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Abstract.

This thesis argues that Access and Benefit Sharing (ABS) agreements, no matter how fair and equitable, ultimately help to destroy traditional knowledge rather than protect it. ABS agreements are promoted and implemented as one of the key mechanisms for the protection of traditional knowledge from illegitimate appropriation by pharmaceutical companies or other actors. However, because they dominantly treat traditional knowledge as intellectual property in need of protection from misappropriation, they have the effect of expanding capital into a previously noncapitalist domain. The thesis argues that it is in the domain of subsistence that traditional knowledge is developed and reproduced; but the expansion of capitalism destroys people's autonomous subsistence and thus the very foundations of traditional knowledge. In order to make this argument, the thesis combines two main strategies. First, a critical understanding of Karl Polanyi's notion of the double movement of capital is integrated with the autonomist Marxist idea of capital as value practice, and the concomitant understanding that alternative value practices constitute an 'outside' of capitalism. This theoretical framework guides discussion of the way in which the protection of traditional knowledge constitutes a form of capital expansion. Second, a detailed ethnographic presentation of a bioprospecting project and its ABS negotiations in the Ecuadorian Amazon is considered in political and historical context. This reveals the way in which traditional knowledge protection introduces market valuations into an area of life which had theretofore been oriented by different values. In conclusion, the thesis points to the importance of engaging in value practices which create and re-create the 'outside' of capitalism as a counter-hegemonic form of traditional knowledge protection which actually safeguards the conditions in which traditional knowledge can flourish.

Keywords: Access and Benefit Sharing, bioprospecting, capital, critical ethnography, double movement, Ecuador, indigenous movement, Napo, subsistence perspective, traditional knowledge, value struggle.

I herewith declare that this thesis is my own work, and that it has not been submitted in substantially the same form for the award of a higher degree elsewhere.

Signed,

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"Antes los gringos decían que somos estúpidos, ahora quieren llevarse nuestro conocimiento..."

(Kichwa grandmother)

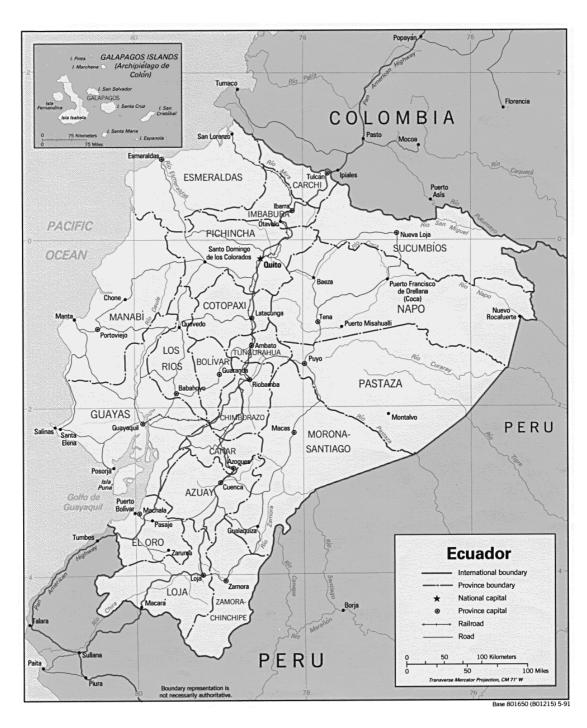


Figure 1: Map of Ecuador.

0 Introduction.

The second time I had to enter the Amazon rainforest from the Ecuadorian capital of Quito, I was in a hurry. It was the occasion of my first extended fieldwork stay in the country, and as part of my research, I was supposed to attend a capacity-building course of a German bioprospecting project as a participant observer. The course was due to start in a couple of days, and I still had to find a place to live in Tena, the small capital of the Napo province with a distinct frontier town feel which was to become my temporary home. To my distress, the whole of the Napo province was on strike. "No, no buses at all" confirmed the ticket clerk at Quito's bustling bus station "not today and not tomorrow and probably not for the rest of the week." - "They are on strike, paro, paro!" somebody else gesticulated to me. All roads into the province were blockaded. "They don't let anyone pass." – "But I have to go" I insisted, feeling queasy at the thought I might miss my first real life performance as ethnographic researcher. It slowly transpired that I could catch a bus to Puyo, the capital of the neighbouring Pastaza province, about 50 km South of Tena. From there, I could try to make my way on a mud road into Napo and to Tena by car - maybe. I bought the ticket, and six hours later, after a spectacular descent from the high Andes through the mid-altitude cloudforest into the Eastern margins of the Amazon rainforest, I found myself in steaming heat and in Puyo, a growing market town amidst sugar cane and cocoa plantations. There were indeed cars offering lifts along the Puyo-Tena road – but only until the next roadblock. "You can cross it by foot, and catch another car on the other side, that is what I will do, I live in Santa Clara [about half way to Tena]" explained a fellow passenger to me. So we rode in cars and pick-up trucks through mud and potholes from roadblock to roadblock. Each roadside settlement had their very own blockade: burning tyres, rocks, tree trunks, sometimes almost a kilometre long. Whole communities seemed to gather around the smouldering rubber, sharing meals. Kids were waving at us, shouting "Viva el paro!" as we walked in groups of varying sizes past their fires and homes, lugging backpacks, suitcases, and thirsty chickens in plastic carrier bags. I arrived in Tena after nightfall, not much wiser about the reasons for the strike – or was it an uprising? – despite my relentless questioning along the way. Everybody seemed to have their own opinions on why a whole province was in protest.

The next day I presented myself proudly at the offices of FONAKIN (Federación de la Nacionalidad Kichwa del Napo, see Fig. 2 below), the indigenous federation of Kichwa communities, with the Council of which I had previously arranged to collaborate as a student researcher and independent adviser regarding the protection of traditional knowledge. "Oh, you are here already!" one of the dirigentes (Council members) exclaimed, "We are on strike. Come along, we are leaving in half an hour, we are going to Baeza, things are getting hot there, they need our support." I was confused: what about the capacity-building course, my research, the original plan? "Oh, the Germans [leading the course] won't be here for another week or two! We have postponed the course." He emphasised again: "We are on strike." It dawned on me that it was of course unlikely that a group of German professionals would feel the same need that I had felt to make it 'at all cost' and through all road blockades to Tena. Moreover, it was even less likely that any of the would-be participants would make it to the first course module, given that their whole province was staging a traffic-arresting strike. So I was whisked into a bus, and, along with a jolly group of

people of all ages, transported to Baeza, a small mountain town, over half way back to Quito (along the road I had originally intended to travel). Once there, we were fed rice and canned sardines along with probably a few thousand others and sent a small walk down the tarmacked highway E45, which was filled with people and free of vehicles. At the bottom of the hill, about 500 metres away from us, oil drums were burning, and a group of people were throwing what looked like rocks. Further below, the highway filled up with a line of lorries, buses and cars that stretched until the horizon through an awe-inspiring landscape of green, descending hills. A moment later, there were gun shots, and people were running in our direction. "Live bullets," somebody said next to me "already several people in hospital." Then there was an explosion. More shots, more explosions. A very old, very small lady came happily walking up the hill "Did you see me throw the dynamite?!" she gleefully pronounced. In the meantime, I had spotted the soldiers blocking the road further down in an attempt to break up the striker's blockade with firearms. "Oh, we can just go home" joked somebody "[the soldiers] are blocking the road for us!" People laughed and continued to stand about and chat. Every now and again, some would join the frontline, set another tyre alight, or shout abuse at the soldiers.

The strike had been called for by the provincial government, after their negotiations with the national government regarding more financial support for the province had failed. Blocking all roads was bound to force some concessions from Quito, as most of the oil produced in the Amazon – the nation's primary export good – is transported through Napo. As a consequence of their call, the provincial governor and several mayors were arrested, and a state of emergency pronounced for the whole of the

province. A curfew was enforced from nightfall and the military had free reign. Witnessing several similar strikes over the period of my fieldwork (22 months over three years), I came to understand that these are not rare occurrences, neither in the Amazon region nor in Ecuador as a whole.



Figure 2: FONAKIN headquarters, Tena 2007.

Most of the people whom I asked about the reasons for the strike spoke of the need for better roads and an international airport in Tena. I was stunned: was I really supporting some kind of pro-developmentalist agenda by my presence, potentially running the risk of catching a live bullet in the process? FONAKIN members were more nuanced in their demands, emphasising better healthcare and educational facilities. More money for the province was the bottom line; how exactly such money would be spent

was, at this stage, secondary. "Well, well" I concluded not without some disappointment in my notebook that day "it is your own fault for assuming indigenous organisations are all radical anti-road protesters! Everywhere everyone just wants a piece of the pie..."

Nonetheless, over time I came to realise that this early conclusion of mine was too facile a conclusion. People's desires and motivations are complex, and 'wanting a piece of the pie' is sometimes simply the most feasible aspiration. At the same time, however, it easily obscures the variety of demands and hopes which people express and harbour, by reducing this variety to the lowest common denominator. In a world in which profit constitutes the ultimate value, and in which practically everything has a price-tag, it is often easier (and more effective?) to frame one's needs, wants and requests in the idiom of the market and economic development. Indeed, it might sometimes seem that there is no other idiom to speak in, no other vocabulary to mobilise, no other discourse to deploy. Scratching at the surface, however, one will soon find a diversity of values and meanings, embedded in a variety of languages which people use to make sense of their world, and their requirements and desires within it. Indeed, social movements often express their demands through a plurality of values which transcends simple market rationalities of cost-benefit (see especially Martinez-Alier 2002). However, far too often, such a plurality of values, even where forcefully voiced, gets subsumed and co-opted by the logic of capital, or might serve to constrain the excesses of capital in a way that ultimately reinforces long-term market expansion.

In this thesis, I explore this tension field between capital expansion, alternative valuations, and people's wants and needs in the context of the endeavour to protect traditional knowledge. My early adventure of the Napo *paro* is partly responsible for setting me off in this direction.

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The protection of traditional knowledge, a critique of which is the objective of this thesis, is by now undeniably a 'global' endeavour. Defined as the protection of "knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles" by the Convention of Biological Diversity (CBD)¹, it is more or less directly addressed by the World Intellectual Property Organisation (WIPO)², the World Trade Organisation's (WTO) Doha Development Agenda³, the International Treaty on Plant Genetic Resources of the Food and Agriculture Organisation (FAO)⁴, the United Nations Declaration on the Rights of Indigenous

This definition is to be found in the CBD's Article 8(j), available online, e.g., at: http://www.cbd.int/traditional/

Especially through WIPO's Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (the IGC).

The Doha Development Agenda's paragraph 19 concerns TRIPS, biological diversity and traditional knowledge. Available online at http://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.htm#par19

The International Treaty's objectives are the conservation and sustainable use of plant genetic resources for food and agriculture and the fair and equitable sharing of benefits derived from their use, in harmony with the CBD. The centrepiece of the Treaty is a 'multilateral system for access and benefit-sharing' which for certain categories of plant genetic resources guarantees

Peoples⁵, as well as by a host of ethical guidelines and codes of conduct of professional societies, such as the Natural Stewardship Circle for the Beauty, Cosmetics, Fragrance, and Flavor Industries⁶. The creation of a legally binding international regime is being debated in several fora. Moreover, various countries have enacted special laws, or established regulatory frameworks for the protection of traditional knowledge at the national level, while indigenous peoples and subsistence farmers organisations continue to fight for the recognition of their rights in this regard at all scales. Large amounts of resources continue to be mobilised for conferences, ad hoc meetings, fact finding missions, capacity building, and report writing in order to facilitate decision-making about protective mechanisms and their implementation.

While the need to protect traditional knowledge is sometimes presented as arising from the erosion of traditional ways of life, its internationally dominant expression is in terms of illegitimate appropriation. This is to say that the protection of traditional knowledge is generally seen as required due to the threat of 'biopiracy'. Biopiracy is cast as the undue appropriation of, and exclusive commercial gain from plant and animal resources of traditional use in indigenous and farming communities, and its most infamous perpetrators are pharmaceutical and biotechnology companies (Shiva

facilitated access in return for benefit-sharing. In respect of traditional knowledge, the key provision of the Treaty is its recognition of 'farmers' rights' through its Article 9. Available online at:

http://www.planttreaty.org/texts_en.htm

I discuss the Declaration in more detail in Chapter 2 below. Its full text is available online at: http://www.un.org/esa/socdev/unpfii/en/drip.html

The full text of its resolution can be accessed online at:

http://www.centifolia-grasse.net/assets/files/RESOLUTION%20TEXT%2020%20NOV
%2008.pdf

1997; Mooney 2000). In this way, traditional knowledge is construed as a kind of (intellectual) property of indigenous and farming peoples, implying the latter's rights to control access to and to benefit economically from their traditional knowledge. Traditional knowledge is thus understood as in need of the same kind of protection as other forms of (private, intellectual) property. Legislation and soft law guidelines regarding Access and Benefit Sharing (ABS) are currently wielded as main mechanisms for the protection of traditional knowledge.

This thesis aims to contribute to the destabilisation of the hegemonic construction of the protection of traditional knowledge as a form of intellectual property protection. I argue that the protection of traditional knowledge is best understood as a *field of struggle* over both meanings and resources, and with implications beyond the particular details of a protective legal regime. More specifically, I argue that this field of struggle comprises movements towards market expansion, countermovements to constrain and regulate this expansion, as well as contests over hegemonic values, and over the meanings of such key terms as knowledge, property, culture, and self-determination.

The thesis unfolds in five chapters. Chapter 1 'Bioprospecting and the War Against Subsistence' provides the theoretical and methodological antecedents necessary for the analysis of subsequent chapters. I here argue that the protection of traditional knowledge as it is performed in and through bioprospecting projects and Access and Benefit Sharing (ABS) agreements furthers what Ivan Illich (1981) has called 'the war against subsistence'. The destruction of the conditions for people's autonomous

subsistence is one of the fundamental effects of the expansion of capital and its mode of production, and I argue that the dominant form of traditional knowledge protection contributes to this destruction. Traditional knowledge is the knowledge that has been developed over generations through subsistence practices; as capital destroys subsistence, it destroys the conditions for the continuous creation of traditional knowledge. As the dominant form of traditional knowledge protection contributes to the expansion of capital, it also contributes to the destruction of the very foundations of traditional knowledge.

After examining bioprospecting and ABS agreements as mechanisms for traditional knowledge protection in Section 1.1., I discuss the war against subsistence in Section 1.2.: how enclosures separate people from their access to the means of subsistence, and how wage labour and its obscure twin 'shadow work' (Illich 1980; 1981) destroy and colonise the ability of a household to fulfil its basic needs for itself. In Section 1.3. I present a view on capital and its contradictions which is inspired by autonomist and radical feminist elaborations of the traditional Marxist account and has recently been lucidly synthesised by Massimo De Angelis (2007). On this view, there is an 'outside' of capital which is constituted in and through *practices* which embody values other than those of the market economy. Many indigenous people's lives reproduce this 'outside' every day, and it is within these alternative 'value practices' that traditional knowledge is kept alive. Subsistence practices, on this account, are quintessentially 'other' than capital. After a discussion of capital's contradiction of 'overaccumulation', as well as capital's tendency to undermine its own conditions of production and its need for 'fictitious commodities', I elaborate on Karl Polanyi's

notion of the 'double movement' (1944 [1967]) in Section 1.4. According to this, the capitalist market economy is characterised by movements towards market expansion and countermovements which arise to protect society from the most destructive ravages of capital expansion. I argue that this 'double movement' is the dynamic through which the capitalist mode of production's long-term survival and reproduction is assured, and any attempt at overcoming capitalism has to take this dynamic into account. Section 1.5. brings the protection of traditional knowledge to bear on the preceding discussion. I argue that the protection of traditional knowledge is a field of by struggle characterised movements towards market expansion and countermovements aimed at 'protecting' social and environmental interests. While the hegemonic construction of traditional knowledge protection as a form of intellectual property protection undeniably undergirds the long-term reproduction of capital, and while it supports the latter's destruction of those practices which create an 'outside' to capital, the development of other, counter-hegemonic constructions is nonetheless still possible on this battlefield. Section 1.6. explains why the methodological approach of 'critical ethnography', which combines ethnographic study with political economy analysis, is appropriate for the arguments I am making in this thesis. In particular, I point out that the protection of traditional knowledge is best understood as existing only in and through its particular manifestations. That is, in order to understand the protection of traditional knowledge, a study of the actual realisation of policies, laws and guidelines addressing the matter is in order. My ethnographic account of an attempt at negotiating a fair and equitable Access and Benefit Sharing agreement in the Ecuadorian Amazon province of Napo should hence be understood as a step toward understanding the phenomenon of the protection of traditional knowledge and its double movement dynamic more generally.

I begin my critical ethnography of the protection of traditional knowledge in Chapter 2 'From Fields of Struggle' by outlining multiple forces that have converged and are converging in a series of fields which together constitute the origins of traditional knowledge protection. I argue that without the histories of political struggle which constitute the five fields of (i) International Law and the Politics of Indigeneity, (ii) Conservation of Biological Resources, (iii) Intellectual Property, (iv) Safeguarding of Cultural Heritage, and (v) Public Participation in Development and Governance, the protection of traditional knowledge would not be an international imperative with the particular shape which it has today. Sections 2.1. - 2.5. address each of these fields and their particular trajectories in turn. I show how each one is itself characterised by the double movement dynamic of market expansion, on the one hand, and countermovements protecting social and environmental interests, on the other. In this way, the theoretical discussion of Chapter 1 regarding the double movement is given a grounding in historical events and trajectories. I emphasise that in the context of sustainable development as well as participatory development, the double movement dynamic collapses into a singular movement of market expansion, which has already incorporated – and thereby disarmed – its countermovements. Understanding each of these five fields and trajectories and their complex conjunction in the mainstream practices and theories with regard to traditional knowledge protection is crucial in order to identify and resist the ambiguity of continuous capital expansion that is expressed in the idea of the double movement.

Chapter 3 'Living in Napo' is a brief political economy of extraction and colonisation in the Ecuadorian Amazon. It contextualises my fieldwork in the Napo region, as well as the key focus of my research, the participatory bioprospecting project ProBenefit – which I present and discuss in Chapter 4 – historically and politically. Approaching the protection of traditional knowledge from a critical perspective, which aims to take into account the views of the so-called knowledge-holders themselves, requires a historical view that sees bioprospecting as one of a wider set of activities impinging on people's lives. This chapter equips the reader with the necessary background for such a historical view. The chapter divides into ten sections, following a largely chronological structure. I start with a brief introduction to the language, culture and ethnicity of the Napo Runa, literally the 'people of the Napo', the indigenous inhabitants of the area. I then begin an account of the historical trajectory of the area with the Conquest of the Napo region and the subsequent 300 years of colonial administration. I focus attention on the rubber boom, increasing colonisation, the economy of debt-peonage, which had indigenous families bonded through enforced debt to European colonisers, gold panning, and oil exploration. With the oil companies, wage labour entered the area, changing the traditional power structures, and familiarising Napo Runa with proletarianisation as a new form of exploitation. From the 1960s onwards, indigenous communities increasingly formed organisations and federations which began to voice political demands and fight for the recognition of land claims. In this context, I introduce the indigenous federation FONAKIN with which I was affiliated as part of my fieldwork. A short account of the 1970s oil boom and consequent debt crisis and structural adjustments which provoked frequent and widespread indigenous uprisings and catapulted the Ecuadorian indigenous movement into a politically relatively powerful position will serve as useful background to understanding the situation into which the ProBenefit project entered in 2003, with its proposal of facilitating a participatory process for the negotiation of a fair and equitable Access and Benefit Sharing agreement with the German pharmaceutical company Schwabe Ltd.

Chapter 4 'Negotiating Access and Benefit Sharing in Napo' is an ethnographic account and discussion of the misunderstandings, frictions and value clashes which characterised the German government-funded ProBenefit bioprospecting initiative during its engagement with the Kichwa people of Amazonian Ecuador represented by FONAKIN. ProBenefit was divided into two phases, yet failed to successfully complete its first phase which aimed at the development of a fair and equitable agreement regarding access to natural resources in the Napo region. Indigenous participation stalled and made timely negotiation of an ABS proposal impossible; neither consent to nor a clear rejection of bioprospecting in Napo was therefore obtained. I discuss the frictions which culminated in this 'failure' in detail, and argue that the problems ProBenefit had to face were rooted in ProBenefit's structural inability to question some of its own fundamental assumptions regarding the value of traditional knowledge, the threats it faces, and the most adequate strategies of protection. This inability – to do with project time frame, obligations to funders, and deep-seated cultural assumptions – also led to the (inadvertent) eclipsing of other understanding of what was at stake, even those that were clearly voiced during the capacity building course which constituted one of ProBenefit's key engagement strategies. In this chapter, I make my case over eight sections. Section 4.1. and 4.2. provide an overview over project organisation, time frame, funding, aims and objectives, and envisioned challenges. In Sections 4.3 – 4.6. I discuss what I believe to be the core underlying problems of the entire endeavour. Using examples from the capacity building course and other occasions, I comment on the disparity in expectations regarding the partnership, as well as on the way in which the relevance of equitable Access and Benefit Sharing to the lives of indigenous people was assumed and, ultimately, imposed rather than discovered as an actual priority of people. I also discuss how the messiness of real public participation conflicted with the requirements of public legitimation which assumes a more ideal version of participation. I argue that the myth of a level playing field and what we might call the the historical 'naivety' of the ProBenefit team members has complicated an already difficult situation and troubled an incipient 'partnership'. Section 4.7. is a detailed account of the aftermath of the capacity building course, during which indigenous participation ebbed and misunderstandings grew. In Section 4.8. I conclude the chapter with a brief discussion of the way in which alternative visions of the protection of traditional knowledge were eclipsed during ProBenefit project activities. This leads us to the next chapter in which I illustrate and discuss such alternative visions.

Chapter 5 '*The Hidden Variety of Protection*' addresses the variety of views on traditional knowledge, its value and need for protection that I was confronted with during my fieldwork. I present and discuss a series of conversations and events at which traditional knowledge protection figured in ways very different to its hegemonic construal as intellectual property protection. 'Protection of traditional

knowledge' is understood and used by the people whom I met in the Amazon in ways and to ends that sometimes overlap with, yet in many ways differ from the schemes and objectives pursued by ProBenefit, and other Access and Benefit Sharing endeavours. I argue that the dominant discourse of protection – the one developed and employed in national and international policy making settings and which animates projects such as ProBenefit – colonises our understanding of what is at stake in the protection of traditional knowledge, and perpetuates background assumptions ultimately instrumental to the continued expansion of capital. In Section 5.1. I clarify the obvious, yet crucial point that the solutions we develop depend on the problems we perceive. The way in which we construe traditional knowledge, and the threats which it faces will hence determine the kind of protection which we develop and perform. In Section 5.2. I present a number of interactions which took place during the capacity-building course of ProBenefit and which highlight the ways in which dominant understandings of traditional knowledge, and the issue of its protection were perpetuated, while alternative understandings of what was at stake were disregarded and subdued. This is meant to show that ProBenefit, despite best intentions, imposed a value system and world view on its indigenous participants. In Section 5.3. I present a series of conversations and encounters which I was part of outside of the ProBenefit setting. These make even clearer that projects such as ProBenefit, and the discourses which they introduce and perpetuate, veil the plural understandings and valuations of knowledge and people's concerns in this regard. I show how traditional knowledge was variously construed as spiritual power, cultural practices, intimate acquaintance with the immediate landscape and its inhabitants, and ethical conduct amongst other things. Each of these was perceived of as threatened in their own specific ways, and protection from this threat was understood respectively in very specific, even surprising, ways. Section 5.4. addresses in some more detail the hegemonic construal of traditional knowledge as intellectual property which dominates most understandings of the matter — especially in policy-making arenas. I argue that the focus on the threat of misappropriation (i.e. on a kind of theft) obscures the way in which traditional knowledge is also threatened by loss and erosion, as well as the way in which such loss might have a very different meaning in and to indigenous communities than most commentators on the issue can imagine. Borrowing from Joan Martinez-Alier (2002), I conclude that the struggle surrounding the protection of traditional knowledge is not only a struggle regarding access over resources, but also a struggle over meanings and values. I urge that the idioms in which these struggles are carried out continue to (or begin to) transcend the language of market valuation, in order to keep alive the plurality of values through which people make sense of and give meaning to their worlds.

1 Bioprospecting and the War Against Subsistence: theoretical and methodological antecedents.

This chapter lays the theoretical and methodological foundations for the rest of the thesis. I make the case that the protection of traditional knowledge, as it manifests in bioprospecting projects based on Access and Benefit Sharing agreements, actually contributes to a world-wide erosion of the conditions for people's autonomous subsistence. By doing so, the drive to protect traditional knowledge undermines the foundations for the creation and reproduction of traditional knowledge. We may hence ask what exactly does the protection of traditional knowledge actually protect? In this way, this chapter also serves as an initial normative framing of the analysis I develop more fully over subsequent chapters.

I argue, with Ivan Illich (1980) and others, that the expansion of capital is also a war against subsistence and the domain of the vernacular – which, according to its Latin roots in *vernaculum* is the domain of that which is homebred, homespun, homegrown, homemade, as opposed to that which is obtained through formal exchange (Illich 1980: 57). From the "subsistence perspective" (Bennholdt-Thomsen & Mies 1999), the perspective which I espouse in this thesis, resistance to capital is vital. Yet, as the reader is likely to be aware, resistance to capital is not a straightforward, let alone easy affair. In this chapter, I present a view of capital's continuous survival and overall expansion, as well as of potential avenues for its overcoming, that is inspired by Karl Polanyi's account of capital's double movement (1944 [1967]), as well as autonomist

Marxist and radical feminist perspectives that have recently been best synthesised by Massimo De Angelis (2007). Based on this view, I argue that the protection of traditional knowledge is a field of struggle characterised by double movement dynamics, and that it thus currently plays a role in the reproduction of capital and the destruction of subsistence. Protecting traditional knowledge is hence in important ways *contra* the very interests of those whose rights it purports to protect. By destroying subsistence, the *protection* of traditional knowledge *destroys* rather than *protects* the foundations of traditional knowledge. It is only once the hegemonic construction of what 'protecting traditional knowledge' means is destabilised that emancipatory avenues might open up through this field of struggle.

1.1 Equitable ABS-bioprospecting as protection of traditional knowledge.

Bioprospecting is a relatively new term for a relatively old endeavour: it refers to the (usually corporate) development of (marketable) products based on research into and subsequent appropriation of the (commercially useful) properties of biological resources. Bioprospecting most often aims at developing pharmaceutical, nutraceutical and cosmetic products for the markets of the industrialised world, and the research phase is often aided by indigenous people and traditional farmers whose knowledge of the local biosphere is in many cases extensive and detailed. What is new about this particular practice of resource acquisition is that, due to the intensified dynamics of biogenetic resource politics over the last few decades (see Chapter 2

For early literature on bioprospecting, see especially Reid 1993; Svarstad 1995; Balick, Elisabetsky & Laird 1996; Shiva 1997.

below), it has turned into an increasingly regulated activity. The guidelines elaborated under the 1992 UN Convention on Biological Diversity (CBD) with regard to the "access to genetic resources and the fair and equitable sharing of benefits arising out of their utilization" are the most influential of the internationally defined parameters within which bioprospecting endeavours have to unfold if they are to remain within the bounds of legality.

Bioprospecting is generally presented in one of two ways. It is presented either as a legitimate, even important scientific phase of the research and development of new pharmaceutical, agrochemical, cosmetic or other products, that propels sustainable development and, when executed in accordance with ethical guidelines, also constitutes a "giving back" (Hayden 2003b), that is, it constitutes a mechanism for distributive justice with regard to indigenous and peasant peoples through the sharing of the benefits arising (e.g. Reid 1993). Or it is presented as biopiracy⁹ (e.g. Shiva 1997; 2007; Mooney 2000).

Some hold that the distinction depends on whether or not an equitable Access and Benefit-Sharing (ABS) agreement has been reached between the researchers and the affected local communities, and that hence sometimes bioprospecting is legitimate

This is the full-length official phrase of what is usually abbreviated to 'access and benefit sharing' or simply ABS. It is used in CBD documentation, such as online at: http://www.cbd.int/abs/intro.shtml.

More correctly biopiracy ought probably to be called bio-privateering. Piracy implies theft, that is the taking of someone's private property. Privateering, on the other hand, implies privatising what was hitherto not privately owned. However, to my knowledge, this more apt term has only been used by Richard Stallman (1997).

research benefiting all stakeholders, and sometimes it is biopiracy (e.g. Svarstad 1995; Balick, Elisabetsky & Laird 1996; Schuler 2004), others consider it to *always* be an instance of biopiracy simply because under current global socio-economic conditions no ABS agreement could ever be equitable (e.g. Shiva 2007; Mooney 2000; Takeshita 2000; 2001).

Underlying the discussions about bioprospecting is the question of control power over access to and rights to income from traditional knowledge. Who can access and use traditional knowledge, and who has the right to the economic benefits, i.e. the income which flows from such use? These are questions with regard to the *property relations*¹⁰ that characterise traditional knowledge. This is to say that in the context of bioprospecting, and in the context of ABS agreements, the question of the protection of traditional knowledge is a question of how best to configure property rights over traditional knowledge. This perspective, of traditional knowledge protection as at bottom a protection from the threat of undue appropriation, is the dominant view of the matter at the international policy-making level, as well as being widespread amongst non-governmental organisations and social movements supporting the indigenous cause. The hegemonic construction of traditional knowledge is hence as a form of intellectual property requiring similar strategies of protection as other intellectual properties do.

For an extensive jurisprudential treatment of property in terms of control powers, use privileges, and exchange rights (rights to income), see especially Christman 1994, and Harris 1996.

Bioprospecting projects and ABS agreements – no matter how fair and equitable – *enact* or *perform* the protection of traditional knowledge as pseudo-intellectual property protection. By doing so, they hide from view, and indeed erode other possible understandings of traditional knowledge and its need for protection. In Chapter 4 I provide an ethnographic account of the ProBenefit bioprospecting project which focuses on the way in which the silencing and erosion of alternative understandings of traditional knowledge protection occurred in practice. I then present and discuss some such alternative understandings in Chapter 5: the Napo Runa with whom I worked voiced a series of views in which traditional knowledge protection figured in different, sometimes surprising ways.

In the present chapter, I situate bioprospecting projects, ABS agreements and their hegemonic construction of traditional knowledge protection in the wider context of capital expansion. I identify the destruction of subsistence as a vital aspect of capital expansion, and argue that the protection of traditional knowledge in its dominant form participates in this destruction.

1.2 The war against subsistence.

The fundamental war of capital, argues Ivan Illich (1981) is the 'war against subsistence' and against what he calls 'vernacular values'. This war, according to Illich is more fundamental to capital expansion than the war against trade unions and their wage demands. In this section, I elaborate on this point, and argue with Illich

(and of course Marx¹¹) that the expansion of capital destroys subsistence, and indeed that in order to expand, capital *has to* destroy subsistence, and colonise the everyday reproductive needs of human beings with market values and mechanisms.

Capital expansion eradicates people's autonomous subsistence in a variety of ways. It makes access to land and use of natural resources impossible for the majority through privatisation and enclosure. It destroys the fertility of the land and the quality of water through the industrial triplets of pollution, monoculture, and asphaltation. It forces people into towns and wage labour – partly of course due to enclosures of land. It replaces autonomous subsistence activities with 'shadow work' (Illich 1980; 1981), which I explicate below. It destroys the 'vernacular values' which animate the non-market related actions of people contributing to the everyday satisfaction of human needs, by replacing them with market values, the profit motive, and cost-benefit calculations.

1.2.1 Subsistence.

From the subsistence perspective (Bennholdt-Thomsen & Mies 1999), what is most important, what is most valuable is that which contributes to an autonomous

¹¹ Marx wrote in his *Zur Kritik der politischen Ökonomie* "since the *real* … labour of appropriating the natural elements for satisfying human needs is the activity through which the material exchange between the human and nature is mediated, the labour power which is denuded of the means of production, the objective conditions of appropriating the natural elements through labour, is also denuded of the *means of subsistence*. Therefore the labour power denuded of the means of production and of the means of subsistence is the absolute poverty as such and the labourer is its personification" (1976: 35; emphasis in original).

subsistence¹². The reproduction of life – human and non-human – replaces the accumulation of profit as final value. This is a perspective that probably still orients the majority of the world's population, even if not those with the greatest agendasetting power. It clearly oriented many of the people whom I met and with whom I worked in Ecuador and Peru. I present some of their voices in Chapter 5.

The view of subsistence builds on the understanding that there is no 'trickle-down effect' in any significant sense of the term and that the privileges of the middle- and upper classes of all countries are only possible at the expense of the majority of the world; the privileges of the few are *dependent upon* the exploitation of the many, and of non-human nature. Michael Perelman has forcefully shown that this dependence of the capitalist market economy on the existence of mass poverty was well-known and supported as 'inevitable' by early free market proponents, such as James Steuart and Adam Smith, who wrote in little known letters to friends and in newspaper articles of the need for a destitute class (Perelman 1984; 2000; 2006).

The subsistence perspective also builds on the insights of Rosa Luxemburg (1913 [1951]) that capitalism requires 'non-capitalist classes', societies and dimensions in order to continuously expand. German feminists Veronika Bennholdt-Thomsen, Maria Mies, Claudia von Werlhof and others have argued since the 1970s that Luxemburg's

Autonmous subsistence here refers to the self-sufficiency, or near self-sufficiency of the household. That is, the household is able to produce most of what it needs for basic survival and more without relying on production taking place elsewhere. Autonomy in this sense is always relative, but there is a clear scale from greater independence to greater dependence on external input (such as through wage labour and commodity consumption).

arguments pertain not only to the traditional subsistence economies of European colonies, but in the same way to housework and the labour of marginalised people in the so-called informal sector in the industrial core countries (e.g. von Werlhof 1978; Bennholdt-Thomsen 1979, 1984; Mies 1982; Dalla Costa and James 1972).

As a growing body of literature in the field of social history shows, the organisation of labour as commodity was possible only once people had been separated from their means of autonomous subsistence. The enclosure of common land was an important mechanism of such separation (see, *inter alia*, Thompson 1963; 1991; Federici 2004; De Angelis 2007), and Karl Polanyi (1967) emphasises in particular the destruction of non-contractual social relations, such as "kinship, neighbourhood, profession, and creed", in favour of individual freedom of contract.

In many, if not most, pre- or non-capitalist social formations, the individual is only threatened by starvation if the community of which she is a part faces the same predicament, as many historical and anthropological studies have shown (see, e.g., Bennholdt-Thomsen & Mies 1999; Herskovits 1940; Polanyi 1967).

"Ironically, the white man's initial contribution to the black man's world mainly consisted in introducing him to the scourge of hunger. Thus the colonists may decide to cut the breadfruit trees down in order to create an artificial food scarcity or may impose a hut tax on the native to force him to barter away his labor. In either case the effect is similar to that of Tudor enclosures with their wake of vagrant hordes" (Polanyi 1967: 164).

All over the world 'willing workers' had to be *made*, they had to be forced into existence, with corporeal violence, socio-legal mechanisms, and, according to Polanyi, "nature's penalty": the threat of hunger. "In order to release it, it was necessary to liquidate organic society, which refused to let the individual starve" (Polanyi 1967: 165). Notwithstanding Polanyi's problematic use of 'society' as organic and unitary, which he carries over into other contexts, when social relations are such that each person's basic subsistence is guaranteed in and through a web of ties, alliances and obligations, individual starvation¹³ is a rare threat.

Ongoing enclosure – forcible acquisition, expropriation, privatisation – is the precondition for capitalist economic growth. Usually Marx's 'primitive', or (more correctly¹⁴) 'original accumulation', is seen to occur before the rise of capitalism and to be irrelevant for the analysis of the logic of capital once capitalism is in place. However, capital is dependent on ongoing expropriation – continuous 'accumulation by dispossession' as Harvey (2003) calls it¹⁵. Enclosure is hence not at all confined to

¹³ By individual starvation I mean a single individual starving *without* her whole community also struggling with famine.

¹⁴ The German "ursprüngliche Akkumulation" translates most directly into "original accumulation". "Primary accumulation" is also sometimes used.

Harvey's continuous accumulation by dispossession (first developed in Harvey 2003), includes "the commodification and privatization of land and the forceful expulsion of peasant populations (as in Mexico and India in recent times); conversion of various forms of property rights (e.g. common, collective, state) into exclusive private property rights; suppression of rights to the commons; commodification of labour power and the suppression of alternative (indigenous) forms of production and consumption; colonial, neocolonial and imperial processes of appropriation of assets (including natural resources); monetization of exchange and taxation, particularly of land; the slavetrade (which continues particularly in the sex industry); and usury, the national debt and, most devastating of all, the use of the credit system as radical means of primitive accumulation" (2006: 153).

capitalism's bloody pre-history, but is its continuous condition (see also De Angelis 2001; 2007). Communities of indigenous peoples in the Ecuadorian Amazon, where I did my fieldwork, are on the contemporary frontiers of capitalism. That is, they are currently targets of the continuous character of enclosure, their lands as well as their knowledge is threatened by dispossession through capital accumulation.

The enclosure of access to land and natural resources, above all else, deprives people of the potential for autonomous subsistence. Yet subsistence work, as every housewife knows, is the very basis of individual and collective life, and it is hence the very basis of industrial society and generalised commodity production just as it is the basis of any other past or existing or indeed imaginable society and economy. After all, there is no economy without people, and there would be no people without their daily reproduction: the making and eating of food, the keeping healthy and making healthy of bodies, the lifting of spirits, the repose. "Without subsistence production, no commodity production: but without commodity production, definitely, subsistence production" (Bennholdt-Thomsen & Mies 1999: 20; see also Mies 1983).

Profit is underpinned by labour-power, and the value of labour-power is underpinned by worker's subsistence. Marx maintained that "the daily sustenance of labour-power costs only half a day's labour", but that once so sustained, "the very same labour-power can work during a whole day" (*Das Kapital* chapter 7). Notwithstanding his

That the value of labour power is half a day's work is of course an illustration rather than an exact measurement. The actual value of labour power is changeable and dependent on many factors. The reference to Marx in this context is mainly to undergird the obvious point that labour power needs sustenance.

disregard of women's reproductive labour enabling this sustenance, the point is that labour-power creates surplus value, but that to do so it needs to be sustained (or sustain itself). This sustenance is the work of reproduction or subsistence.

"[T]he socially reproductive labours of mothers, wives, housekeepers, or slaves, continue to be an essential backup to factory production. At further remove in the global economic gestalt, are those colonised others, whose labours and lands generate the resource surplus from which First World citizens draw leisured hours for speculation and such. Whether domestic care givers or peasant farmers, these meta-industrial workers have hands-on knowledge of sustaining labours in a remarkable metabolism with nature" (Salleh 2000: 31).

Women's unpaid housework guarantees the reproduction of the workforce, and keeps it cheap; the capitalist economy free-rides on this subsistence labour. The work of peasants in the Third World (also often guaranteed by women's unpaid household labour within a patriarchal social structure) contributes essential foodstuffs and other commodifiables (such as medicinal knowledge) at throwaway prices to the capitalist economy which free-rides on their subsistence work just as it free-rides on the productivity of nature. It is in this way that capital colonises and plunders subsistence work and nature, extracting their value for its own ends. We might say that indigenous knowledge practices are for big pharma what housework is for the capitalist mode of production as a whole. The 'added value' both kinds of practices create is appropriated by capital at no or marginal cost.

We can of course see moves to commodify subsistence work: housework amongst the middle classes is outsourced to domestic workers, often from developing countries; privatisation of services and utilities such as water and waste disposal take over some of the subsistence work necessary for daily reproduction; and payments for environmental services aim to put a price tag on certain ecological processes in order to 'internalise negative externalities' and ostensibly green the economy. Moreover, there is another way in which capital comes to colonise and exploit the everyday needs of human reproduction, and Illich aimed to explain this mechanism in terms of the concept of 'shadow work'.

1.2.2 Shadow work.

The expansion of capital is predicated on human effort, wage labour being the obvious yet not even the primary instance. Unpaid work, that is, women's reproductive work above all but also such seemingly unconnected efforts as are involved in commuting to and from the workplace, homework and exam revision for school, activities of consumption more generally, and many other activities assumed as routine in industrialised societies, all feed the formal economy and enable its continuity – and arguably to a greater extent than wage labour does (Illich 1980).

These efforts are necessarily complementary to wage labour, and Ivan Illich calls them 'shadow work' (Illich 1980; 1981). Shadow work is necessary for survival in advanced capitalist societies, for wage labour is not enough for anyone to survive. Survival (let alone leading a joyful, interesting existence) necessitates acting towards that end: it is hardly news that human beings need to eat, drink, defecate, and rest

(both physically and emotionally) as an absolutely basic precondition for their very existence. A salary does not in and of itself contribute to this end. Livelihoods include all so-called reproductive activities that one either has to engage in oneself or that one needs to have someone perform on one's behalf in order to live a life at all. Given that the capitalist economy (or, more correctly, the capitalists' capacity to accumulate profit) is dependent on the availability of living, at least marginally healthy human beings to produce and consume commodities, reproductive activities are as basic a necessity for the survival of capitalism as they are for the survival of a person.

Having a job will require that we turn up. It also will require that we are fed enough, rested enough, healthy enough to turn up. The activities that keep us fed (acquiring, preparing and eating food, disposing of the leftovers), rested (a balance of convivial interaction with others, exercise, sleep and general physical and emotional comfort), and healthy (preventing and curing physical and mental dis-ease) are all activities that require a considerable amount of unpaid effort to be exerted either by oneself or by someone else on one's behalf – often primarily a wife or other housekeeper. Moreover, there is an important sense in which an at least minimally bearable existence involves the participation in social networks and cultural activities beyond the boundaries of one's household. Such participation is often tied to different kinds of 'social pressures': to wear the rights kinds of clothes and accessories, display ownership of the right kinds of objects, know the right kinds of things to converse about. As such, both basic reproduction and social participation – the taken for granted background 'conditions of production' (a concept to which I turn again below) – require, in capitalist societies, the consumption of commodities. It is in this way that capital

expands into the realm of reproduction, colonising, and indeed destroying everyday subsistence.

Reproductive activities are often equated with subsistence work, yet Illich insists that reproduction under capitalism takes on forms that are very different from, and indeed should be understood as *undermining* subsistence work. Subsistence activities, for Illich, maintain and regenerate the *autonomous* social subsistence of the household: it is the male and female members of the household who together create most of what the household needs to exist. Subsistence activities are often supplemented by paid labour or the income gained from selling products, but autonomous subsistence will predominantly rely on the creative efforts of men, women and children in collaboration with the natural resources that they have direct access to. Shadow work, by contrast, is that "form of unpaid work which an industrial society demands as a necessary complement to the production of goods and services" (Illich 1980: 1).

Reproductive activities are part of both subsistence and the wage-labour-shadow-work nexus, yet subsistence aims at the largely self-sufficient creation and maintenance of life and its cycles at the level of the household. Wage-labour-shadow-work on the other hand, while forcibly being the only practicable strategy open to most people in capitalist societies, and hence arguably constituting a special form of subsistence effort, crucially creates and perpetually maximises profit.

Shadow work is vital and ubiquitous, yet largely unrecognised and indeed un-named. It is likely that by now the vast majority of the world's population has been conscripted into producing value for the capitalist economic system in one way or the other. Replacing people's sovereign subsistence activities with wage-labour-shadowwork is one of the primary forms of such forced conscription, and an inevitable complement of aggressive enclosures, privatisation, and propaganda. Replacing breastfeeding with the administration of bottle milk formulas from such corporate giants as Nestlé is a striking example of this process. Even more relevant to the subject matter of this thesis is the example of deforestation as a form of expropriation of land, producing a resource squeeze and rushing people into the cash economy for want of subsistence possibilities.

The concept of shadow work is useful insofar as it highlights the hidden productivity of 'unproductive' labour, as well as emphasising the way in which much reproductive activity under capitalism has been transformed from the self-sufficient, empowering efforts of subsistence to the alienating, personally disempowering yet economically effective shadow work.¹⁷ Shadow work is one way of capital expansion destroying subsistence. For the purposes of this thesis, the war against subsistence, that is, the war against self-provisioning that creates and maintains life without (or only with

The more commodity-consumers (shadow workers) capital can create, the more likely its growth. Those people who are unwilling or otherwise resistant to turn into consumers, or whose buying power is kept insignificant, need to be made economically effective in other ways. They can be made symbolically or discursively effective, such as the added value the image of the Amazonian Kayapo provides to Body Shop Brazil nut oil products, or the possibilities for boosting the arms and defence industry the image of the Arab terrorist provides. Non- or minimally-consuming people can also be made more directly economically effective, such as through appropriation of their (commercially useful) knowledge. Moreover, the exploitation of the shadow worker's labour can be made more efficient by a variety of ingenious means – such as through free 'immaterial' labour online (Terranova 2000). All provide accumulation opportunities: resources for capital to feed on and grow.

marginal) reliance on the formal economy, forms the ever-present backdrop for the arguments I wish to make. We shall see in Chapter 4 how the bioprospecting project ProBenefit enrolled people into a form of labour that, while carrying the promise of a wage, remained unpaid. This work contributed to the achievements of (some of) ProBenefit's aims and objectives, partly justifying the project's very existence, yet from the indigenous participants' perspective it was "all in all, a waste of time" as someone commented in retrospect. I argue that capital's war against subsistence is not always as crude and visible as forced enclosures, industrialisation or urbanisation. Capital expansion also works in insidious ways through the spreading of particular kinds of values and particular kinds of practices such as those which were performed by ProBenefit.

In order to account for the continuous expansion of capital, and the capitalist mode of production's long-term survival despite the contradiction and crises that are seen to lie at its very heart — and hence in order to account for the war against subsistence — I provide in subsequent sections an overview of the theoretical orientations that undergird this thesis and my analysis of capital expansion, its reproduction and potential overcoming.

1.3 Capital and its contradictions.

In this section I very briefly discuss capital as self-valorising value and social force. Based on this, I offer an account of the capitalist mode of production as value practice, informed by Massimo De Angelis's recent reflections (2007). This will clarify –

against such accounts as, e.g. Hardt and Negri's (2000) — that there is an 'outside' of capitalism which is constituted in and though *practices* embodying values other than those of the (commodity exchange) market. Many indigenous peoples' lives reproduce this 'outside' of capitalism through their everyday interactions and subsistence practices. On this view, the dominant version of traditional knowledge protection, which protects 'traditional knowledge' as a form of intellectual property, is a means by which this 'outside' can get subsumed, as market values encroach upon and colonise alternative values and practices. In other words, traditional knowledge protection arguably reflects the continuous character of enclosure, about which more below.

In this section, I also very briefly discuss two key contradictions of capital and the way in which these are understood to generate crises which need to be overcome if capital expansion is to continue. This is to lead us into the following section where I expound on Karl Polanyi's concept of the 'double movement' — the movement towards market expansion giving rise to and being tempered by societal countermovements aimed at protecting society from the market's most destructive ravages. I argue that it is through the double movement that capital's long-term expansion and survival is assured, and that a sensitivity to double movement dynamics is hence crucial for a successful resistance to and overcoming of the capitalist mode of production and the values it promotes. I hold that indigenous and other movements guided by a subsistence perspective, including those struggling for counter-hegemonic ways of interpreting traditional knowledge protection, can be strengthened through an appreciation of the double movement and its effects.

1.3.1 Capital as self-valorising value.

Capital is monetary value striving to valorise itself, that is, striving to grow and increase. The paradigm process through which capital expands was stylised by Marx as the circuit of capital in the following way: first, money capital is used to purchase the materials, means of production and labour power necessary to produce commodities for sale. In the production process, labour power then creates added value, which can finally be appropriated through the exchange of the produced goods at a profit (i.e. a greater value than the cost of production). This is shorthanded as ...

$$M-C \dots P \dots C'-M'$$

... where M is money and credit, C is commodities, C' is the increased amount of commodities created by the productivity of labour (P), and M' is the increased monetary value from the sale of the output.

Capital is capital when this process (or a derivation such as the simpler, more mercantile and less industrial M-C-M' or the moneylender's M-M') is in operation. Value (of the monetary kind) 'self-valorises' as it passes through the circuit of capital, from one form to the other, from money into materials, machines and labour, into whatever is produced – the commodity – into money again, this time more money. It is important to understand that the source of added value, and hence ultimately profit, in the circuit of capital is labour-power. We will return to the significance of this shortly.

Most often we think of capital in terms of money, things, machines, raw materials, but of course such things are primarily just material. They become part of the circuit of capital when they are or can be inserted into a set of relations and a series of activities that lead to the generation of profit. They help constitute capital when people use them or at least think of them as generating profit. Money is capital when it will be put toward the acquisition of a few basics for setting up a business. It is not capital when it is burned or spent on, say, an ice cream — in the latter case it might become capital for someone else. The industrial ice cream maker in a dairy processing plant is capital. The cooking utensils in my kitchen are not capital, because they are not used as part of a process which creates profit. Neither do I sell them, for their use value is much greater to me than their exchange value could ever compensate, nor do I (at the moment) use them to bake cakes or cook soups for sale with them (cf. De Angelis 2007). Capital (as self-valorising value) only exists as part of a social process and social relation through which its continuous increase is realised.

1.3.2 Capital as social force.

As capital circulates and accumulates, more and more people and resources are drawn into its dynamic. Yet most fundamentally, the circuiting only occurs because people widely accept the institution of money, because people exchange and trade goods, because people (have no choice but to) sell their labour and engage in production. Human powers and capacities are interwoven and articulate with one another in such ways that capital becomes more than self-valorising value, it becomes a social force (cf. De Angelis 2007). But it should not be understood as an autonomous force in the world which orders things and relations independently of the participation of human

beings. Rather, it might be best seen as a kind of systemic imperative, the necessity and urgency of which emerges from conditions that were, and continue to be, violently imposed on non-capitalist worlds.

The variety of ways in which people's lives can be lived and reproduced is only limited by human ingenuity and the elasticity of ecological systems. Nonetheless, despite very many people's better judgement, against their own hopes and desires, and regardless of their struggles, however fierce, capitalism is regulated, preserved and extended in and through their own very actions. This is because in unquestionably crucial ways, wherever the system has taken a firm hold, people have very little choice than to act in accordance with its imperatives. Autonomous access to the means of subsistence, which usually entails use of a minimal amount of fertile land and a source of water, is a precondition for any significant, and minimally dignified evasion of capital¹⁸ – and this is increasingly difficult in a world where growing amounts of land are asphalted, desertifying or privately owned by the few. People are hence forced to submit at least parts of their lives to the exigencies of the market, forced to pit their livelihoods against those of others, thereby acting out and reproducing capital over and over again.

"The aspiration of capital – generally referred to as the 'profit motive' – becomes a social force when the practices of a multiplicity of social

Of course we might argue that a scavenging and/or petty crime existence in urban areas might enable such evasion of capital. The cultural stigma and constant threat to integrity of one's body and mind in such situations, however, hardly make such evasion bearable. Some squatters, nonetheless, have managed to create subcultures within which such livelihoods become practicable and enjoyable.

subjects are interlaced ... to give [this aspiration] concrete forms ... It is irrelevant here whether the individual singularities (i.e., the real 'body subjects' or, at larger scales, groups and networks of individuals, communities, organisations, companies, etc.) share or do not share this motive or aspiration. For capital to be constituted as a social force what matters is that the mental and manual activities of these singularities, their *doing*, constituted in a web of social relations, *are coupled* to [this aspiration] so as to reproduce capital itself in its endless drive for self-expansion" (De Angelis 2007: 38).

Importantly then, capital is a force that is brought to life by people and their interactions. It is not autonomous nor external to human relations, but created and recreated by people's own actions. Nonetheless, it enthrals us as if it was an autonomous force, as it reifies and thus materialises in the vast majority of the things that surround us (as commodities), and in factories, warehouses, shopping malls, institutions and their buildings, as well as in certain people, industrialists, employers, investment bankers.

1.3.3 Capital as value practice.

While market exchanges might constitute an increasing part of the totality of exchanges on which the reproduction of people's livelihoods depends, this totality can – even in so-called advanced capitalist societies – not be reduced solely to market exchanges and their corresponding social relations of production. Other relations and practices of social cooperation exist alongside (in harmony, in conflict or in a host-parasite relation with) capitalism. The totality is hence not capitalism; rather,

capitalism is a subsystem of the whole which is constituted by a variety of dynamic, interacting, often mutually constitutive systems of relations.

Market rationalities – cost-benefit calculations, competitive pursuit of profit – animate particular value practices (De Angelis 2007). Value practices are practices and activities which are both based on and reproduce and give rise to particular values, even entire value systems, and in this case, market values.

To speak of value practices in this way is of course to deploy a concept of value distinct from its common Marxian usage. Following anthropologist David Graeber, we can understand value as "the meaning [that an object or a person] take on by being assigned a place in some larger system of categories" (Graeber 2001: 41). People pursue values, that is, they act in accordance with a system of meaning within which they place and through which they represent the importance of their actions to themselves (Graeber 2001: 76, fn 28 at 270). Through their pursuit of particular values, people reproduce a particular system of meaning — a value system, a social system.

To talk of value practices hence emphasises the value-based and meaning-making nature of social action and practice. On this view, value guides action, and endows it with particular meaning. Yet value and meaning are not prior to action, but rather produced in and through action — value and action, meaning and practice are coemergent. This perspective also includes an understanding of the market as an ethical system, an acknowledgement that all market decisions are value judgements and an

expression of the market value system (McMurty 1998; Sayer 1997). As such, market values and their concomitant practices are neither normatively neutral nor inevitabilities or facts of life; rather they are particular kinds of norms amongst many others kinds of norms which may also guide human action, and with which they may conflict. This also implies that "the study of how we reproduce the capitalist mode of production ... is a study of how we pursue the values that are characteristic of it" (De Angelis 2007: 25).

Massimo De Angelis understands the struggle against capital in terms of struggles between value practices: "clashes between modes of doing, relating, giving meaning and articulating social powers" (2007: 13). This understanding allows for an 'outside of capitalism' that is not spatially or materially determined, but rather embodied in particular kinds of practices and relationships. The outside of capitalism is hence cast as a dimension of everyday life that is organised on principles and constituted by practices and relationships that are radically different ¹⁹ from the systemic ordering of capital which is "predicated on the enclosure of commons, pursuing ... accumulation, reproduced through pitting livelihoods against each other and resulting in the production of scarcity in the midst of plenty" (2007: 12). Value practices that give rise to and take place within the 'outside' of capitalism are based upon and reproduce

This 'outside' of capitalism can be made radically visible in what Hakim Bey (1985) would have called "temporary autonomous zones" ("temporary space-time commons" for De Angelis), when these 'other' value practices bring forth a shared experience of a space organised on value practices other than and opposed to capital's value practices. De Angelis cites the protest camp set up as part of the mobilisations against the G8 meeting in Gleneagles in 2005 as such a commons (2007: 19-24).

values different from the values of capital. Many indigenous relational modalities are, on this account, outside of capital.

Distinct from the claim that any 'outside' to capitalism has already be completely subsumed (Hardt and Negri 2000) and distinct from the claim that resistance always begins with a 'negation', a screaming *NO!* (Holloway 2005), there is a tradition of (autonomist) thought that holds that life, in all its complexity, multiplicity, and constitutive and generative power continuously creates practices and relations that are 'other than capital', which constitute alternative value practices (e.g. De Angelis 2007). Such value practices are inevitably threatened by capital which seeks to subsume them into its profit-seeking logic, or dissolve and destroy them through the techniques and mechanism which are at capital's disposal, and which are often associated with state structures (Deleuze 1995; De Angelis 2005).

The politics of capital, and in particular the politics of neoliberal capital, on this account, are about the imposition of particular values as measurements and objectives of all social practices. Alternative value practices constitute an 'outside' of capital, which, given its hegemonising drive, it will strive to subsume or articulate with. It is exactly these alternative value practices in which the key to transformation and counterhegemonic pursuit of meaning lies. Firstly, they remind us that capitalist value practices are not irrevocable facts of life but rather historically contingent practices

that can be contested if not overturned²⁰, and secondly, that these are not total, but constitute one (powerfully expansive) set of practices amongst many (possible) others.

The realm 'outside of capitalism' emerges when and where material and social life is reproduced through value practices other than those of capital. It is from that realm that we can observe and evaluate capital's values and social relations "from the vantage point of a refreshingly different bias" (2007: 31). It is in and through struggles against capital's value practices that different values emerge: "[s]truggles bring values, their tensions and boundary lines to the forefront, and this creates the *outside* [of capitalism] as an emergent property" (De Angelis 2007: 33).

Sometimes the non-capitalist is seen as that into which capital needs to expand (e.g. Luxemburg 1913 [1951]), or it is cast as that which is emerging from people's struggles against capital (e.g. Thompson 1991). De Angelis furthermore points out that "[s]ometimes we discover this other-than-capitalism as practice right at the heart of capital, in its shopfloors and offices, a practice of gift, mutual aid and solidarity among workers themselves. At other times we find it outside, or running across capitalist organisations via circulation of struggles. Often this force of community and gift is a social force that capitalist firms must be able to tap into for competitive advantage over others" (2007: 35).

Capital as embodied force constrains people's capacity to engage in non- and anti-capitalist forms of social production, primarily simply through the time and energy expended in the service of capital. However, "[m]oney, commodity, capital are modes of existence of social relations, the forms in which social relations currently exist. These are the frozen or rigidified modes of existence of relations between people... but things-as-they-are are not eternal, they are just the historically congealed forms of social relations" (Holloway 2005: 51). Forms are thus neither unchangeable facts, nor are they illusions.

This other dimension, this relational field that is other-than-capitalism, in which gift exchanges, family and kin relations, relations of solidarity and mutual aid, pursuits of conviviality interact and articulate to create meaning and value and to reproduce lives, has been theorised and documented increasingly over the last few decades. It needs to be pointed out however, that non-market relations of oppression such as patriarchy and racism can flourish in and amongst these non-market interactions just as much as (albeit in different ways than) they flourish in market interactions. Non-market relations are not in and of themselves free of oppression. But they are free of the particular oppression of capital.

The perspective of value practices allows us to see that:

"The ultimate stakes of politics ... is not even the struggle to appropriate value; it is the struggle to establish what value *is.*.. Similarly, the ultimate freedom is not the freedom to create or accumulate value, but the freedom to decide, (collectively or individually) what it is that makes life worth living. In the end, then, politics is about the meaning of life" (Graeber 2001: 88).

Apart from the longer-standing discussions of the relationship between capitalism and non-capitalism (as in Rosa Luxemburg, especially 1913 [1951]), see Dalla Costa and James (1972) for a conceptualisation of non-market relations in terms of "unwaged labour", Tronti (1973) for the idea of the "social factory", Illich (1981) for "shadow work" and "the vernacular", Meillasoux (1981) for "domestic community", Mattera (1985) for the "underground economy", E.P. Thompson (1991) for the "moral economy", and the various theorisations of the "informal economy" (such as Portes, Castells and Benton 1989; Latouche 1993, Sassen 1994). Cf. Caffentzis (2002) and De Angelis (2007). We could also add Gibson-Graham (1996; 2006) to this list, even though her/their arguments emphasise that the triumph of capitalism over other forms of provisioning has been overstated both by capitalists and their critics.

1.3.4 Contradictions of capital.

In the Marxist tradition, contradictions and crises are seen to lie at the very heart of the capitalist mode of production. This means that in the course of its normal functioning, capitalism generates barriers to its own further development. These barriers take on the form of crises that have the potential to either undermine or strengthen capitalism as a whole, depending on the particular historical and geographical circumstances.

This crisis-tendency of capitalism (amongst other things) implies that stable capital accumulation is improbable without a political regime which ensures that the economic and extra-economic conditions for accumulation are in place. Accumulation regimes take a variety of forms, and are historically and geographically specific (Jessop 2002). Whether the crises that the contradictions of capital provoke resolve themselves as fundamental threats to any given accumulation regime, or whether they serve to discipline and renew it, is an open question.

Regulation of some kind is always necessary to make accumulation possible.²² Accumulation hence calls for what Jessop calls 'spatio-temporal fixes': institutionalised compromises, and particular social formations that support the

In particular this is due to the reproduction of capital depending on extra-economic conditions: that is, capital is incapable of reproducing itself entirely through endless circuits of commodification. We have seen this already in the discussion of subsistence, and I return to this again below. See also Jessop (2002: 18-22) for an account of the "indeterminate but antagonistic nature of the capital relation and its dynamic".

provisional stabilisation of the circuit of capital within given time-space coordinates. Spatio-temporal fixes constitute particular solutions to the problem of the reproduction and stabilisation of capital. However, due to its antagonistic and crisis-prone nature, capitalism is likely to result in the periodic renewal of any particular fix. So far, capital accumulation has proven highly adaptable, and has transformed itself from the old liberal regime through Keynesianism to neoliberalism, surviving and extending its reach in somewhat altered but nonetheless clearly recognisable forms. For example, all social formations that capital as force produces are undeniably marked by antagonisms – between the labouring class and the class of the owners of the means of production, but also within and cross-cutting classes as people compete for jobs and profits – as well as by the recurring crises produced by the structural contradictions inherent in the relations and processes that constitute capital.

I turn now to an exposition of two contradictions of capital, firstly capital's tendency to overaccumulation, and corresponding need for spatial expansion, and secondly capital's dependency on certain conditions of production.

1.3.5 The primary contradiction of capital and colonisation.

The primary contradiction of capitalism is generated by capital's drive to expand. An obvious way to increase profits is to decrease the cost of production, to extract more labour from fewer workers, cut wages, or speed up work technologically. Yet workers' loss in wages reduces the final demand for consumer commodities, and leads to the overall reduction of profits. In this way, this fundamental contradiction is expressed in capital's tendency to overproduction and a consequent crisis of its realisation. It is

sometimes seen as a contradiction between the social nature of production and the private nature of appropriation.

It is this contradiction that is often understood as driving the processes of imperialist expansion of capitalism. As David Harvey explains

"To simplify, we initially assume that all production and realization of interdependent capitals occurs within a closed region. Accumulation proceeds within that region at rates dependent upon the local expansion of the proletariat, the state of the class struggle, the pace of innovation, the growth in aggregate effective demand, etc. But since capitalists will be capitalists, overaccumulation is bound to arise. The threat of massive devaluation looms large and civil society appears destined to experience the social distress, disruption and unrest that accompany the forcible restoration of conditions favorable to accumulation. This is, of course, exactly the kind of 'inner dialectic' that forces society to seek relief through some sort of 'spatial fix'. The frontiers of the region can be rolled back or relief gained by exports of money capital, commodities or productive capacities or imports of fresh labor powers from other regions. The tendency toward overaccumulation within the region remains unchecked, but devaluation is avoided by successive and ever grander 'outer transformations'. This process can presumably continue until all external possibilities are exhausted or because other regions resist being treated as mere convenient appendages" (Harvey 1982: 426-427).

Crises of overaccumulation are thus 'solved' by displacement, by export into other areas²³. However, while this is undeniably part of the capital dynamic, it should be

^{23 &#}x27;Temporal fixes' are also possible solutions to the contradictions of accumulation, deferring problems into the future with the help of certain legal and/or financial mechanisms.

noted that this dynamic itself developed through colonisation. That is, capitalism was from its very beginnings dependent on 'outer transformations'. 'Outer transformations' are not just a strategy for resolving an 'inner contradiction', but have always been part of the preconditions enabling inner contradictions to arise in the first place. Walter Rodney remarks that

"... most bourgeois scholars write about phenomena such as the industrial revolution in England without once mentioning the European slave trade as a factor of primary accumulation of capital... But even Marxists (as prominent as Maurice Dobb and E.J. Hobsbawm) for many years concentrated on examining the evolution of capitalism out of feudalism inside Europe, with only marginal reference to the massive exploitation of Africans, Asians and American Indians" (Rodney 1972: 101).

In her *Caliban and the Witch*, a ground-breaking study of the birth of the proletariat as inextricably intertwined with a violent subjugation of women and disciplining of the body in feudal Europe and its colonies, Silvia Federici argues that we can understand the waves of colonisation starting in the sixteenth century as part of and reaction to the accumulation crisis which had beset the feudal economy "between 1350 and 1500 [when] a major shift occurred in the power-relation between workers and masters. The real wage increased by 100%, prices declined by 33%, rents also declined, the length of the working-day decreased, and a tendency appeared towards local self-sufficiency" (2004: 62). In response to this crisis of the feudal economy's reproduction, the European ruling classes launched a "global offensive" that lay the bloody foundations

for a capitalist world system in an unprecedented appropriation of new sources of wealth (Ibid.; see also Moore 2000).

It was through this global predation, including the plantation system and the slave trade, that capitalism developed. This point has to be understood not only in terms of (the external) transatlantic trade constituting the primitive accumulation necessary for the concentration of capital to set off the (internal, European) circuit of capital. Rather, it was in and through the transatlantic trade circuit that capital began circuiting. And it was hence already at the capitalist mode of production's earliest of origins that those peoples whose descendants we today call indigenous were tied into its circuit.

"After an initial period of direct predation of already produced luxuries, especially at the hands of the early Spanish conquistadores, the M-C-M' circuits of the great merchants began therefore to be fed by the increasing supplies of gold, silver, sugar and cotton extracted by local indigenous people forced to work to death in mines and plantations" (De Angelis 2007: 47).

However, after the massive decimation of the indigenous people of the Americas through European violence and disease²⁴, "free labourers necessary to cultivate the staple crops of sugar, tobacco and cotton in the 'New World' could not have been supplied in quantities adequate to permit large-scale production. Slavery was necessary for this" (Williams 1964: 6). A triangular transatlantic trade developed

See, *inter alia*, Crosby (1972) and Denevan (1976) for reliable sources on the demographic collapse of the population of the Americas after 1492.

between Europe, Africa and the Americas. From Europe, commodities produced in its budding industrial mills were moved to the west coast of Africa from which captured men, women and children were shipped to the Americas and Caribbean, to work as slaves in the colonial plantations and mines, the raw materials and staple crops of which were in turn sailed to Europe – both as inputs into industrial production and as exotic commodities for the social reproduction of the upper, middle, and increasingly even the working classes.

Massimo De Angelis argues that capitalism has not been theorised and problematised sufficiently as a "global *articulation* of a multitude of techniques and strategies, from slavery to wage labour, from unwaged work of reproduction to post-Fordist temporary work, from unwaged third world petty commodity producers on the breadline to the highly skilled 'systems analysts' of high-tech capitalism, from Fordist sweatshops to cognitive precarious labour" (De Angelis 2007: 50, emphasis in original). Yet it is this articulation of different moments in the global wage hierarchy, which pits coproducing communities against each other on a global scale, that is constitutive of both contemporary capitalism and its earlier forms. What is more, an engagement with the indigenous condition, the enclosure of indigenous livelihoods, and the war against subsistence more broadly, is often lacking from a comprehensive critique of contemporary capitalism. In this thesis, I hope to contribute in small ways to remedy this lack.

1.3.6 Conditions of production and fictitious commodities.

In his attempts to apply Marxist analysis to the ecological-environmental crisis, James O'Connor has been conceptualising a 'second contradiction' of capitalism. O'Connor bases this contradiction on the notion of 'conditions of production'. According to O'Connor, Marx defined three kinds of production condition²⁵: (i) the labour power of workers, or the "personal conditions of production"; (ii) "external nature", that is, "external physical conditions or … natural elements"; and (iii) "the communal general conditions of production" such as means of communication, transport, and wider, especially urban infrastructures (O'Connor 1996: 200).

The second contradiction of capitalism is a contradiction between the process of accumulation and the conditions of production, for the latter are impaired or even destroyed by the former rather than reproduced. The idea is that the material and social *conditions of production* of capital are degraded through the cost-cutting of individual capitals, to the extent that their degradation will, over time, slow down or even halt production.

I will leave the question of whether or not it is useful to theorise a 'second contradiction' of capitalism – and whether or not it is usefully Marxist – for another occasion²⁶. The insight to be retained from O'Connor is the dependence of capital

Marx's use of the term as a clear analytical category is disputed, however (e.g. Spence 2000). O'Connor himself acknowledges his debt to Polanyi's notion of "fictitious commodities", to which I shall return in more detail below.

For example, while it is certainly undeniable that capitalism undermines its own 'natural' conditions of production – the environment and ecological health on which production, and indeed human life is predicated – it is also important to remember that this is not solely a feature

accumulation on certain conditions of production. While it is rather obvious that processes of accumulation do not happen in a vacuum, but in a context that is – largely – earth-bound, it is worth pointing out that this context is not entirely reproducible by the circuiting of capital itself. The *conditions* of production are only partially maintained by the actual *processes* of production – that is, the production conditions are in important respects prior to or outside of capital.

Polanyi's concept of 'fictitious commodities' (1957) is an important elaboration of this point. Let me briefly expound on this idea here.

A capitalist market economy comprises all elements of industry within the mechanism of the market, extending the commodity form also to labour, land and money. Labour, land and money are essential to industrial production, and their supply is ensured through the market²⁷. Indeed, these markets form absolutely essential parts of the

of the *capitalist* mode of production. Other modes of production can and indeed have led to the deterioration of the environment to such an extent that they undermined their own smooth continuation. This holds for both previous modes of production, such as the agricultural practices of the Roman Empire, and possibly even those of hunter-gatherer societies (cf. Spence 2001), as well as for more contemporary, non-capitalist modes of production, such as in Soviet Russia. Martin Spence has found other problems with O'Connor's approach to a 'second contradiction' of capitalism (Spence 2000). See also Toledo (1996) and Lebowitz (1996) for critical commentaries on O'Connor.

Polanyi even seems to argue that this is necessarily so: since industrial production developed out of a mercantile society, he holds that the supply of labour, land and money "could be organized in one way only: by being made available for purchase... The extension of the market mechanism to the elements of industry – labor, land, and money – was the inevitable consequence of the introduction of the factory system in a commercial society" (Polanyi 1967: 75). It was because the factory system had developed as part of a process of buying and selling, that labour, land, and money *needed* to be treated as commodities in order to keep the system

capitalist system. However, "labor, land, and money are obviously not commodities; the postulate that anything that is bought and sold must have been produced for sale is emphatically untrue in regard of them" (Polanyi 1967: 72). While they are not commodities in the sense of having been produced for sale, they are treated like commodities; they are 'fictitious commodities'.

We can understand fictitious commodities as vital inputs into production — into the circuit of capital — inputs without which the capitalist system would not function, yet which it is, if at all, only *partially* able to provide for itself. Even once a labour market has taken hold, labour power is (re)produced through non-market (as well as some market) relations and practices. The reproduction of labour power is one of the necessary conditions of production. Similarly, the productivity of the land can only be to a certain extent artificially induced — through industrially produced fertilisers, say — before it collapses. Land itself is generally given, and even if landscaping, the drying out of wetlands, the reclaiming of below-sea-level areas can 'produce' it in certain ways, these are clearly limited.

On Polanyi's account, it is the tendency to treat land, labour and money as if they were real commodities that constitutes a fundamental source of contradiction in the capitalist system, and which, if left unchecked leads to "the demolition of society" (Polanyi 1967: 73). He explains: "[L]abor is the technical term used for human beings, in so far as they are not employers but employed" (Polanyi 1967: 75). And it is because there is a human being "attached to [the] tag" *labour power*, that this

going. For our purposes, suffice it to recognise that they *are* treated as such.

commodity cannot be "shoved about, used indiscriminately, or even left unused" without causing "acute social dislocation"; if treated in this way, nature, too, would be despoiled and polluted, "the power to produce food and raw materials destroyed"; and "shortages and surfeits of money would prove as disastrous to business as floods and droughts in primitive [sic] society". In short "no society could stand the effects of such a system of crude fictions even for the shortest stretch of time unless its human and natural substance as well as its business organization was protected against the ravages of this satanic mill" (Polanyi 1944 [1957: 73]).

Hence, when such 'fictitious' commodification goes too far, Polanyi argued, social forces adversely affected by the expansion of market relations into labour, land, and money will rise up to protect human beings and their environment. In this way, the market economy will be restrained in relation to fictitious commodities, even as it expands in relation to 'genuine' commodities. This is what the notion of 'double movement' aims to grasp.

1.4 Polanyi's 'Double Movement': one hand taketh away, the other giveth back?

Karl Polanyi's main concern in *The Great Transformation* (1944) was with the disastrous social effects of market forces dominating all social relations. He argued that while economies (in their broadest sense as human want-satisfying behaviour and general provisioninig) have always been embedded in social relations, with the rise of

capitalism social relations have come to be embedded in the economy — with catastrophic consequences for people, their relationships and environments.

It is the treatment of land, labour and money as (fictitious) commodities, as well as the separation of economic relations from social institutions which characterises capitalist as opposed to non-capitalist economic relations. However, since "a market economy can function only in a market society", the mere separation of economic relations from non-economic social relations is not enough. Rather, "society must be shaped in such a manner as to allow [the economic] system to function according to its own law" (Polanyi 1944 [1957: 57]).

The self-regulating market, according to Polanyi, wreaks havoc in society as it catapults the many into poverty and a precarious existence, pitting social classes against each other and threatening a "plunge into utter destruction", a breakdown of social peace and order (Polanyi 1944 [1957: 156]). Polanyi argued that the extension of the commodity form to land, labour and money – three vital inputs into the economic system that were not produced for sale yet subjected to the price-setting mechanisms of the market – has particularly destructive consequences. Bob Jessop (2007; 2008) has raised the question "whether the contemporary neo-liberal market economy has reinforced the role of a fourth fictitious commodity: knowledge" (Jessop 2008: 340-341). I return to this question in Chapter 2.

Importantly, on Polanyi's account, the dangers of a rampant market economy threaten not only a particular class, but by extension 'society as a whole'. Polanyi writes of

"the dangers involved in the exploitation of the physical strength of the worker, the destruction of family life, the devastation of neighbourhoods, the denudation of forests, the pollution of rivers, the deterioration of craft standards, the disruption of folkways, and the general degradation of existence including housing and arts, as well as the innumerable forms of private and public life that do not affect profits" (Polanyi 1944 [1957: 133]). The threats that an unfettered market poses provoke a countermovement to protect society from the worst depredations.

Modern society, he argued, is characterised by the interplay of *economic liberalism* on the one hand, positing the self-regulating market, laissez-fair and free trade as the ultimate socio-economic organising mechanisms, and by *societal self-protection* on the other, a kind of instinctive or necessary reaction of society to preserve its order as well as its productive organisation through protective legislation, associations such as trade unions, welfare institutions and other means. This is Polanyi's thesis of the 'double movement': the movement, on the one hand, to expand market relations, and society's (parallel or subsequent) countermovement to protect itself from the effects of the very operation of this market, on the other.

It is important to understand that the countermovement, while constraining the destructive tendencies of the free market by subjecting it to extra-economic regulation and by softening its blows through welfare institutions, at the same time also supports and sustains capital accumulation. Without the countermovement to protect society, market forces are likely to prove self-destructive, as the very process of

commodification generates contradictions that the market mechanism itself cannot resolve.

This resonates with a common account of the three functions of the capitalist state²⁸ (e.g. Scharpf 1998). Its first function is that of guarantor of social stability and the security of private property, both externally through territorial defence and internally through its police and justice systems. Its second function is that of facilitator for continued capital accumulation, and involves the creation and maintenance of economic policies, and infrastructures, amongst others. Its third function, and the function that we might understand as fulfilling an important 'countermovement' role, concerns the alleviation of the negative effects of capitalist development and free markets, the pacification of those adversely affected by it, and is often expressed in social welfare policies. While this third function is directly related to the amount of pressure exerted by social movements and trade unions, it would be wrong to see this function as merely a response to such public pressure. The long-term stability of capitalism is dependent on all three functions to be fulfilled by the state, and the alleviation of negative effects of the capitalist market is an important precondition for continual economic efficiency.

Polanyi was optimistic that "our age will be credited with having seen the end of the self-regulating market" (Polanyi 1944 [1957: 142]). Unfortunately, as we now know, he was more hopeful than prescient. Nonetheless, his thesis is still illuminating of the

These regime imperatives can also be found in more elaborate description in Jessop 2002, as applying to both the capitalist type of state and other post-national competition regimes.

dynamics that characterise market expansion even today. The labour-capital and (developmentalist) North-South social contracts of the post-war area as well as ecological protection initiatives can be read as signs that market expansion is indeed accompanied by the countermovement to palliate its effects.

In order to clarify the notion of a double movement, I briefly address the nature of the movement toward market expansion, and the nature of the countermovement to protect society in turn.

1.4.1 Market expansion.

Polanyi argued that the industrial revolution in Britain, and the long-term investments it required, created the need for a relatively stable production process to make the risks of investments bearable. This meant that the inputs required by industry, especially the fictitious commodities of labour, land, and money, be readily available for purchase. This need provided strong incentives for the establishment of a world market. Additionally, an ideological force propelled market expansion based on "the three classical tenets: that labor should find its price on the market; that the creation of money should be subject to an automatic mechanism; that goods should be free to flow from country to country without hindrance or preference; in short for a labor market, the gold standard, and free trade" (Polanyi 1944 [1957: 135]). These three measures formed "a coherent whole" (Polanyi 1944 [1957: 138]) and their

entrenchment was supported in Britain through the enactment of a flurry of laws in the 1830s and 1840s²⁹.

Jessop (2001; 2008) has complemented Polanyi's account of the double movement³⁰, with insights from the Parisian regulation approach to the study of contemporary capitalism, and systems-theoretical understandings of the market economy as an autopoietic system. In doing so, he provides a fuller, more robust analysis of the mechanism of the double movement, and more generally of the dynamics through which the – always unstable and contested – capitalist system is reproduced and stabilised.

Jessop identifies four interrelated ways in which capital – as a social force – can come to dominate society: first, through commodification of hitherto non-commodified areas of life; second, through the extension of economic measurements (cost-benefit, profit-loss calculations) to hitherto non-commercial areas of decision-making; third, capital's systemic capacity to protect itself from the influence of other systems with

The legislation included the Poor Law Amendment Act of 1834 instituting a competitive labour market, Peel's Bank Act of 1844 subjecting money circulation to the gold standard, and the Anti-Corn Law Bill of 1846 which opened the British market to grain from the rest of the world (Silver and Arrighi 2003: 330).

Others have also complemented Polanyi's account. For example, in their illuminating article on the *belles époques* of nineteenth-century British and late twentieth century U.S. hegemony, Silver and Arrighi (2003) have forcefully shown the relevance of Polanyi's thought to understanding the recent period of neoliberalisation, despite its important differences from the earlier British-dominated liberal crusade. Many others have also commented on "the remarkable growth of posthumous interest" in Polanyi's work (Özveren 2007: 549), and on the import of Polanyi's ideas for an understanding of the contemporary socio-economic condition (see also, for example, Stiglitz 2001; Block 2001; Hindess 2007).

which it interacts and co-evolves reduces the possibility of its distinctive operational codes being eroded; fourth, capital's systemic capacity to induce, provoke or force other institutional orders to operate according to its logic consolidates the market mechanism through time and space. When these four tendencies reinforce each other, capital has taken hold of society, which "means no less than the running of society as an adjunct to the market. Instead of economy being embedded in social relations, social relations are embedded in the economic system" (Polanyi 1944 [1957: 57]).

Polanyi himself was very clear about the fact that "the gearing of markets into a self-regulating system of tremendous power was not the result of any inherent tendency of markets towards excrescence, but rather the effect of highly artificial stimulants administered to the body social" (Polanyi 1944 [1957: 57]). That is to say that the expansion of the "unregulated" market was, and continues to be, a highly regulated affair. As Jamie Peck has recently argued with regard to the wave of market expansion known as neoliberalisation: "There was nothing spontaneous about neoliberalism; it was speculatively planned, it was opportunistically built and it has been repeatedly reconstructed" (Peck 2008: 3).

1.4.2 The countermovement.

The notion of a countermovement to market expansion carries connotations of protest and social movement. However, Polanyi did not understand the countermovement as primarily a force of protest from below. Instead he believed that whether or not workers and the unemployed had the bargaining power to protect themselves, the unsustainability of an entirely self-regulating market would summon 'agencies' that

would ameliorate their conditions. In this way, in early nineteenth century Britain, according to Polanyi, it was the "enlightened reactionaries of the landed classes who spoke out on behalf of the emergent working class and fought for their protection³¹ (Polanyi 1944 [1957: 165-166]).

Silver and Arrighi (2003) point out that these notions of class leadership have parallels in Gramsci's understanding of hegemony as "intellectual and moral leadership". But while hegemony for Gramsci is accompanied by the forcible domination of antagonistic groups by the ruling group (Gramsci 1971: 181-182), Polanyi deemphasises asymmetric power relations between classes and conceives of society in less antagonistic terms, arguing that because "different cross sections of the population [are] threatened by the market, persons belonging to various economic strata unconsciously [join] forces to meet the danger" (Polanyi 1944 [1957: 155-156]). This is not out of straightforward solidarity, but rather because the threat to social order of market expansion affects everyone. Civil unrest is rarely in anyone's interest, which is why the disenfranchised are likely to be protected from the most harmful market consequences by those in less precarious situations.

Michael Burawoy (2003) has argued that Polanyi's analysis is limited by a problematic conception of society, which lends itself to overly optimistic readings that misconstrue the double movement thesis according to what Gillian Hart has recently

³¹ The 'protection' of the working class was also in the interest of the landed classes. After all, the latter were economically pitted against the rising bourgeoisie of factory owners.

called "a mechanistic hydraulic model": top-down market expansion automatically resulting in bottom-up resistance (2010: 14).

The regulationist approach promoted by Jessop (2001; 2008) emphasises that the double movement should be understood less as a two-step process from unregulated to regulated capitalism, and rather as a movement, propelled by crisis, from one regulated regime to another, each with its own particular dynamic, contradictions, and propensities for crisis. The systems theoretical analysis of autopoietic systems emphasises the autopoiesis, that is the self-production, self-creation, and self-organisation of the market economy. This approach, by highlighting the co-evolution and inter-dependence of co-existing systems, shows that the market economy is by no means fully self-contained, yet that as an autopoietic system it is likely to transform and reorganise itself in response to outside pressure (or external management), if at all, only in terms of its own, internal operating codes (such as profit-and-loss calculations).

Polanyi's account is refined by a regulationist sensitivity to the economic and extraeconomic conditions that contribute to the survival of the capitalist order, as well as by an understanding of the operation (reproduction and transformation) of autopoietic systems. All three approaches recognise that capitalist societies are not constituted solely by market relations, but importantly involve other forms of social relations, and indeed that a social world ruled fully by the logic of capital, the commodity form and cost-benefit calculations, could prove destructive of capital itself: "accumulation always and everywhere depends on a precarious balance between commodity relations and other forms of social organization" (Jessop 2008: 334).

Jessop points out that each of the four movements of market expansion (commodification, economic measurements, protection and imposition of capital's logic) has its own limitations, its own countermovements and its own resistances. In this way, the move towards increased commodification, when excessive, can generate market failures which put the social reproduction of capital at risk, and provoke class struggles. The move towards the imposition of cost-benefit calculations and erosion of alternative institutional codes or modes of valuation leads to resistance to this market logic by the joining of social forces that are not necessarily class-based but aim to defend the non-commercial values of the lifeworld. With regard to the other two movements toward the consolidation of capital's logic, a variety of struggles may occur "over the hegemonic worldviews and naturalized forms of 'common sense' that posit capital accumulation as the desirable and/or necessary condition for accomplishing other social goals" (Jessop 2008: 336).

These counter-hegemonic struggles, it is important to note, are diverse in their ethicopolitical vision and strategies of resistance – they might articulate into socialist,
anarchist, or fascist projects, amongst many other possibilities. This point is important
as it highlights that there is nothing inherently progressive or emancipatory about the
countermovement.

Moreover, the double movement can also be used to explain reactionary projects of social containment. In this way, Porter and Craig argue that the social disruptions of market liberalisation are mollified by "giving [the market orientation] a human face or policy limit" (2004: 391). The countermovement, they argue, serves to appease social conflicts and instead of challenging the capitalist global order, rather re-entrenches it through legitimation and deflection of more radical critique.

By contrast, I argue that Polanyi's countermovement is most fruitfully envisioned as consisting of a dynamic variety of forces in any particular space-time context. The drive to 'protect society', I argue, is both a top-down, as well as a bottom-up force which simultaneously challenges and contests as well as reproduces and legitimises capitalism. The countermovement is itself a field of struggle, and it is through close attention to the actual and ongoing processes of its constitution that we can learn most about the contradictory ways in which capitalism survives and reproduces itself, as well as about the cracks of capital and how to prise them open.

Nonetheless, it is crucial to understand the *need* for a countermovement. In order for capital not fully to destroy its own conditions of production, and thereby bring forth crisis and potentially its own demise, a reining in of unfettered market expansion is necessary, and countermovements provide such reining in. This resonates with the insight discussed previously that accumulation can only occur under an accumulation regime which ensures the (extra-economic) conditions for stable and continuous capital accumulation are in place.

In this way, the double movement dynamic raises worrying questions about the complicity of capital-restraining action with the system's self-preservation strategies³². Hence a vital question is how we disentangle from the dialectic of the double movement. How is it possible for countermovements and struggles against the imperatives of capital not to tie back into capital's homeostatic self-preservation, but instead to become "a force for the social constitution of value practices that are ... independent from those of capital" (De Angelis 2007: 42)?

1.4.3 Implications for transformative action: the double movement and nonreformist reforms.

André Gorz in his *Strategy for Labour* (1967) raised the question of the possibility of 'revolutionary reforms', that is, reforms of and within the capitalist system that ultimately undermine rather than strengthen it, reforms which make more acute and

³² A drive for self-preservation, or conatus, according to De Angelis, can be seen as inhering in social forces just as much as in living organisms. He speaks of this drive as homeostatic patterns made up of a multitude of interactions rather than the conscious planning and directing of a human or institutional actor: "On the one hand, social forces that constitute themselves in opposition to capital and immediate conditions of accumulation (for example, struggles for higher wages, for less work, for more stringent environmental regulations, for commons and entitlements) represent 'life threats' to conditions of profitability and therefore threaten capital's immediate conditions of existence. On the other hand capital, like living organisms facing external dangers, must strive to adapt for the sake of its self-preservation. In this adaptation there emerge self-organising patterns that strive to capture this conflict, to co-opt it, to acknowledge some of its demands to the exclusion of others, to subsume them and make them the condition of a new round of accumulation, predicated on qualitatively new organisational forms of labour and social cooperation, but reproducing the same basic life form for the social body, the same relations of production, the same rat race within the social body and artificial production of scarcity, that are fundamental in keeping mechanisms of homeostasis alive" (2007: 41).

more visible the internal contradictions of the system and that would hence (gradually) lead to the overthrow of capitalism – and the rise of socialism. Are such reforms ever possible?

This question is particularly pertinent in those contexts ("richer societies") in which "it is not so clear that the status quo represents the greatest possible evil" (Gorz 1967: 3). When basic needs do not any longer assert themselves with great urgency, when "the intolerability of the capitalist system has become relative", its overthrow or radical transformation no longer appears as a "clear and vital necessity" (Gorz 1967: 21). Gorz's book addresses the questions of why and how to continue the struggle against capital despite the relatively improved situation of the working class in 'mature capitalist societies'.

Gorz's distinction between reformist and non-reformist reforms has been used by generations of activists in order to make sense of the objectives and achievements of their struggles. Debates about what constitute successful non-reformist reform strategies have long been an important aspect of progressive policy discussions amongst NGOs, trade unions and social movements (Klees 2002).

Reformist reform ultimately reinforces structures of inequalities by "subordinat[ing] its objectives to the criteria of rationality and practicability of a given system and policy", whereas non-reformist reform cumulatively creates the conditions in which transformations of the existing system become possible by insisting on "what *should* be made possible in terms of human needs and demands" (Gorz 1967: 7, my emphasis).

The struggle for non-reformist, 'revolutionary' or 'structural' reforms "creates possibilities which point beyond capitalism and which therefore render the status quo all the more intolerable, its contradictions and shortcomings more evident" (Gorz 1967: 60). Structural reforms are not the kinds of reforms that are the outcome of a compromise, but "should rather be considered as cracks created in the system by attacks on its weak points... To fight for alternative solutions and for structural reforms (that is to say, for intermediate objectives) is not to fight for improvements in the capitalist system; it is rather to break it up, to restrict it, to create counter-powers which, instead of creating a new equilibrium, undermine its very foundations" (Gorz 1967: 181n).

Non-reformist reforms alter the terrain on which future struggles will be waged, thereby expanding (or at least changing) what is feasible to be achieved. The hope is that over time radical transformation of deep-seated, unjust structures may become an actual possibility rather than a utopian ideal.

Erik Olin Wright defines non-reformist reforms as "social changes that are feasible in the world as it is (thus they are reforms), but which prefigure in important ways more emancipatory possibilities" (in Kirby 2001). Nancy Fraser has adopted the concept of non-reformist reforms as a *via media* between her strategies of affirmation and transformation (Fraser & Honneth 2003). She emphasises the double-sided nature of non-reformist reforms: "on the one hand, they engage people's identities and satisfy some of their needs as interpreted within existing frameworks of recognition and distribution; on the other hand, they set in motion a trajectory of change in which

more radical reforms become practicable over time" (Fraser in Hrubec 2004: 881). For Fraser, affirmation aims to remedy inequitable outcomes of social arrangements without touching upon the underlying social structures that generate them, whereas transformation aims to address unjust outcomes precisely by dismantling or reconfiguring the underlying generative framework. The distinction between affirmation and transformation allows Fraser to classify and evaluate political strategies in both dimensions of justice to which she has drawn attention: redistribution and recognition. Non-reformist reform is heralded in this context as a kind of "third way" strategy in both dimensions.

However, movements for particular non-reformist reforms run the risk of turning into toothless lobbying or electoral efforts aiming at adoption of a reformist reform, as the feasibility of their demands becomes the prime mobilising factor³³. Gorz was of course aware of this risk of subordination, that is, the risk that the efforts of social movements may be co-opted, subsumed and reabsorbed within the capitalist framework, subordinated to its functioning and hence serve to reinforce it. But he insisted that "the risk of subordination exists, but subordination *is not inevitable*. The risk must be run, for there is no other way" (Gorz 1967: 8, emphasis in original). His vision was one of incremental change in the short and intermediate term, leading to revolutionary socialism in the long term.

³³ See Hart-Landsberg (2007) for an account of such a process in the U.S. movement for 'a living wage'.

An abstract evaluation of the double movement's restraints, reforms, and facilitations of market expansion is impossible. We have to attend to the particularities of actually existing struggles in order to judge the reformist or revolutionary nature of any given countermovement. In this thesis I aim to begin such an evaluation with regard to the protection of traditional knowledge.

1.5 The role of traditional knowledge in the reproduction of capital.

I argue that the protection of traditional knowledge – as the endeavour expresses itself today – is a field of struggle characterised by movements towards market and colonial expansion as well as by countermovements aiming to 'protect' social and environmental interests. Seen from the perspective of the double movement, the protection of traditional knowledge is less of a challenge to capital than it is an expression of capital's adjusted entrenchment.

It is important to understand the protection of traditional knowledge as a field of struggle in which the clashing of forces can lead to unexpected results. Yet while the "messy actualities" (Larner 2000) of the operation and effects of capital leave many gaps and openings in and through which surprising and disrupting relations and practices can arise, these do not necessarily confront or subvert capital (or if they do, they are likely to be forcibly dissolved relatively speedily). It is hence at least as important to understand the existence of this field of struggle as a crucial legitimising resource shoring up market expansion. This means that while engaging in the struggle on this terrain might limit the most destructive effects of market expansion, this very

engagement itself might undergird rather than undermine capital. This perspective is not supposed to draw an entirely dark picture in which no resistance to capital is possible, but rather highlight the need for a radical critique of the activities and discourses and contestations of the protection of traditional knowledge in order for radically transformative action to be taken on this terrain.

Of course a subversion of capital might not be the objective of those struggling to shape, influence and give meaning to the protection of traditional knowledge, or to use its discourses for particular ends. A certain reining in of capital might be all that is aimed for, in order to soften its harshest consequences. I am in no way arguing that the indigenous movement as a whole has anti-capitalist ambitions. It has been a lesson from my fieldwork, however, that the indigenous movement is far from homogeneous. My normative standpoint of steadfast anti-capitalism is aligned with those parts of the movement which are involved in the direct and day-to-day defence of their subsistence and land rights. Many of those that I am thinking of and referring to in this context will never be able to attend let alone be heard at the international fora in which the protection of traditional knowledge is debated and given a policy shape.

For those struggling against capital, then, an understanding of the protection of traditional knowledge as a field of struggle characterised by capital's double movement is vital. I maintain that it is the double movement that accounts for capital's long term survival, and that it might hence be less the movement towards expansion and more the countermovement for protection that needs to be resisted in order to break the dynamic that has provided capital with its adaptability and resilience.

Because the countermovement pacifies resistance to capital, we might say that it is at least as much a threat as capital itself. In fact, it might be a greater threat as it is, at bottom, the very force that mitigates the internal contradictions of capital. While capital, left to its own devices, might undermine itself, with the help of some democratic countermovement it is able to perform a bootstrapping feat of overcoming its own contradictions.

Yet, as André Gorz argued, when seizure of power by insurrection is out of the question (or, we might want to add, if it is undesirable as in Holloway's *How to Change the World Without Taking Power*), there is no other way than to run the risk of fighting for reforms which might ultimately destabilise the system even as they temporarily legitimate it (Gorz 1967). But what are non-reformist reforms in the context of the protection of traditional knowledge? I argue that such revolutionary reforms are those which successfully contest the hegemonic constructions of knowledge and property which are being perpetuated through the endeavour to protect traditional knowledge. Indigenous movements are in an ideal position to contest this hegemonic 'common sense' as they can make legitimate claims to 'other cosmovisions and world views', thereby providing fresh ways of understanding what is at stake in the protection of traditional knowledge. It is in Chapter 5 that I discuss some such alternative visions in more detail.

^{34 &#}x27;Cosmovision' is the term which indigenous peoples' movements often prefer to the more European 'cosmology'.

In what is first to follow, however, I explain with the help of some historical and ethnographic examples the way in which I understand the protection of traditional knowledge to be a field of struggle characterised by the double movement. A particular contribution of this study is the ethnographic account and discussion of the attempted negotiations for a fair and equitable Access and Benefit Sharing agreement by the ProBenefit project in the Napo region. Before I continue my arguments in the subsequent chapters, let me briefly address the methodological question of how such a particular account is able to make sense of a much wider issue.

1.6 Critical Ethnography as methodological approach.

Ethnographic studies of particular localities or events are of more than merely parochial interest. After all, an ostensibly general process or structure, such as market expansion or race relations, is replicated in concrete forms in particular historical-geographical situations. However, the crucial question here concerns the meaning of *replicated*. Eschewing the idea of a pure, ideal or representational form of (say) market expansion, particular manifestations of which are mere local aberrations of its general form based on the particular local 'contingencies' of a situation, I hold that an object such as market expansion only exists in and through its particular manifestations. It is through an acquaintance with the concrete forms that we can come to gain a fuller understanding of the process or structure in question, the replication of which is less like an identical copy and more like a (Wittgensteinian) family resemblance.

Similarly, it is my contention that the protection of traditional knowledge only exists in and through its particular manifestations. While in the case of traditional knowledge protection such manifestations could be particular policies, guidelines or laws, it is their concrete realisation that is of special interest³⁵. My ethnographic account of an attempt at negotiating a fair and equitable Access and Benefit Sharing agreement in Napo, then, should be understood as a step toward understanding the phenomenon of the protection of traditional knowledge and its double movement dynamic more generally.

In choosing this approach, I am following what geographer Gillian Hart calls "critical ethnography" (Hart 2002; 2004; 2005). Critical ethnography is set apart from the otherwise similar endeavour of *global ethnography* (Burawoy et al. 2000). While Burawoy's project of global ethnography makes the differentiated yet connected *experiences* of globalisation its main focus (cf. Hart 2004; Gille and O'Riain 2002), critical ethnography rather concentrates on the processes of mutual constitution of the local/global³⁶, and the question of what globalisation actually means in its material actualities (Hart 2004: 98).

Hart wants to overcome the notion of 'case studies' as concrete instances of more abstract processes and move instead towards a relational understanding of generality

If a law is only printed words on paper, it is not very much at all. It is its social and material effects that constitute its power and endow it with a more meaningful existence in the world.

In terms of place we may say that "the specificity of a place … arises from the particularity of interrelations with what lies beyond it, that come into conjuncture in specific ways" (Hart 2005: 21). Places, then, are points of convergence of wider ('global') processes as well as arenas for practices: "a local articulation within a wider whole" (Massey 1994: 4, quoted in Hart 2005: 21).

(as in Sayer 1991). Relational generality eschews representational pretensions³⁷: usually we think of the general as a representation of that which is shared amongst a set of discrete entities, that which typifies them and groups them together taxonomically. Relational generality, however, is the relationship between a whole and its parts inasmuch as they presuppose each other. It expresses the notion that parts and wholes can be dialectically related, and that hence parts and wholes are constitutive parts of one another rather than the latter being a representation of the former and/or the former an instance of the latter.

In this way, I conceptualise my study in Napo as co-defining what the protection of traditional knowledge actually *is*. Ultimately other studies of ABS negotiations and other forms of protecting traditional knowledge would have to be undertaken, their double movement dynamic explored, and social implications assessed in order to develop a fuller picture of traditional knowledge as a field of struggle. For now,

³⁷ The representational general is a notion of the general as a kind of ideal type – the general as faithfully representing the important essence of the particular. In this way the particular is conceived of as an instance of the general, an example of it, which however does not tell us anything about the general: While the general defines and explains the particular, the particular is passive: it is defined and explained and categorised, but it has no such powers in and of itself. It cannot define and explain and categorise, it is incapable of agency in that sense. We can, however, understand the relationship between the general and the particular also as one of mutual constitution. As such the general defines the particular as much as the particular defines the general. This understanding acknowledges that the general definition of, say, tree as "a perennial plant having a self-supporting woody main stem ... and growing to a considerable height and size" (OED) makes real, live, human sense only once we make acquaintance with one or more actual, particular trees. Moreover, our understanding of tree is refined the more particular trees we come to know – redwoods, bonsais, bottle trees – and the more we come to know about their particular qualities - their different scents, human uses and ecological relations.

however, even such a seemingly snippet-view of the global endeavour of traditional knowledge protection can provide an insight into its workings. This is because there is no global endeavour for the protection of traditional knowledge that exists apart from its actual and material realisations in such varied forms as negotiations in UN fora, practices in intellectual property offices, court cases, the creation of community data bases, and, as I will show, on-the-ground processes of ABS agreements.

Moreover, choosing critical ethnography as a methodological approach allows for a politically enabling 'focus on the cracks' of neoliberal capital*ism*.

1.6.1 A focus on the cracks.

"There is a crack in everything/That's how the light gets in" (Leonard Cohen, *Anthem*).

There is always the danger that a radical critique of capital power, especially when it focuses on the latter's pervasiveness and inexorability, freezes one's capacity to register, conceptualise and seize the openings and potentials for evasion, resistance, subversion, and hence that it discursively strengthens the very force it set out to undermine.

I aim to avoid conceptualising capital as a quasi-autonomous global force, the dynamic action of which unilaterally affects passive localities and impotent people. Apart from simplifying and dichotomising a complex reality in unacceptable ways, such a perspective would moreover close down possibilities for radical transformation

by deploring the inevitability of the current configuration of the world that the neoliberal 'end of history' outlook celebrates. Both views hence contribute to the entrenchment of the attitude that capital and its social relations are inescapable.

An understanding of the relationship between capital as force and its concrete manifestations in material actualities as one of co-constitution and co-production is not only more nuanced in its rendering of reality, but also opens up the imagination for visions of alternative worlds, echoing the alterglobalisation insistence that 'other worlds are possible'. Moreover, a focus on the *processes* of co-constitution would have to attend to the messiness of these, and hence allow for a theorisation of the contradictions inherent in them, enabling thereby the development of strategies for the creation (and not just the envisioning) of 'other worlds'.

This kind of focus and attention can increasingly be found in critical social science literature (eg. Tsing 2005; Ong 2006; Hart 2002), and many 'critical ethnographies' (cf. Hart 2004) are particularly careful in pointing to the contradictions and slippages, to the always only partial achievements of totalising forces, to the "messy actualities" (Larner 2000), and the cracks and disjunctures.

Neoliberal politics relies on Margaret Thatcher's famous dictum that "there is no alternative". It is thus necessary to show "the multiple and porous forms of neoliberalism and the potent – if often compromised – material social practices of its 'subjects'" (Katz 2005: 631) in order to destabilise neoliberal assumptions, and thereby also their performative power.

In similar vein, Massimo De Angelis insists that the term *capitalism* "projects coherence and closure into the world ... when in fact political thinking should be able to identify cracks and openings in any context and scale of social doing, those cracks and openings necessary to produce new commons" (2007: 36).

However, in taking pains to distance themselves from the rather discredited black-and-white approach of 'evil capitalism smothering the luscious lifeworld' on the one hand, and the overly enthusiastic cultural-turn celebration of concerns of culture and identity eclipsing the politico-economic on the other, studies of processes of co-constitution can run the risk of overestimating the likelihood and ability of turning the possibilities for alternatives that reside in the cracks into actualities. If possibilities for change are held open through contradictions and cracks in actually existing capitalism, then these possibilities are open for emancipatory, empowering and life-enhancing trajectories as well as reactionary, restricting and life-stunting ones. We can thus not only theorise the spaces for the shaping of futures that exist in the messy actualities of the world, but also need to *seize* them – for progressive purposes.

As we saw, Hart calls for critical ethnographies that come to grips with and illuminate contemporary social changes in ways that are "politically enabling" (2004: 91). A critical ethnography, then, has to make salient the openings for resistance to,

reworking of, and resilience under neoliberalism³⁸, so that we may not only *understand* but also *contribute* to these dynamics in emancipatory ways.

Critical ethnographies, so Hart, engage productively with "the question of how multiple forces come together in practice to produce particular dynamics or trajectories, as well as possible alternatives" (2004: 97). As such, they elucidate the mutually constitutive processes that make up neoliberal globalisation, thereby providing inspiration for the reconfiguration of practices and relationships.

Yet critical ethnography is obviously not just a conceptual approach: the ethnographer spends time 'in the field' as well as at the desk. The 'participant observer' field technique is usually taken as the archetypal form of research employed by ethnographers. However, it is probably more appropriately conceived of less as a unitary research method and more as a research strategy, since it is always made up of a variety of methods (Davies 1999). The strategy derives from the insight that one achieves an understanding of a community's values, structures and world views best from their observed daily lives and actions, rather than from their statements of what 'is' or 'should be'. The participant observer attempts immersion in local life for usually at least a year in order to understand the cultural meanings and social structures of the group and how these are interrelated. However, it should be noted that participation is almost definitely not the chief data-gathering technique. Rather, we might better understand participation in people's daily lives as a means of

³⁸ See Katz 2004 for the distinctions between resistance, resilience and reworking. See Sparke 2006 and 2008 for a valuable appropriation in the context of political geographies of globalization.

facilitating observation of conduct and events and of enabling more open and meaningful discussions with informants. Major use will often be made of the unstructured interview, and biographies are frequently collected, photographs and videos taken, surveys carried out. In this way, it is fundamentally an extractive intellectual exercise, which mostly leaves little of real value in the community on whose shoulders the researcher is taking essential steps towards her or his career.

The critical ethnographer has to be reflexive about her presence in and effect on other people's lives. Conducting research across any cultural context requires intense attention to ethics, but this situation might be exacerbated in the case of working with *indigenous* cultures. Such a cross-cultural research relationship involves a particular dynamic of power: as members of colonial cultures, researchers have traditionally held disproportionate power in forms of money, mobility and 'expertise' over their human subjects. This cross-cultural research relationship is imbued with its historical origins and warrants particular care with regards to issues of consent, control, research design, and data ownership.

It cannot be denied that the academic endeavour, despite its discursive ennoblement as humanity's honourable quest for knowledge, is a vast industry necessarily concerned with the perpetuation of its own existence, which must thus remain largely acquiescent to whichever (socio-economic/political) system sustains it in its current form. Whether for this or any other reason, comparatively little effort is ever put into making the fruits of our mental labouring physically and intellectually accessible beyond the peer group, whose verdict alone is deemed significant to their evaluation. Yet in many, if

not most cases — especially in the social sciences — it is people, communities, phenomena beyond the peer group that afford the substance for our essays, theses, books and articles, that is, for the vehicles of our careers. We trade in 'the Other'. Our representations of the lives, deaths, joys, sorrows, everydays and extraordinaries of other people is the currency with which we acquire a name in print, a seat at the table, and a flight and hotel booking in the pocket. Linda Tuhiwai Smith writes of the trade in the Other: "it has no concern for the peoples who originally produced the ideas and images, or with how and why they produced those ways of knowing. It will not, indeed, cannot, return the raw materials from which its products have been made" (Smith 1999: 89).

For the most part, indigenous people have viewed research with suspicion and hostility as an intrusive, exploitative activity. Researchers have been viewed as intruders and predators (Trimble 1977; Maynard 1974) inaccurately representing indigenous ways of life. Thomas Peacock (1996) points out that a large proportion of indigenous culture and history consists of information recounted by researchers that is comprised of non-indigenous perceptions of indigenous people and culture. This problem is exacerbated by the fact that indigenous people, tired of being studied, passively resisted researchers with untruths and deliberately fictitious information (Sinclair 2003; Peacock 1996; Swisher 1993; Trimble 1977). Smith reveals about the Maori community in which she grew up: "Research was talked about both in terms of its absolute worthlessness to us, and its absolute usefulness to those who wielded it as an instrument. It told us things already known, suggested things that would not work, and made careers for people who already had jobs" (Smith 1999: 3). Resistance to it

does thus not come from nowhere. Moreover, it is no secret that anthropology – and its ethnographic method – was used throughout the 19th and 20th centuries to aid in the management and incorporation of Aboriginal groups worldwide, that is, to aid to the processes of absorption and assimilation by which those groups would gradually become a part of the colonizer's culture (Banerjee & Linstead 2004; Elkin 1944). The knee-jerk negative responses to research inquiries and suspicion with which academics are often met should thus not come as a surprise.

However, to focus solely on the power of the researcher in the cross-cultural research encounter, is to deny the Other their agency – their own capacity to exert power. In all relationships dominance is inescapably at stake. In every instance of talk power is being negotiated, and the researcher-researched relationship is no different: sometimes power does not lie with the obvious person, i.e. the researcher, but rather moves and shifts between researcher and participant. No researcher is only a researcher, and different subjective positions create multiple relations of power. A researcher is not necessarily always powerful, and other identities, such as gender, age and nationality, have to be considered when analysing power relations (see for example Riley et al. 2003; Finlay 2002; Alvesson and Sköldberg 2000). Being a relatively young, childless woman meant that my opinions were not taken seriously in all settings. This, however, is not a situation that is unique to 'fieldwork' at all, but part of my particular living in the world in general. Moreover, it has certain advantages, as it can enable participation in activities in which a more authoritative person would be perceived as threatening. Nonetheless, the vulnerability of the researcher should not be overstated: her opportunities to extricate herself from the fetters of the field are greater: she can simply return to her original life, and will after all have gained some credentials from her (possibly painful) adventure. Unless the research project has some clearly beneficial outcome beyond a printed monograph, the 'researched' indigenous person might be left with little more than frustration. Moreover, the researcher's images of the encounter will circulate among and inform not only a potentially much larger audience than the indigenous person's account ever can, but also, more importantly, an audience whose access to resources and influence in policy making is incomparably more extensive.

I tried to overcome the problems of power differentials and the asymmetric usefulness of my research by ensuring that at least my presence (if not my research) were enjoyable and useful to the people with whom I worked. As I will illustrate in later chapters, I took on a variety of supportive roles in the indigenous organisations I affiliated with, and participated in people's everyday and family lives whenever I was invited to do so, and I remain in touch with most of my closest relations to this day.

It is difficult to assess whether it was sheer luck or some particular attitude or action on my (or anyone else's) part that made my research period in South America the relatively unproblematic experience which it was. I was asked to return soon every time I left, and have felt deep friendship with many of the people with whom I worked. In this context, I cannot help but recall the Aboriginal Australian activist Lilla Watson's words "If you have come here to help me, you are wasting your time, but if

you come because your liberation is bound up with mine, then let us work together"³⁹. These words have always supported my belief in the possibility of 'collaborative emancipation', even across vast cultural distances, on the basis of sharing the experience of being subject to similar forms of structural disempowerment. Maybe an exploration of the ways in which the emancipation of all research project participants is intimately (even if not obviously) entwined can provide the most fertile ground for an equitable research relationship. And maybe the sincere interest with which the people whom I met and I approached this question facilitated such positive relations as I was able to experience 'in the field'.

I begin my critical ethnography of the protection of traditional knowledge in the next chapter by outlining multiple forces that have converged and are converging in a series of fields to produce the particular trajectory that characterises traditional knowledge protection today, and that has shaped the processes and experiences of the ProBenefit ABS negotiations which I discuss in detail in Chapters 4 and 5. In between, Chapter 3 will situate ProBenefit within a historical political economy of Napo, an area characterised since the 16th century by forceful resource extraction and colonisation which has been formative of its indigenous inhabitants' identity and experience.

Through the discussions in the present chapter, I have aimed to lay the foundations for the key argument of this thesis that the hegemonic form of traditional knowledge

³⁹ This quote can be found in various places on the world wide web, for example here: www.antimedia.net/nooneisillegal/DirectAction.htm

protection which protects traditional knowledge as a kind of intellectual property plays a role in the expansion and reproduction of capital, thereby contributing to the destruction of people's autonomous subsistence. By doing so, it also undermines the very basis for the continuous creation and indeed relevance of traditional knowledge: people's everyday interactions that are not oriented by formal market exchange, and constitute a source of meaning and value beyond profit maximisation. But let us now turn to the five fields – each of them characterised by double movement dynamics – from which the protection of traditional knowledge as a possibility and imperative springs.

2 From Fields of Struggle: on the origins of traditional knowledge protection.

The purpose of this chapter is to illustrate an array of multiple forces that have converged and are converging in a series of five fields which together constitute the origins of traditional knowledge protection. I argue that without the histories of political struggle which constitute these fields, the protection of traditional knowledge would not be an international imperative with the particular shape which it has today. The five fields are: (i) International Law and the Politics of Indigeneity; (ii) Conservation of Biological Resources; (iii) Intellectual Property; (iv) Safeguarding of Cultural Heritage; (v) Public Participation in Development and Governance. The different political and historical trajectories of these fields combine to establish the current sites of struggle that inform and shape the protection of traditional knowledge.

Needless to say, the world did not suddenly awake to CBD guidelines on Access and Benefit Sharing, or the UN Declaration on the Rights of Indigenous Peoples: movements towards colonial and market expansion, countermovements to restrain and regulate these, as well as subsistence struggles, have shaped the historical and political conditions in and through which such policies and declarations have been brought into being. The five fields and their trajectories that I present in this chapter form a hegemonic underpinning to endeavours to protect traditional knowledge. Capital's double movement characterises all of them.

I will not be able to do justice to the complex histories of these five fields. Each of them have, in turn, their own genealogies and origins in other fields, discourses, practices, and states of affairs. All I can do, for reasons of space and focus in this thesis, is to point the reader towards the connections between these fields and the protection of traditional knowledge. This is by no means an exhaustive exercise, but it serves to provide the reader with the first outlines of what we might call a genealogy of the protection of traditional knowledge. A clear vision of these genealogical connections is, I believe, indispensable to an understanding of the protection of traditional knowledge as a field of struggle. It is moreover informative for analyses and strategic contemplation of the organisation of the subsistence struggles that are based on value practices other than those of capital, and which are not commensurable with the double movement that characterises the reproduction of capital. Indeed, from the subaltern, indigenous perspective, understanding each of these five trajectories and their complex conjunction in the mainstream practices and theories with regard to traditional knowledge protection is crucial in order to identify the ambiguous problems of capital expansion and to illuminate the cracks through which some anticapitalist light can find its way.

It is through these five fields, which I address in turn in sections 2.1. - 2.5 below, that we can come to understand the protection of traditional knowledge as characterised by the movements of and countermovements to colonialism and capital expansion. Caught, even strangled within the complicit nature of the double movement, traditional knowledge, the people who practice it, and their artefacts are destined to become entries in museum catalogues or other databases. What is needed is hence a

radicalisation of the countermovements which focus on traditional knowledge protection. To this end, it is crucial to contest the hegemonic construction of what it means to protect traditional knowledge, and to strengthen the subsistence struggles that continue to be fought all over the world. With this thesis, I aim to contribute to the destabilisation of the hegemonic understanding of the protection of traditional knowledge. As part of this overall aim, this chapter addresses the question of *how come* that the protection of traditional knowledge has taken the particular form which it has today, namely as a form of intellectual property protection realised primarily through Access and Benefit Sharing agreements?

2.1 International Law and the Politics of Indigeneity.

The first of the five fields through the trajectory of which we must understand the prominence of the protection of traditional knowledge in international negotiations is the rise of 'indigenous peoples' as legitimate subjects of international law. This will uncover a history of violent conquests as initial movements of the expansion of European kingdoms and their accompanying countermovements, which actually resulted in the inclusion of indigenous peoples as bona fide citizens able to enter into contractual relations with the colonisers, thereby turning them into a class not too dissimilar to the proletariat of those colonisers' home countries.

While the concept of 'indigenous peoples' only developed in the mid-20th century (see, e.g., Niezen 2003), European nation states and earlier social formations were actively involved not only in the brutal decimation and plunder of the societies they

encountered in the 'New World' from the time of the Conquest onwards, but also in the conceptualisation of their (moral) status. Were these new-found 'Others' human beings at all? Did they constitute nations with territorial rights? Could they collectively enter treaties? Was there a moral obligation to respect such treaties? These were questions increasingly asked (see, e.g., Pagden 1986; 1993).

In this section, then, I present a brief overview of this shifting relationship, highlighting its 'double movement' tendencies, as developed in Chapter 1. The narrative will unfold largely chronologically from the conquest of the 'New World', through the development of positivist law and sovereign nations, to the nineteenth century 'trusteeship doctrine' and 'civilising mission', and finally the rise of the discourse of 'partnership'. Each moment of the relationship between the European powers (and later also non-European nation states), on the one hand, and 'indigenous' societies on the other, can also be understood as a moment in the double movement dynamic, moving from capital and colonial expansion with devastating consequences, to a more restrained expansion, controlled through 'countermovements'. The narrative illustrates that these countermovements are not always bottom-up movements of resistance, but rather constitute a confluence of reactions from different social strata to the socially (and environmentally) detrimental effects of capital and colonial expansion, which simultaneously challenges and contests as well as reproduces and legitimises the latter. As we shall see, the trajectory of this field provides crucial background for understanding Access and Benefit Sharing agreements today.

2.1.1 New World Lands and Souls: a papal gift of terror.

The devastation and terror that the early transatlantic contact brought to the peoples of (what we now know as) North and South America has been documented extensively, and I assume the reader's general familiarity with the broad outlines of the enslavements⁴⁰, massacres, pillaging, deadly epidemics and ethnocides of those times (for reliable sources, see Crosby 1972; Denevan 1976; Pagden 1993).

While I want to avoid the stereotypical imagery of victimisation — indigenous inhabitants of any colony are very much active agents of history in their resistance to, engagement with, and manipulation of the colonising forces — it is nonetheless crucial to remember that no matter how varied and complex relations were between the European seafarers and the old inhabitants of the 'New World', the violence of the Conquest is hard to overestimate, and constitutes a central piece of the historical background to the questions, events and arguments with which I deal in this thesis.

Even though the actual death toll of disease and violence is highly contested, the *lowest* estimates suggest a decimation of the population of both Americas by a staggering 80% by the end of the 16th century⁴¹. Tragically this number seems to repeat itself until this very day: since the discovery of oil in the Ecuadorian Amazon in the 1970s in the territories that the Huaorani people have inhabited for many hundred

The recent work of Marcus Rediker, *The Slave Ship: A Human History* (2009), is particularly informative with respect to the gruesome, slave based origins of the transatlantic trade upon which modern Europe and all its 'civilised' societies are built.

⁴¹ See Thornton 1987; Ramenofsky 1988; Jennings 1993; Stannard 1993; Rummel 1994; and Shoemaker 1999 for numbers. See Henige 1998; and Royal 1992 for an overview of the heated debate over the right numbers and methodological concerns over their exact determination.

years, only 10% of the Huaorani people remain today (Enström 2007). Of those who remain, many suffer from cancer, birth defects and lack of access to resources; some work for the oil companies as a last resort or as a way to enter what increasingly seems inevitable: the cash economy. A divided, nearly extinct people, they now 'enjoy' a mythical status as the last proper forest dwellers of the region (Rival 2002; Ziegler-Otero 2004). The plight of the Huaorani in the last thirty years reflects the history of the last half millennia in the region: annihilation or conversion (to either Christianity and/or capitalism).

The story of conquest began, in a legal sense, when in 1493 Pope Alexander VI granted the Spanish monarchs all territories their envoys might discover that were not heretofore under the jurisdiction of Christian rulers (e.g. McAlister 1984; Green & Dickason 1989). This papal donation was considered by the Spanish crown to establish its legal title to the lands of the 'New World', as well as conferring the mission and authority to convert 'idolatrous Indians' to Christianity. The 'religion of the slaves' (Engels 1894) had come full circle, soon supplying slaves for the early movements of capital expansion (see especially Todorov 1984).

The brutality of the conquistadores and the subsequent colonial administrations did not pass uncontested, however, and a movement to counter the extremely violent nature of the conquest began to emerge (see, e.g., Pagden 1993). The Dominican priest Bartolomé de las Casas (1474 – 1566) is the most prominent of the early missionaries who denounced the genocidal treatment of the original inhabitants of the Western Hemisphere at the hand of the Spaniards. His *Apologetic History of the Indies*

details the atrocities perpetrated through the *encomienda* system, which granted Spanish colonists pieces of land and the rights to the labour of those 'Indians' living on them. Another Dominican cleric, Francisco de Vitoria (1486 – 1547), also expounded normative and legal parameters for the relationship between Spaniards and Indians (Anaya 2004). Countering the extreme violence, but not the underlying principle and objective of conquest as such, we can see de las Casas and Vitoria as two of the first notable and historically best preserved specimens of Polanyi's 'enlightened classes' that demanded restraint after the ravages of unfettered colonisation had become impossible to ignore. A double movement dynamic hence consolidated the conquest of the New Worlds and its extraction of wealth.

2.1.2 Sovereign Nations and Positivist Law.

The 1648 Treaty of Westphalia, which ended the Thirty Year War and the political hegemony of the Roman Catholic Church, is usually seen as marking the beginning of the era of the sovereign nation state. ⁴² The rise of the modern state is accompanied by an important intellectual transformation: natural law as a framework for a universal moral code for humankind evolved to comprise natural rights of individuals on the one hand and the natural rights of states on the other (Damerow 1978, cited in Anaya 2004: 20) – the 'law of nations' as a discrete body of law developed. ⁴³ The idea of a nation-state makes it largely impossible for indigenous peoples to qualify as such,

⁴² However, see Croxton 1999, and Krasner 2001 for different views. The exact origin of the sovereign nation state is not important for our discussion.

Emmerich De Vattel's 1758 treatise *The Law of Nations, or the Principles of Natural Law* elaborated the natural law framework of Thomas Hobbes, Samuel Pufendorf and Christian Wolff in this way. See, e.g., Anaya 2004.

after all the concept is based on models of European social and political organisation which are characterised by territorial dominion, and centralised, hierarchical government structures (Hall 1984; Vincent 1987), which would apply, if at all, only to such empires as those of the Aztecs and Incas.

In his treatise *Elements of International Law* (1846), the U.S. Supreme Court reporter Wheaton expressed what was to become the dominant political and jurisprudential tendency to exclude (what would now be called) 'indigenous peoples' from the legitimate subjects of international law, and hence to deny them the group rights and protection such law affords, unless their socio-political organisation and land use mirrored those of the European nation-state. He writes: "The legal idea of the state necessarily implies that of the habitual obedience of its members to those persons in whom superiority is vested, and a fixed abode, and definite territory belonging to the people by whom it is occupied", and hence excludes any "unsettled horde of wandering savages not yet formed into civil society" (Wheaton 1866: 50-51).

The late nineteenth and early twentieth century positivist school of international law came to overpower the previous jurisprudential framework of natural law by insisting that international law is *between* states, that is, it is based in their consent and not in transcendental right. Through this development the idea that indigenous peoples might be political bodies with rights under international law was completely abandoned. Jurisprudence yielded "to the forces of colonization and empire as Western colonizers consolidated indigenous lands with their respective spheres of political hegemony and control" (Anaya 2004: 26).

Under the positivist conception, discovery and conquest came to be viewed as endowing rights superior to those of first possession or occupancy, further undermining any possibility for the recognition of indigenous peoples' collective rights (See, for example, Kent 1896; for cases in US courts see Anaya 2004). In fact, positivists even came to deny that European states had *ever* considered indigenous peoples as nations and capable of possessing rights in the international realm (e.g. Hyde 1922; Snow 1918), thereby precluding them from formal international relations and affairs through denial of their status as nation-states.⁴⁴ The positivist framework operated to consolidate the sovereignty built through colonialism at the expense of the sovereignty of indigenous peoples, and its dominance is particularly obvious in international arbitrations of the 1920s and 1930s⁴⁵. The law of nations was turned into a legitimising force for colonisation and empire-building, elevating the colonising forces above the primitive other in moral and political terms.

However, emerging counter movements began to let their effects be felt: indigenous peoples were to be integrated, civilized and raised above their miserable station through trustee- and guardianship provided by the enlightened. A next stage of

Anaya (2004: 29-30) writes: "the positivist doctrine of effective occupation of territory and recognition of such occupation by the "Family of Nations" provided the legal mechanism for consolidating territorial sovereignty over indigenous lands by the colonizing states" (see also Alfredsson 1982).

See especially the cases Cayuga Indians (Great Britain) v. United States of America; Island of Palmas (US v. Netherlands); Legal Status of Eastern Greenland (Denmark v. Norway), all cited in Anaya 2004: 30-31.

colonial mastery and resource exploitation was hence carried out legally and in accordance with the moral zeitgeist.

2.1.3 The trusteeship doctrine: to guard and civilise.

From (at least) the nineteenth century onwards, notions of trustee- and guardianship started to increasingly permeate the official discourse of the home countries regarding the indigenous populations of their colonies (e.g. Pagden 1986; 1993). Although the trusteeship doctrine displayed elements of humanistic thought, insisting on the common humanity of all people, it was deeply rooted in the view that non-European peoples and their cultures were inferior to the European ones. The rights of colonised peoples were thus conceptualised as a parallel to the kinds of rights that were seen to apply to 'undeveloped individuals'. Pseudo-scientific arguments of the 19th century bolstered this perspective (Curtin 1971; Cowen & Shenton 1996).

The trusteeship doctrine had as its objective to 'civilise' indigenous peoples, and change their 'backward' ways, and has thus to be understood as rooted in a negative regard for other cultures and lifeways. Ideas of trusteeship can be found in virtually all the late nineteenth century and early twentieth century Acts regulating the European colonies⁴⁶.

See Anaya 2004: 32-34 for a list of examples, including Canada'a 1876 Indian Act, the Berlin General Act (as part of the scramble for Africa) and various legislations from newly independent Latin American states.

The 1919 Covenant of the League of Nations adopted at the end of World War I also commits all its members to "undertake to secure the just treatment of the native inhabitants of territories under their control" (Art. 23a). Article 22 reads: "To those colonies and territories which as a consequence of the late war have ceased to be under the sovereignty of the States which formerly governed them and which are inhabited by peoples not yet able to stand by themselves under the strenuous conditions of the modern world, there should be applied the principle that the wellbeing and development of such peoples form a sacred trust of civilization and that securities for the formance of this trust should be embodied in this Covenant". Hence, as Article 22 of the Covenant of the League of Nations indicates, international law adopted the norms of colonialism and continued to serve the goals of the colonisers (Niezen 2003).

Notions of trusteeship, while ostensibly motivated by a concern for indigenous peoples' well being, ultimately translated into a justification for colonisation and continued colonial control, rather than a defence against them (Cowen & Shenton 1996). Current UN Special Rapporteur on Indigenous Issues, James Anaya argues that "whether through the doctrine of trusteeship or the positivist legal construction that denied sovereign status to indigenous peoples, international legal discourse and related decision making processes developed historically to support the forces of colonization and empire" (Anaya 2004: 34). International law developed in complicity with the brutality of colonialism.

However, Anaya maintains that the contemporary international legal system has moved away from state-centred positivism to a concern with world peace and human rights of both individuals and groups, opening up possibilities for indigenous peoples to be recognised once again, and this time more firmly, as autonomous communities and rights-holding political bodies. In other words, yet another countermovement has come to characterise international relations with indigenous peoples. It is on the basis of the historical trajectory presented here, as well as in the remaining four sections that make up this genealogy of the protection of traditional knowledge, that we must understand contemporary efforts to 'protect' indigenous peoples. There are two sides to the contemporary politics of indigeneity, and Anaya's vision of increasing recognition and partnership fails to grasp the ways in which protective inclusion of the potentially revolting margins is an indispensable aspect of capital expansion — notwithstanding the difficulties involved on part of the activists who have struggled and continue to struggle for the recognition of the rights of indigenous peoples.

2.1.4 From trustee- to 'partnership'.

The human rights frame of contemporary international law has made possible an impressive mobilisation of social forces for the development of rights of indigenous peoples *qua* peoples. The recently adopted UN Declaration on the Rights of Indigenous Peoples (more on which below) is the culmination of a struggle challenging the state-centred structures and precepts of the international legal system and global organisation that lasted several decades, and which involved indigenous representatives as key actors for change within and without United Nations' institutions. Anaya writes:

"Within the past decades ... there have been significant advancements in the structure of world organization and shifts in attendant normative assumptions. These changes have engendered a reformed system of international law, and the reformed system, in turn, has provided fertile ground for social forces to further alter, and eventually reverse in many ways, the direction of international law where it concerns the indigenous peoples of today" (2004: 49).

While fraught with tensions and complicated questions regarding representation (Brysk 2000; Muehlebach 2003), "[t]his movement ... has resulted in a heightened international concern over indigenous peoples and a constellation of internationally accepted norms generally in line with indigenous peoples' own demands and aspirations" (Anaya 2004: 72).

While I do not intend to downplay the very important concessions that have been achieved at the international level, I argue that a sensitivity to double movement dynamics – and their historical manifestations – allows us to view these advances as necessary aspects of capital's continued colonial expansion.

In the remaining part of this section I provide a short overview of the development of international norms with regard to indigenous peoples, as reflected in the International Labour Organisation's treatment of the question of 'native labour' and conclude with notes on the rocky road to the UN Declaration on the Rights of Indigenous Peoples. I focus in particular on the double movement dynamic of this development.

2.1.4.a The International Labour Organisation.

The Versailles Treaty — which in order to dampen public support for communism included clauses for the protection of workers' rights (Leffler 1994) — established the International Labour Organization (ILO). The original remit of the ILO was to promote "the regulation of the hours of work, including the establishment of a maximum working day and week, the regulation of the labour supply, the prevention of unemployment, the provision of an adequate living wage, the protection of the worker against sickness, disease and injury arising out of his employment, the protection of children, young persons and women, provision for old age and injury, protection of the interests of workers when employed in countries other than their own, recognition of the principle of freedom of association, the organization of vocational and technical education and other measures" (Treaty of Versailles, Part XIII). The words of its Constitution "there can be no lasting peace without social justice" reflect the ILO's main objective of assuring peace and social stability.

The ILO⁴⁷ engaged with issues of 'native workers' in the overseas colonies of the European powers relatively soon after its establishment, in the early 1920s – usually in the context of 'natives' being displaced from their ancestral territories to become seasonal, migrant, bonded or domestic labourers, and hence becoming subject to the forms of labour exploitation covered by the ILO mandate. The 'native labour code' as

The information on the history of the ILO was partly taken from official web resources. See, for example:

http://pro169.org/ and http://ilo-mirror.library.cornell.edu/public/english/indigenous/background

the conventions and recommendations of the 1920s and 30s were called, lay down the conditions under which 'natives' could be made to work and limits on how they could be exploited (Swepston n.d.). In 1939 at an American Regional Conference, several by then independent Latin American countries began asking questions about their 'indigenous' populations⁴⁸ which the ILO adopted alongside the idea of the 'natives' of Europe's colonies. However, while its own publications tout its foresight and equal concern for workers of all skin colours (see website, note 45 above), other commentators are more cautious:

"Of the major international organisations, the ILO has consistently been the first to get involved in 'native' or 'indigenous' issues. But this pioneering spirit has with equal consistency been offset by the inevitably disappointing results of early efforts... The ILO exercised its jurisdiction over native labor, for example, with ILO Legislative Ordinance No. 52 of November 7, 1924, conferring upon colonial 'Residents' of Burundi the 'power to compel natives to perform work in connection with plantations and other undertakings carried on for profit'. The supposedly compassionate goal of this ordinance was to moderate the extreme punishments meted out in the course of forced labor: 'Any native who fails to carry out work in connection which he is required to perform... or who is guilty of negligence in the performance thereof, shall be punished by not more than seven days' penal servitude and a fine of 200 francs, or by one or other of these penalties'" (Niezen 2003: 36f, quoting a League of Nations document).

National Indian agencies were formed throughout the Americas as part of the decisions taken at the 1940 conference establishing the Organization of American States Inter-American Indigenous Institute.

With the demise of the League of Nations and the creation of the United Nations (UN) in 1945, the ILO became a Specialised Agency of the UN. From its inception, the UN promulgated decolonisation and nation-building, and the sovereignty of nation states as means to world peace and prosperity. Yet within many former colonies, there remained groups of people with languages and cultures distinctively different from the dominant society, which in most cases was a hybridised one made up of former colonisers, local elites, and *mestizos*. Often, and usually due to their ethnic differences and distinct ways of life, subaltern cultural groups (indigenous peoples) were not only perceived as incapable of self-government, but also as a hindrance to the processes of nation-state building (Popova-Gosart 2009).

An ostensibly 'humanitarian' concern regarding such groups' economic and social 'backwardness' soon took the form of an international developmental regime, led by UN agencies, to support governments in integrating and acculturating their indigenous populations, perceived as obstacles to modernization and progress (Popova-Gosart 2009). A 1946 ILO study laments that "the aboriginal groups in many regions stagnate in conditions of economic destitution and pronounced cultural and technical backwardness, which severely limit their productive and consumptive conditions. This is due to the primitive conditions in which they are obliged to earn their living, to the lack of educational stimuli and opportunities and to the almost complete absence, in some areas, of welfare services and measures for social and labour protection" (quoted in Tennant 1994: 14).

Throughout the 1950s, the ILO commissioned studies on the 'indigenous problem', initiated an inter-agency, multidisciplinary development programme, the Andean Indian Programme⁴⁹, and worked on the *Convention on Indigenous and Tribal Populations* (No. 107), which was adopted in 1957⁵⁰. Convention No. 107 was the first international treaty regarding the rights of indigenous peoples.

Article 2 of Convention 107 asserts the primary responsibility of governments to develop "co-ordinated and systematic action for the protection of the populations concerned and their progressive integration into the life of their respective countries, in order to foster individual dignity, and the advancement of individual usefulness and initiative". Niezen (2003: 38) comments that "the first piece of international legislation to specifically address indigenous peoples thus reflects the prevailing political and philanthropic attitudes of the time, in which assimilation of 'backward' societies into a nation state was seen as the first necessary step for the prosperity and liberation of their individual members".

With the rise of the increasingly vocal organisation of indigenous peoples at the national and international level during the 1960s and 1970s, calls were made to revise

The Andean Indian Programme (or *Misión Andina*) provided training and tools for new kinds of production, as well as a health and leadership training to the rural population in the Andes. As such it helped to bring people from often isolated communities together, and promoted local organising and leadership skills, even though it also helped proletarianise indigenous communities (Barsky 1984; Yashar 2005). It concluded in 1972.

It was eventually ratified by 27 countries, mostly in the Americas, but also in South Asia and in several African and European countries.

Convention 107⁵¹. In June 1989, the *Convention on Indigenous and Tribal Peoples* (No. 169) was adopted accordingly⁵². It was based on the perspective that the cultures and ways of life of indigenous and tribal peoples ought to survive, as they constitute crucial parts in the world's cultural diversity. The Convention, still applicable today, recognises the right of indigenous peoples to define their own priorities for development, as well as their right to be consulted about and to participate in the planning and implementation of the measures taken to realise the Convention. Notably, more so than for the sake of the indigenous peoples themselves, these efforts to protect indigenous peoples stress the value of cultural diversity that indigenous peoples happen to represent *for the rest of the world*.

Convention 169 also changed the terminology of its predecessor from indigenous populations to indigenous peoples, an apparently small change that took, however, three years of debate because of its implications for the right to self-determination (and hence independent state-hood) under international law (Swepston 1990: 228; Anaya 2004: 109). Despite its final adoption, the term 'peoples' is qualified in Article 1.3: "The use of the term 'peoples' in this Convention shall not be construed as having any implications as regards the rights which may attach to the term under international law".

For the rise of the international indigenous movement see Brysk 1996 and 2000; Warren & Jackson 2002.

Ecuador ratified ILO 169 in 1998. The recognition of collective rights in its Constitution of the same year echoes the provisions of the ILO Convention. Implementation of those rights in Ecuador, especially in its oil producing areas, has lagged however (Yashar 2005).

As a consequence of this countermovement, therefore, indigenous peoples finally became a pseudo-people: somewhat recognised, yet not deemed worthy of the full set of entitlements that other, 'more developed and civilized peoples' enjoy within international law. However, the ILO Convention 169 was a decisive step towards (once again) recognising indigenous collectivities as entities capable of entering into contractual agreements. It is no longer possible, according to various international guidelines, regional agreements and national laws, to legally extract resources from indigenous territories without standing in a clear contractual relationship with an indigenous group. The requirement of obtaining 'Prior Informed Consent' is key here as a defensive protection irrespective of the type of extractive activity pursued. In the case of knowledge and genetic resources, this contractual relation is increasingly embodied in the pursuit of Access and Benefit Sharing agreements, to which I return in Section 2.2.

2.1.4.b The rise of the international indigenous movement and the rocky road to the UN Declaration on the Rights of Indigenous Peoples.

The critical situation of indigenous communities in Brazil and other Latin American countries in the late 1960s, involving forced acculturation and evidence of genocide (e.g. Grünberg & Fuerst 1969; Jaulin 1972) led to the formation of a number of international organisations concerned with the protection of ethnic minorities (Wright 1988). Many of these⁵³ were founded and staffed by European anthropologists, who had become increasingly vocal regarding the need for indigenous advocacy to redeem

⁵³ Such as the International Work Group for Indigenous Affairs (IWGIA), Survival International, and Cultural Survival.

their discipline⁵⁴. The 1970s witnessed a further flourishing of indigenous and advocacy groups, as well as numerous regional and international meetings to elaborate the discourse and praxis of the budding global indigenous movement. Crucial to the articulation of indigenous (cultural) politics were indigenous intellectuals, especially from Latin America, who formulated what it meant to be Indian (Wright 1988; Varese 1996; Muehlebach 2001).

In 1982 the United Nations' Economic and Social Council (ECOSOC) established the Working Group on Indigenous Populations (WGIP), tasked with developing human rights standards that would protect indigenous peoples. This was a result of increasing pressure on the UN, due to the rise of organisations concerned with indigenous issues, as well as the growing representation of indigenous peoples themselves at UN conferences (Muehlebach 2001). The establishement of WGIP was also recommended in the monumental study by Special Rapporteur José R. Martínez Cobo on the problem of discrimination faced by indigenous populations, which took over a decade to complete⁵⁵.

The WGIP began the drafting of the *Declaration of the Rights of Indigenous Peoples* as early as 1985. Yet it was finally adopted by the UN General Assembly only on

Calls for a new anthropology became particularly apparent in the Declaration of Barbados for the Liberation of the Indian redacted as part of the Symposium on Inter-Ethnic Contact in South America organised by the World Council of Churches and ethnologists from the University of Berne in 1971.

The Martinez Cobo report 'Study of the Problem of Discrimination Against Indigenous Populations' originated in a 1971 Resolution of the UN Human Rights Commission to conduct a study on "the problems of indigenous populations" (see Martinez Cobo 1986).

September 13, 2007⁵⁶. The protracted process of drafting and adoption stalled due to concerns regarding some key provisions of the Declaration, such as lack of a clear definition of the term indigenous, as well as states' worries regarding the meaning of an indigenous peoples' right to self-determination, or the control over natural resources existing on indigenous peoples' traditional lands (Oldham & Frank 2008). It was feared that a strong interpretation of self-determination would open up possibilities of secession, or otherwise undermine the sovereignty of existing nation states. In other words, states needed to ensure that the developments were contained within the double movement dynamic by preventing a potential exit from state control and capital gain.

Indigenous activism in UN human rights fora – such as the second World Conference on Human Rights, Vienna, 1993 – ultimately led to the establishment of the United Nations' Permanent Forum on Indigenous Issues (UNPFII) in July 2000⁵⁷. Its establishment was seen as a breakthrough achievement for indigenous peoples in their struggle for access to the international community – the forum is unique not only in formally including indigenous peoples into the UN structure at a high level, but it also "marks the first time in history that representatives of states and non-state actors have

The vote was 143 countries in favour, four against, and 11 abstaining. The four member states that voted against were Australia, Canada, New Zealand and the United States. The abstaining countries were Azerbaijan, Bangladesh, Bhutan, Burundi, Colombia, Georgia, Kenya, Nigeria, Russian Federation, Samoa and Ukraine; another 34 member states were absent from the vote.

As a subsidiary organ to ECOSOC, UNPFII was given the mandate to "discuss indigenous issues within the mandate of the Council relating to economic and social development, culture, the environment, education, health and human rights" (ECOSOC Resolution 2000/22), and submits recommendations and expert advice to the Council on all issues related to indigenous peoples.

been accorded parity in a high level body within the United Nations" (IWGIA 2002: 444; see also Muehlebach 2001; Niezen 2003).

Collective rights – rights of human groupings other than nation states – are articulated in and through the Declaration on the Rights of Indigenous Peoples to an extent unprecedented in international human rights law. The adoption of this instrument is seen by many as a clear indication that the international community is willing to uphold and protect the individual and collective rights of indigenous peoples, and no other United Nations document has ever been elaborated with the same degree of participation of all parties concerned (IWGIA 2008). Special Rapporteur Rodolfo Stavenhagen stated that even though it remains a non-binding instrument, "the Declaration reflects a growing international consensus concerning the content of the rights of indigenous peoples, as they have been progressively affirmed in domestic legislation, in international instruments, and in the practice of international human rights bodies"⁵⁸.

The Permanent Forum considers the Declaration "an important standard for the treatment of indigenous peoples that will undoubtedly be a significant tool towards eliminating human rights violations against the planet's 370 million indigenous people and assisting them in combating discrimination and marginalisation" (UNPFII n.d.). UN Secretary-General Ban Ki-moon described the adoption as a "historic moment when UN Member States and indigenous peoples have reconciled with their painful

⁵⁸ Quoted in UN Press Release September 14, 2007; available online at http://www.unhchr.ch/huricane/huricane.nsf/view01/2F9532F220D85BD1C125735600493F0B? opendocument Last accessed 14 October 2009.

histories and are resolved to move forward together on the path of human rights, justice and development for all"⁵⁹. The High Commissioner of Human Rights Louise Arbour hailed it "a triumph for justice and human dignity"⁶⁰.

It is important to note, however, that the Declaration does not create any new rights, but rather interprets and elaborates upon existing international human rights norms as they apply to indigenous peoples (Human Rights Council 2008: paragraph 40). The Declaration is based upon the principles of partnership, consultation and cooperation between indigenous peoples and nation states. In his statement to the General Assembly, the Chair of the Global Indigenous Peoples' Caucus, Les Malezer, welcomed the adoption of the Declaration: "The Declaration does not represent solely the viewpoint of the United Nations, nor does it represent solely the viewpoint of the Indigenous Peoples. It is a Declaration which combines our views and interests and which sets the framework for the future. It is a tool for peace and justice, based upon mutual recognition and mutual respect" Partnership is also the theme of the Second International Decade of the World's Indigenous People (Partnership for Action and Dignity 2005-2015).

Quoted in UN Press Release September 13, 2007, available online at http://www.un.org/apps/news/story.asp?NewsID=23794&Cr=indigenous&Cr1 Last accessed 14 October 2009.

Quoted in UN Press Release September 13, 2007, available online at http://www2.ohchr.org/english/issues/indigenous/declaration.htm Last accessed 14 October 2009.

⁶¹ Statement available online at http://iwgia.synkron.com/graphics/Synkron-Library/Documents/InternationalProcesses/DraftDeclaration/07-09-13IPCaucusStatementAdoptionDeclaration%20.pdf Last accessed 14 October 2009.

To look at the development of indigenous rights and the rise of the global indigenous movement purely as a success story is, however, to misunderstand the ways in which this story is also one of co-optation and subsumption. Radical social movements always run the risk of being either oppressed or destroyed by counter-forces, or their demands disarmed and subsumed under a more reformist agenda. While a UN partnership with indigenous peoples means "making place" (Muehlebach 2001) for indigenous representatives at negotiating tables, it also implies the necessity for these representatives to 'play by the rules' of UN institutions. Entering into a partnership with a much stronger counter-part obviously entails the risk of the weaker partner not being able to stand their ground. I return to this and related questions concerning (neoliberal) partnerships in Section 2.5.

Moreover, these countermovement processes of partnership development have fostered the creation of new class divisions. A global indigenous elite has emerged, able to travel from one international meeting to the next across the continents (Friedman 1999).⁶² The representativeness of these indigenous representatives is far from obvious, and is vehemently questioned and fiercely debated at the rural community level, a lesson from my field work to which I return in Chapters 3 and 4. What is more, as Elizabeth Rata (2003) has shown for the New Zealand context, 'neotraditionalist' indigenous movements can intertwine with and become supportive of late capitalist accumulation, thereby introducing, entrenching and perpetuating (capitalist) class divisions within indigenous communities. We will return to this issue

In order to keep statements about elites in perspective, however, it has to be pointed out that some globally mobile representatives nonetheless while their time in YMCA hostels during international conferences (Paul Oldham, personal communication).

of problematic representation and class asymmetry at other points throughout the thesis.

'Partnership' and 'participation' has to be understood as (at least running the risk of) constituting a new form of subsumption of indigenous lives into the overall circuit of capital. From exploitation and enslavement to trusteeship forms of national integration and now 'partnership', the powers of capital have found different, *zeitgeist*-appropriate ways of making indigenous peoples economically effective. In the period of 'partnership', culture (including, of course, traditional knowledge) becomes a commercial asset through which indigenous peoples become included in the global capitalist economy as market actors.

2.2 Conservation of Biological Resources.

In this section, I address the importance of biological resources, and the concomitant need for their conservation. It is in and through the particular trajectory of the field of conservation, combined with the other four fields which this chapter addresses, that the protection of traditional knowledge has gained its particular shape.

Biological resources have always been of vital importance to human life and hence any social formation at all. Industrial destruction of the natural productivity of the landscape is hence a threat not just to the survival of other living species, but to human beings and hence the capitalist economy itself. From the point of view of capital, the continuous, long-term supply of biological resources thus needs to be assured – without, however, hampering capital's ability to expand. One attempt to do so is to capitalise the conservation of biological resources by redefining nature as a capital asset, internalising previous externalities (M. O'Connor 1994). The clarification of property relations with regard to biological and biogenetic resources ('who owns what?') thus becomes crucial. The Convention on Biological Diversity (CBD) partly addresses this issue. 'Sustainable development' and 'green capitalism' are discourses and practices through which the double movement of capitalism combine in one singular movement of capital expansion which has already incorporated its countermovement – and thereby also disarmed it. Through Access and Benefit Sharing agreements, the protection of traditional knowledge is so disarmed.

Before discussing biogenetic resource politics and the CBD, I argue that conservation and enclosure have entangled origins, and that mainstreaming the environmentalism of 'eco-efficiency' and 'sustainable yield' is the clearest example of the double movement working to undergird the survival of capital.

2.2.1 Conservation and Ecological Conflicts.

Conservation of biological resources typically becomes an issue when the latter are or are perceived to be becoming increasingly scarce or in the danger of extinction. In a situation of abundance, certain spiritual or moral views might guide human behaviour with regard to the living things that surround them, but an attitude of conservation, in the way that we understand the concept today, only emerges when the experience of lack or threatened lack becomes predominant. Scarcity, of course, is not always absolute. Conflicts over access to and control over resources can give rise to a kind of

artificial scarcity: if the lord prohibits access to the forest, wood for fuel will become scarce for the peasant, despite its actual abundance in the forest.⁶³

In the fourteenth century, France introduced a Forest Code. This code and the subsequent generalised forest ordinance of 1669⁶⁴, ensured a steady supply of timber to the navy by regulating wood production, a safe haven for game in royal domains, and a consolidation of the power of the state (Ford 2004; Guha 2000). These laws, and similar ones in other European countries, served in particular to curb the peasantry's customary use of forests, especially as the effects of deforestation – increased flooding and soil erosion – became obvious. Conservation and enclosure, therefore, have entangled origins. The contribution of the navy and other military institutions, however, had a much more serious impact on deforestation than the small scale use of the rural population (albeit growing) ever could (Ibid.).

Through the quantitative methods developed in Prussian Germany to estimate the availability of wood on any given area, and its annual growth, German forestry emerged as the fore-runner in the field by the eighteenth century⁶⁵, and German foresters soon thereafter travelled abroad to promote their scientific methods

I am not using the term 'artificial scarcity' in its usual economic sense which is often applied to the creation of scarcity with regard to otherwise non-rival goods through such economic mechanisms as intellectual property protection, about which more in Section 2.3. below. However, the link should be obvious.

The ordinance disappeared with the French Revolution, but a new forest code was introduced in 1827 (Ford 2004).

Japanese scientists and government officials had developed and successfully applied methods of forest regeneration previously (Totman 1989).

throughout Europe, Russia, and in their own and other powers' colonies, setting up forest schools and departments (Guha 2000: 33-38). German-style forest administration which took over the world was characterised by "the reservation of forest areas to the state, by curtailing or extinguishing rights exercised by village communities; dividing up these reserves into territories controlled by individual officers; identifying valuable species and studying their growth curves; and ... establishing schools and laboratories for furthering research and education" (Ibid.: 34). In the colonies, the conservationists condemned both the pioneer settler and the indigenous farmer for their ostensibly destructive agricultural practices, failing to distinguish between the many varieties of pastoralism and cultivation that were practised in the colonies at that time. Miguel Angel de Quevedo, the Mexican forestry pioneer and "apostle of the tree" (Simonian 1995) was one of the many vociferous in his hostility towards peasants on whom he blamed the deterioration of his country's forests. Competition for control over resources and territory lies at the heart of the (early) foresters' and conservation scientists' fierce condemnation of peasants and settlers, who vied for access to the same landscapes as the conservationists, under state auspices, did (e.g. Peluso 1992; Grove 1994; Rangarajan 1996).

It cannot be underestimated how vital forests, water, and other natural resources are to the social and economic life of any human social formation (and, for that matter, life in general). The creation of government controlled reserves and hence restriction of access to the vital resources which had for centuries been used by the human beings living near them for their basic subsistence inevitably led to conflicts between forest departments and resident communities. It matters little whether one's access to wood

for fuel and building, grass for livestock, herbs for medicines, and fruit and game for food is restricted by a private landlord or a governmental body, the experience of enclosure remains substantially the same for the excluded.⁶⁶

Conflicts over access to and use of forests and other lands, often leading to violent uprisings and brutal repression, continue to this day. Increasingly, these conflicts are also about the degradation and pollution of resources upon which human lives depend (for examples, see Martinez-Alier 2002; see also Guha 2000). This 'environmentalism of the poor' (Martinez-Alier 2002) is about the health of ecosystems for the benefit of *life*, rather than the bottom line. It is hence radically at odds with private enterprise and conservation through market mechanisms. It is often also at odds with state control, due to the governmental institutions' proclivity to yield benefits and tailor practices to the most influential stakeholders – i.e. big business or economically powerful conservation organisations pursuing their own particular agendas, such as Conservation International⁶⁷.

The dominant contemporary form of environmentalism and its ubiquitous presence in socio-political and economic discourses, however, is entwined with indelible visions of continued economic growth. Joan Martinez-Alier has insightfully discussed the

At the time, peasants and commoners in the home countries were perceived as indigenous people also are, and hence seen as backwards and uncivilized, which justified the expropriation of their customary and hard-won rights (see, e.g. Linebaugh 2009).

This is not to say that states will always favour business interests. State institutions are battlegrounds, and outcomes are always contingent (see Jessop 2002). However, it is important to remember that one of the core imperatives of the capitalist state is to ensure continued accumulation and economic growth.

"cult of wilderness" and the "gospel of eco-efficiency" as two powerful, historical currents of environmentalism, which, despite their philosophical differences, "sometimes become bedfellows" (2002: 10). The proponents of the 'gospel of eco-efficiency' promoted the ideal of 'sustained yield' centuries before the 1987 Brundtland Report pushed the term 'sustainable development' into common parlance (see also Guha 2000).⁶⁸

It is the utilitarian conservationist ethic of sustained yield (utility with added temporal dimension as expressed in the well known Gifford Pinchot quote "the greatest good for the greatest number *for the longest time*") that predominates in discourses and practices today. It is minimally disruptive to the circuit of capital, and, indeed, enables its long-term survival by ensuring the long-term availability of capital's 'conditions of production' (see Chapter 1 above). A precondition for an environmentalism which benefits capital, of course, is that it is severed from its radical roots, from its grass-roots movements (such as 'the environmentalism of the poor') and from the roots of real trees. In the next section we look at environmentalism's uprooting.

Ramachandra Guha (2000) explores three discursive strands of the environmental movement, all of which emerged as responses to the changes brought on by the rise of industrial society. He identifies the forceful moral and cultural critique of the Industrial Revolution with its strong "back-to-the-land" ethic which was articulated by the romantic poets and others as one of the tropes of environmentalism. The other two, scientific conservation, and the preservation of wilderness coincide with Martinez-Alier's distinction, who of course famously added the environmentalism of the poor as a third, increasingly vocal current.

2.2.2 Mainstreaming Environmentalism.

Ecology started to turn from a marginal and internally split discipline⁶⁹ into a politically influential science when, shortly after the Second World War, the U.S. Nuclear Energy Commission included in its budget a sizeable amount of funding for studies of the impacts of nuclear weapon use, testing and production (Worster 1977; Hagen 1992).

The radical politics of the times took aim at the entire scientific-industrial complex of the technocratic and consumer-oriented Euro-American civilisation, incorporating ecological concerns into their discourses. Herbert Marcuse, for one, added fuel to the New Left fire by claiming that "authentic ecology flows into a militant struggle for a socialist politics which must attack the system at its roots, both in the process of production and in the mutilated consciousness of individuals" (Marcuse 2005: 176). But this 'radical ecology' ebbed fast in the early 1970s. Indeed, some argue it was incorporated into the prevailing commercial-technocratic discourses in ways that disarmed its most important realisations and demands⁷⁰ (e.g. Gottlieb 1993).

Ecology's relationship to conservation was fraught with conflict and disagreement from the beginning. Many ecologists were trying to establish ecology as a basic science, rigorous and quantitative, with the repute necessary to make inroads into prestigious schools and faculties. Applied ecology, occupied with the problematic environments that were disturbed and altered by humans, was seen as an inferior concern. The potent view that humans are not a part of nature, and hence our influence not a legitimate concern of a natural science, obviously played a role in these tensions (Thomas 1956; Coker 1991).

Of course radical environmentalism never completely disappeared, and found one of its most creative expressions in the English road protest throughout the 1990s. Direct action groups continue to sabotage the workings of coal-fired power stations, genetically modified crops test fields, supermarkets and other agents seen as harmful to the environment on a regular basis.

Marcuse's essay on 'Ecology and Revolution' (1972) bemoaned the co-optation of the ecology movement by capitalism.

Rachel Carson's 1962 hallmark publication *Silent Spring* catapulted ecosystem science into the awareness of a wider public. During the 1960s and 1970s, applied ecology came to dominate the International Biological Program, boosting the discipline with more financial resources and prestige (Dritschilo 2006; Kwa 1987; Blair 1977). Indeed, ecologists' advice was increasingly sought at government level, and the 1970 US National Environmental Protection Act (NEPA) fully "legitimized ecology" (Curlin 1972), and was called "an ecological 'Magna Carta'" (Auerbach 1972). Increasingly, environmentalism became a matter of political consensus across many of the usual divides. And while academic ecology certainly became one of environmentalism's conceptual cornerstones, it was not a subversive ecology that questioned the fundamental values of economics and techno-scientific control. Mainstream environmentalism rather represented an engineering mentality in which problems of waste, pollution, over-consumption, and biodiversity loss could be solved through technology and, progressively, the market – a fix for a failing system.

The realisation that there are ecological "limits to growth"⁷¹ – that is, limits to exponential growth in a world of finite resources – is vital to continued capital accumulation, as broached in Chapter 1 above. Without such a realisation feeding into its homeostatic processes, capital would soon undermine its own conditions of production, and thereby its own basis for continued circuiting. Mainstreaming the

⁷¹ The realisation manifested, of course, most explicitly in the 1972 report of the Club of Rome.

environmentalism of 'eco-efficiency' and 'sustainable yield' is the clearest example of the double movement working to undergird the survival of capital.⁷²

2.2.3 Biogenetic Resource Politics.

While an international consensus was forming amongst scientists and policy makers that biological diversity⁷³ was facing a largely unprecedented crisis due to human action, control over biogenetic resources, especially seeds, became a highly politicised issue in the international arena. Especially the unfettered expansion of intellectual property rights into the domains of plants and other lifeforms was vociferously attacked by activists (e.g. Mooney 1979). Within a very short time the conservation of biological diversity became a battleground, on which developing countries fought developed countries, and indigenous peoples and their allies fought big business and governments. Graham Dutfield (2004: 4-5) suggests that the most plausible explanation for the heated debates at the time relates to the then widespread perception that biogenetic resources were 'the new gold', due to the advancements of the biotechnology sciences.

Hegemonic environmentalist discourse today goes further than the 'received wisdom' that a healthy environment — a resilient network of ecosystems — is critical to the survival of humanity, yet more threatened than ever. Biological resources are now

See also the growing critiques of 'green capitalism' and the 'Green New Deal', e.g. Green 1999; Rogers 2010.

⁷³ The term 'biological diversity' was coined in the early 1980s (Takacs 1996). See also Wilson 1988.

seen as "vital to humanity's economic and social development", and their diversity as "a global asset of tremendous value to present and future generations", yet "species extinction caused by human activities continues at an alarming rate".⁷⁴

Many of the most diverse biological habitats are located in the territories of developing nation-states, the economic situation of which is usually presented as putting particular pressures on these ecosystems (e.g. Dobson 1992). Long-term conservation objectives are rarely a priority given the need of short-term cash generation due to the pressures of the globalising economy on most developing countries. The Preamble to the Convention on Biological Diversity (CBD) itself recognizes "that economic and social development and poverty eradication are the first and overriding priorities of developing countries". Moreover, even if these priorities were reversed, it is generally thought that "poorer" countries do not have the scientific and technological capacity to allocate appropriately what are in any case scarce and insufficient resources in pursuit of conservation (e.g. Coughlin 1993). The question whether environmental protection and economic development were antithetical or combinable had reached international import, and found its relatively uncontested international answer in 1987, when the Brundtland Report Our Common Future of the World Commission on Environment and Development proclaimed the necessity and practicability of 'sustainable development'.⁷⁵

⁷⁴ Quotes from the Convention on Biological Diversity (CBD) website – online at http://www.cbd.int/history/ Last accessed 15 June 2009.

The report defined the term famously as development "meeting the needs of the present generation without compromising the needs of future generations", that is, economic development that does not consume natural resources at a rate faster than regeneration of those resources is possible. Capitalism with a long-term vision.

Soon thereafter, at the UN Conference on Environment and Development (the Rio 'Earth Summit'), the Convention on Biological Diversity (CBD) was opened for signature. It commits its signatories⁷⁶ in particular to three obligations: to conserve, and to sustainably use biological diversity, as well as to share the benefits arising from the utilisation of genetic resources. The CBD explicitly upholds the UN General Assembly principle of Permanent Sovereignty over Natural Resources, ⁷⁷ confirming a state's sovereign rights over the biogenetic resources within their territory. However, through Access and Benefit Sharing (ABS) Agreements, states can make their biogenetic resources available to foreign enterprise or scientific institutions in exchange for monetary or other benefits. In this way, the CBD is meant to protect developing countries' interests without locking down innovation, and product development based on research into biogenetic resources.

Even though indigenous delegates attended CBD's Conferences of the Parties (COPs) from the beginning, it was only at the first Workshop on Traditional Knowledge and Article 8 (j), taking place in 1997, that indigenous organisations had been given the

It was signed at the Summit by 153 nations and the European Community. The United States was criticised considerably for being the only nation attending the Earth Summit not to sign (Porter 1992). The Bush Administration cited dissatisfaction over what it saw as vague and ambiguous wording of some of the convention's main provisions, which it feared would leave the U.S. biotechnology industry without adequate intellectual property protection and the government without control over its financial contributions to the cause of conservation (Porter 1992; Coughlin 1993). Although the Clinton Administration signed the Convention on the last day it was open for signature, almost a year after the Earth Summit, the CBD has still not been ratified by the United States to date.

⁷⁷ Confirmed in Resolution No. 1803 of 1962.

opportunity to express their positions and points of view on a par with government representatives — they were not relegated to the back seats, for example, and could address the Chair under the same conditions as government representatives (CBD 2004: 17). It is through the CBD that much of the discourse on the protection of traditional knowledge has found its current shape. ABS Agreements are one of the key mechanisms through which the protection of traditional knowledge is seen to be effected: by requiring the involvement of indigenous peoples and peasant communities in ABS Agreements that regard biological resources of traditional use, the CBD is in line with the Declaration on the Rights of Indigenous Peoples. The Declaration maintains the right of indigenous peoples to make their own decision with regard to their knowledge and related resources (Art. 31 and Art. 32), and hence requires states to obtain their free and informed consent with regard to any third party use of the latter.

The Declaration allows for an impoverished interpretation of self-determination as the right to be consulted and to give or withhold consent. Whether indigenous peoples will be able to challenge such a narrow conception will depend on the creativity with which they put the Declaration to use – in practice and in discourse – and the force with which they will insist on a wider understanding of this basic right. Contesting the hegemonic construction of traditional knowledge protection as realisable simply through Access and Benefit Sharing agreements is a crucial aspect of challenging the narrow interpretations of the Declaration. One of the key issues in this struggle is the concept of intellectual property to which I now turn. The importance of intellectual property in this context is in no small part due to the importance for clear property

relations with regard to biogenetic resources: the economically most interesting biogenetic resources are often *informational* in kind, as it is the genetic information contained within biological organisms that has a potentially high economic value (see Parry 2004). Who holds (intellectual) property rights over this information is hence a crucial question.

2.3 Intellectual Property: knowledge as a fictitious commodity.

Intellectual property is one of the key tools with which to frame the protection of traditional knowledge. I argue that this is in large part so, because the kind of protection that private property forms necessitate is a protection which does not constrain, but supports the capitalist mode of production. Capital accumulation is only possible through the mechanism of private property. At the end of this section, I ask whether there is scope to contest the hegemonic construction of property as private, primarily commercially-oriented property. First, however, I illustrate the workings of the double movement in this field by discussing intellectual property as a form of market expansion, and a countermovement to this expansion which expresses itself in the claims of indigenous peoples which have insisted on reinvigorating the interpretation of intellectual property as a human right.

2.3.1 Intellectual property as form of market expansion.

As discussed in Chapter 1, land, labour and money are basic inputs into production processes, and their distribution is governed by market mechanisms. They are treated

as if they were commodities, yet they are themselves not produced for sale. They are *fictitious* commodities. We have seen that their treatment as commodities requires a fundamental reorganisation of society, a subordination of society to the market.

Jessop (2007; 2008) suggests that under contemporary neoliberalism, with its emphasis on knowledge-intensive products as increasingly economically important, knowledge is in effect a fourth fictitious commodity. Insofar as knowledge is an attribute of human existence that is collectively maintained and developed, and is inherently non-rivalrous – that is it can be simultaneously used and employed by different actors in different locations – it acquires a commodity form only when it is made *artificially scarce* (and hence rivalrous), and when access is granted or withheld based on the payment of rent. The construal of (certain) knowledge as intellectual property, and the protection of the 'owners' interest, i.e. their rights of income from their property, through an intricate system of legal-economic mechanisms is a way to create and police artificial scarcity with regard to knowledge. Intellectual property protection is the most obvious example of the commodification of knowledge, and the most relevant to this thesis. We will hence not focus on the other forms of knowledge commodification that have been identified.⁷⁸

Jessop identifies the following phenomena: "(a) the primitive accumulation of capital through the 'enclosure' of the intellectual commons inherited from the past — biopiracy is the most notorious example but there are many others; (b) the divorce of intellectual labour from control over the means of production that it deploys — achieved through its formalization and codification in smart machines and expert systems — and the resulting appropriation of the knowledge of the collective worker; (c) creeping extension of the limited nature of copyright into broader forms of property right with a consequent erosion of any residual public interest; (d) the dynamics of technological rents generated by new knowledge and their disappearance once the new knowledge … become[s] generalized and monopoly profits are competed away — such

Knowledge commodification requires a social reorganisation of knowledge and human relations with regard to it. Jessop helpfully identifies three aspects to such reorganisation:

"First, as opposed to being an organic and inseparable part of creative labor in general, knowledge is codified, detached from manual labour, and disentangled from material products to acquire independent form in expert systems, intelligent machines, or immaterial products and services. Second, by analogy with the disembedding of economic activities from their wider social contexts, knowledge is disembedded from its social roots and integrated into extra-economic institutional orders, functional systems, and the lifeworld and made subject to creeping commodification so that the primary code governing its use is profitable/unprofitable rather than true/false, sacred/profane, health/disease, et cetera. And, third, knowledge no longer circulates in closed economic units (householding), through reciprocity, or through redistribution but is allocated through profit-oriented markets" (Jessop 2007: 120).

that the knowledge-based economy is subject to ever increasing pressure to innovate and to protect vulnerable monopolies in knowledge-intensive products by embedding them in technology, standards, tacit knowledge, or legally entrenched intellectual property rights; (e) the contradiction that each capital wishes to pay nothing for its knowledge inputs but wants to charge a high price for its intellectual output; and (e) the dependence of continuing high profits in knowledge-, design-, or creativity-intensive sectors ... on uneven development, on unequal exchange, and on downward pressure on the incomes of the surplus population, the unskilled, and producers of commoditized goods and services" (2008: 341-342; cf. Jessop 2007).

We can thus speak of knowledge commodification as a threefold process of (i) disembodiment; (ii) imposition of market logic with regard to its evaluation and use; and (iii) imposition of market logic with regard to its transmission.

Intellectual property protection, it is well known, has intensified internationally: the scope and level of protection in intellectual property law has dramatically increased over recent decades and gained significance in the global political economy and, hence, international relations (May 2000; 2010). Protectable subject matter is being widened, protection terms are being expanded, new rights are being created, the ease with which protections are granted is growing, and intellectual property standards are being harmonized throughout the world (Fisher III 1999). While intellectual property rights have never been more economically and politically significant than they are in the current so-called 'knowledge-based economy', they have also never been more controversial (Dutfield 2003). Information and knowledge today are crucial market commodities, and are priced accordingly. In this way, the benefits of the 'knowledge-based economy' or 'information society' flow "to those who own the information and knowledge resources which have been rendered as intellectual property rather than those whose need for such information and/or knowledge might be greatest" (May 2000:1).

Intellectual property law must be divided into several distinct areas. Copyright law protects 'original forms of expression' – '*Mr. Tambourine Man*', '*Star Wars*', '1984'. Patent law protects inventions – snowboards, microchips, genetically engineered rice. Trademark law protects words and symbols that identify goods and services – '*Coca*-

Cola', the Mercedes-Benz star. Trade-secret law protects information that a company has tried but failed to conceal from competitors – for example, secret formulas for soft drinks, or confidential marketing strategies. Plant breeders' rights protect new plant varieties.⁷⁹ Of these, copyrights, patents, and trademarks are arguably the most economically significant. Despite differences in origin and development, expansion is a trend common to all of them: with rare exceptions, the set of entitlements created by each of the doctrines has grown persistently and dramatically from the 18th century to the present (Fisher III, 1999). This relentless expansion of intellectual property claims and protection is provoking new (forms of old) battles on a multitude of fronts. Important questions in such areas as public health, food security, education, technology transfer, and scientific research are today all intimately entwined with developments in intellectual property law. In some cases the answers to these questions are a matter of life and death. Alongside these developments, the steady rise and increasing sophistication of indigenous rights movements which we discussed in Section 2.1. has meant that the continuing exploitation and marginalisation of indigenous communities is today denounced more forcefully than ever. Relatedly, the defence of indigenous rights now often includes claims to intangible cultural property.

Over the years, indigenous communities have more and more vocally condemned the unauthorised reproduction of such cultural expression as their artistic works, handicrafts, designs, dances, and musical and dramatic performances. Moreover, the practice of extracting from communities traditional knowledge of particular

There are other, more obscure rights that fall under the intellectual property category: e.g. the rights to layout designs of integrated circuits, or the "right of publicity" which protects celebrities' presumed interests in their images and identities.

commercial interest to outsiders (that is, above all, knowledge related to local biological resources such as medicinal plants) in order to market new products based on such knowledge, has been decried as 'biopiracy' and attacked as an extension of the centuries-long colonial exploitation of indigenous labour force, territories, and natural resources (e.g. Shiva 1997; Mooney 2000; Ramos 2000). Yet it has been difficult to prevent these practices of unapproved appropriation and subsequent commercial exploitation of indigenous cultural expression and traditional knowledge. This has raised the question of whether intellectual property rights, such as copyright, patents and trademarks can be used for the protection of traditional cultural knowledge and expression. Opinions vary widely.

Intellectual property protection, at least in its conventional form, is a form of quasi-commodification⁸⁰. The question, then, is whether indigenous peoples will benefit from such quasi-commodification of their knowledge, or, conversely, whether their struggles can challenge and redefine the conventional conception of intellectual property, undoing some of its commodity elements. Changing the intellectual property regime continues to be a high priority of indigenous peoples' struggles at the international level. It is important to understand, however, that these changes sought, and the protection of traditional knowledge fought for, are inextricably linked to much bigger issues like territorial sovereignty, cultural continuity, food security,

Quasi-commodities have a price but otherwise fail to meet one or more of the criteria for a full capitalist commodity, for example they are not produced in order to be sold (Schaniel and Neale 1999). Intellectual property protection turns particular items of knowledge, information, or know-how into an entity, the rights to which can be alienated on the market.

conservation of biodiversity, autonomous development, health policy and the use of biotechnology.

2.3.2 Intellectual property as human right.

As part of these struggles, indigenous groups have generated a number of declarations condemning prevailing intellectual property systems as, for example, "colonialist", "racist" and "usurpatory" (COICA 1994). Peter Drahos clarifies that such declarations

"... do not, however, abandon the concept of intellectual property altogether. Instead they assert and call for the recognition of indigenous intellectual property rights. Indigenous peoples, it seems are seeking to make intellectual property serve a function beyond that of appropriation of value. They want property to function in a way that allows them to control the use of cultural information which in some deep sense is part of them, to which they are attached, cultural information they do not necessarily want to become the subject of global processes of commodification and appropriation. For them, intellectual property should first and foremost function to preserve their way of life" (Drahos 1999: 365).

As part of this strategy, indigenous movements and their allies have been calling for a recognition of intellectual property rights as human rights. After all, they are already enshrined as such: Article 27, paragraph 2 of the Universal Declaration of Human Rights states that "everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he [sic] is the author". This has been refined and enshrined in the International Covenant on

Economic, Social and Cultural Rights (CESCR) as one of four cultural rights referred to in its Article 15 (emphasis is mine):

"1. The States Parties to the present Covenant recognize the right of everyone: (a) To take part in cultural life; (b) To enjoy the benefits of scientific progress and its applications; (c) *To benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.*"

While the case could thus be made that intellectual property rights are, in important ways, primarily human rights (see Coombe 1998), the Committee on Economic, Social and Cultural Rights, a body of independent experts monitoring implementation of the Covenant and interpreting its provisions, upholds a clear distinction between the two, in its general comment no. 17 (2005)⁸¹:

"Whereas the human right to benefit from the protection of the moral and material interests resulting from one's scientific, literary and artistic productions safeguards the personal link between authors and their creations ... as well as their basic material interests ... to enable authors to enjoy an adequate standard of living, intellectual property regimes primarily protect business and corporate interests and investments" (paragraph 2).

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Juridical persons – such as corporations – are included among the potential holders of intellectual property rights under existing international treaty protection regimes, however, the Committee underlines that "their entitlements ... are not protected at the level of human rights" (paragraph 7). Unfortunately, human rights lack effective enforcement mechanisms, making juridical persons and their economic interests often much 'better protected' than flesh and blood human beings (Chapman 2002).

Intellectual property as a human right primarily protects an author's so-called moral rights, that is, their right to be recognised as the creator of a work, as well as their right to "object to any distortion, mutilation or other modification of, or other derogatory action in relation to, such productions, which would be prejudicial to their honour and reputation" (paragraph 13). This right is understood to be based on the "intrinsically personal character of every creation of the human mind and the ensuing durable link between creators and their creations" (paragraph 12), as well as the idea of creations being "expressions of the personality of their creator" (paragraph 14).

The ideology of expression of personality, and emphasis on the author obfuscates the way in which creativity is also collective and anonymous, spontaneous and involuntary, seeking rather than expressing. The same ideology underlies the indigenous movements' discourse of traditional knowledge as property due to its intrinsic expression of identity. I argue that its predominance, if left unquestioned, can easily support rather than challenge the entrenchment of capital. Due to the scope of this thesis, however, I am unable to discuss these elements further and want to

conclude here with a perspective that pertains not only to intellectual property, but to property in general.

2.3.3 Challenging the hegemonic construction of property as private property.

Property, it has repeatedly been argued, is best understood as a relation between people with regard to things (Pedersen 2010). Private property is just one configuration of property relations amongst many possible (and, indeed historically existing) others (Ibid.). Private property distributes decision-making power over and use privileges to a given object or resource to individuals or quasi-individuals (such as firms). Capitalist private property is one particular configuration of private property that characteristically collocates exclusive control rights over an object or resource with rights to the alienability on the market and wealth effects – that is rights to receive an income through the sale or rent of the thing in question (Berle and Means 1932; Christman 1996; Holderness 2003).

This collocation is at the core of the privatising forces of the capitalist economy. It "provides both the incentive and the feasibility for value-enhancing transfers. Berle and Means … appropriately call collocation the 'atom of property' and view it as 'the very foundation on which the economic order of the past three centuries has rested'" (Holderness 2003: 77).

The crucial question in this context is: will the capitalist idea of property determine traditional knowledge or can traditional knowledge challenge the capitalist idea of property? Pedersen (2010) has convincingly argued – in the context of Free Culture

and Free Software politics – that new relational modalities, or property relations, that have emerged in cyberspace have the potential to reanimate debate about property in general. This is necessary because the "impoverished concept of property that has dominated our political discourse in the twentieth century" (Mossof 2005: 38) is one in which *property in general* (which can take any form, as property relations are social relations based on conventions or agreements, although often imposed by a central authority) is conflated with *property in particular*, i.e. exclusive capitalist property rights. Current debate in the context of indigenous peoples' struggles reflects the same problem, revealing, indeed emphasising the need to reinvigorate informed and informative debate on property. It has been argued *In Defense of Property* that there is an:

"...emerging view, in scholarship and popular society, that it is normatively undesirable to employ property law as a means of protecting indigenous cultural heritage. Recent critiques suggest that propertizing culture impedes the free flow of ideas, speech, and perhaps culture itself. In our view, these critiques arise largely because commentators associate "property" with a narrow model of individual ownership that reflects neither the substance of indigenous cultural property claims nor major theoretical developments in the broader field of property law" (Carpenter, Katyal and Riley 2009: 100).

In parallel to Pedersen's argument, the relational modalities of indigenous peoples, that is their *particular* property relations — which are often incommensurable with market relations — constitute social dynamics that can enrich our understanding of property *in general*. Given that the majority of the world's resources and the means of

production are controlled through property relations, and given that the primary threats to indigenous culture and access to land and resources arise from this particular form of ownership (and its need to expand), it is of great potential benefit for indigenous struggles to adopt the language of property in general and enrich it with their particular relational modalities. In this way it becomes possible to speak the same language as capital, but with a different inflection capable of articulating alternative forms of social relations with regard to resources. The potential promise here, then, is that indigenous ways of relating can be mapped back onto the domains of land, its resources and the means of production, thus contributing to a reconfiguration of the property relations that threaten indigenous livelihoods and lifeworlds.

There is an alternative to the commercial orientation of 'property' in international discourse, and that is *heritage*. The concept of heritage has been picked up by some indigenous movements in order to re-frame the question of the protection of traditional knowledge. Collective bio-cultural heritage, for example, has been coined by prominent indigenous activists in Peru in their collaborations with the International Institute for Environment and Development (Swiderska 2006), and orients the activities of the communities of the Potato Park⁸², a 'collective biocultural heritage conservation area' practising *in situ* conservation of over one thousand varieties of potato in the Peruvian Andes. I turn to an examination of the field of cultural heritage in the following section.

More information on the Potato Park can be found online at http://www.parquedelapapa.org/ Last accessed 23 March 2010.

2.4 The Safeguarding of Cultural Heritage.

As a response to industrial destruction, societal countermovements arose to protect what was called *cultural heritage* for the benefit of their nation, or later humankind. At first, such heritage was tangible: referring to such things as monuments and landscapes. It carried connotations of responsibility to safeguard for future generations. In the latter part of the twentieth century, the notion of *intangible cultural* heritage was promulgated at the international level. I argue that this was not in some kind of opposition or as an alternative to intellectual property, but rather a means by which collective and perpetual (quasi-property) rights could be claimed over intangible cultural items, or what used to be called folklore. Nonetheless, the field of cultural heritage might provide some scope for the contestation of commercial interpretations of 'culture' as intellectual property. Yet the power differential at the international level between the World Intellectual Property Organization (WIPO) and the United Nations' Educational, Scientific and Cultural Organisation (UNESCO) and hence between their respective conceptions of 'culture' indicates that overcoming fundamental ideas of private property and commodification will remain a difficult task in this context.

2.4.1 Development and the Protection of Tangible Heritage.

In the mid 1950s, Egypt decided to build the Aswan High Dam on the Nile, a mega development with foreign financial support. This construction was set to flood a valley containing the Abu Simble and Philae temples, and hence raised grave concerns

amongst archaeologists and others. On the appeal of the Egyptian and Sudanese governments, a worldwide fundraising and rescue campaign was launched by UNESCO, the temples taken apart and put back together again piece by piece at a higher location, or granted to countries who had supported the work – hence we find some of these temples now in Madrid and New York. The project was deemed very successful and led to further safeguarding campaigns, as well as the drafting of a UN convention to protect the common cultural heritage of humanity.

The discourse of heritage is a long-standing one, and was applied to both cultural and natural 'monuments'. One of the German forestry missionaries of whom we learned previously made lavish use of this discourse when he addressed the Technological Museum in Melbourne in 1871, urging that the forest be understood "as a heritage given to us by nature, not for spoil or to devastate, but to be wisely used, reverently honoured, and carefully maintained. I regard the forest as a gift, entrusted to any of us only for transient care during a short space of time, to be surrendered to posterity again as an unimpaired property, with increased riches and augmented blessings, to pass as a sacred patrimony from generation to generation." (Ferdinand Müller, quoted in Guha 2000: 35).

From the end of 19th century onwards, the French bourgeoisie called for the preservation of landscapes as an aesthetic refuge and mnemonic device to recall the country's rich past. The forest came to be valued as an expression of history, and for the Parisian public, it became a haven from the social strife and vicissitudes of the city. Aesthetic and nationalist concerns came to dominate the movement for landscape

protection in France, which harked back to protections of architectural and monumental heritage (*patrimoine*) from the French Revolution onwards (Ford 2004).

The idea of combining cultural conservation with nature conservation as an *international* responsibility was first formally aired in 1965 at a White House Conference in Washington, D.C., where participants called for a "World Heritage Trust" to stimulate international cooperation for the protection of "the world's superb natural and scenic areas and historic sites for the present and the future of the entire world citizenry". The Convention Concerning the Protection of World Cultural and Natural Heritage was adopted in Paris on 16 November 1972. Upon adoption, several UNESCO Member States stated their interest in the importance of safeguarding what was later to be called intangible heritage.

The principle of common heritage is an important norm in international law governing the access to and use of certain resources. Birnie and Boyle (2002) point out that all members of the international community have an equal duty to protect and conserve as well as an equal right to benefit from the use of resources declared 'common heritage' (see also Joyner 1986; Dutfield 2004). The high seas, Antarctica and extraterrestial resources are common heritage par excellence⁸³.

And while heritage usually implies a notion of responsibility and stewardship in order for future generations to be able to continue passing on and inheriting the very same

The principle is explicitly included in the 1979 Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, and the 1982 UN Convention on the Law of the Sea.

'heritage', it is also often invoked as a justification for open, unregulated access. In this way, appeals to common heritage were often used to justify bioprospecting and subsequent patenting of commercially useful biogenetic elements — after all these resources, and traditional knowledge relating to them could easily be described as not 'owned' by anyone and freely accessible to all. This however, is a misuse of the notion of common heritage. For common heritage areas and resources cannot be subject to 'appropriation' of any kind, either public or private, national or corporate, that is it cannot be made subject to these forms of ownership (Joyner 1986).

It is the biogenetic resource conflicts over recent decades that have led to increasing pressure at the international level to codify who can make rightful claims to what. These are struggles about property relations: their meanings and definitions, and hence distributive potentials. Negotiations increasingly concern 'knowledge' and 'culture', too.

2.4.2 The Protection of Intangible Cultural Heritage.

In 1973, Bolivia proposed to the Director-General of UNESCO to add a protocol for the protection of folklore to the Universal Copyright Convention. This concurred with the release of pop singer Paul Simon's recording of 'El Condor Pasa', a song soon thereafter identified as a Bolivian folk song. The publication brought the 'author' considerable revenue, an income that Bolivia felt it was being deprived of without legal protection of its folk traditions (Honko 2001). Opposing Paul Simon making a profit on the folk tune by arguing for a cut of the action (in this and in future instances of other cultural 'products') is an example of a countermovement that serves the

expansion of capital, rather than delimiting it: a "non-reformist reform" (cf. Gorz 1967) would aim at the dissolution of exclusive rights and corporate or state control over cultural expressions, in order that these may flow freely outside of capital. On this level it is important to understand not only the double movement, but also the nature and function of exclusive private property rights, the legal mechanism at the very core of capital and its expansion. From enclosures to patents on living things and scientific processes, private property underpins capital expansion and a non-reformist reform must seek alternative configurations of property relations (cf. Pedersen 2010).

However, it was not only economic considerations that prompted the demand for the protection of folklore in many developing countries from that time onwards. Concern was also expressed over the exportation of traditional culture and its potentially offensive presentation in different contexts. Slowly the term 'folklore' was discarded in favour of 'traditional culture' or 'cultural heritage', because of the former's disparaging Western overtones (Honko 2001).

In 1996 the World Commission for Culture and Development published its report 'Our Creative Diversity', which notes, amongst other things, that the 1972 Convention Concerning the Protection of World Cultural and Natural Heritage is not adequate for the protection of cultural expressions such as dance or oral traditions. The following years saw a multiplication of meetings, conferences, consultations and programmes, leading to the adoption of the Universal Declaration on Cultural Diversity and its action plan in October 2001, in the wake of the events of September 11, and billed as a

re-affirmation of intercultural dialogue and cooperation as the best guarantee for peace.

Earlier that year, UNESCO conducted a survey among States and NGOs to draw up an operational definition of *intangible cultural heritage*. The Roundtable of Experts which met in Turin, Italy, recommended to UNESCO to prepare an international normative instrument on the safeguarding of the intangible cultural heritage in order to preserve and recognise human creations in danger of disappearance, strengthen cultural identities and assure historical continuity, promote the creative diversity of humanity and facilitate access to it.⁸⁴ The Convention for the Safeguarding of the Intangible Cultural Heritage was adopted in October 2003.

The Convention for the Safeguarding of the Intangible Cultural Heritage considers the importance of safeguarding intangible cultural heritage to be based on its "invaluable role ... as a factor in bringing human beings closer together and ensuring exchange and understanding among them", its contribution to the realisation of human rights, and refers in its preamble to existing international human rights instruments. Communities, "in particular indigenous communities" are recognised as enriching cultural diversity in their role as producers and stewards of intangible cultural heritage.

The Final Report of the Roundtable is available online at http://www.unesco.org/culture/ich/doc/src/00077-EN.pdf Last accessed 25 September 2009. Rosemary Coombe (1998) points out that the World Intellectual Property Organization (WIPO) and UNESCO are the institutional embodiments of the two sides of a conceptual division of culture. WIPO views culture as the 'accumulated cultural capital' of a given society or humankind as a whole. 'Cultural development' in this sense means encouraging more cultural products, more literary, artistic, and musical works, and more technological innovations, and hence more items for potential commodification through intellectual property. As already suggested, this hardly safeguards culture from capital's expansion, but indeed integrates it into this expansion through the commodity form. UNESCO, on the other hand, understands culture more anthropologically as "the material and spiritual activities, products, meanings and values of a given social group that distinguish it from other groups", which implies that the right of a group to maintain its cultural integrity might trump the rights of cultural creators in the wider society, and "the group might choose to restrict access to and use of elements of its cultural heritage ... if doing so was deemed necessary to preserve the group's identity" (Coombe 1998: 74). In this way, WIPO underscores individual creation and public diffusion, UNESCO emphasises the collective aspect of culture, stressing the need for sharing and cooperation. Coombe hypothesises that this "international division of labour" may account for "the failure to consider measures necessary to balance rights to individual intellectual properties, rights to public diffusion, and rights to the preservation of cultural identity" (1998: 76) a failure that has relegated indigenous communities to a particularly disadvantageous position with respect to the struggle for the preservation of their cultural integrity. The 'protection of culture', therefore, is an international battlefield with commercial interpretations competing with more 'anthropological' ones. This battle reflects the totalising vision of private property as the only form of property, thus perpetuating the conflation between property in general and property in particular.

In 2005 another UNESCO Convention was adopted, the Convention on the Protection and Promotion of the Diversity of Cultural Expressions. This Convention calls for the recognition of the "dual economic and cultural nature of cultural activities, goods and services, which convey and transmit cultural expressions and, in so doing, constitute vehicles of identity, values and meaning, irrespective of their commercial value" (UNESCO 2007: 3).

It must be pointed out that in the context of this convention 'protection' refers to the adoption of measures aimed at preservation, safeguarding and enhancement – as can be gleaned from its use in the various UNESCO Conventions concerned with heritage. In UNESCO terminology, 'protection' has no directly commercial connotations. When used in conjunction with the term 'promotion', it implies the need to keep alive cultural expressions threatened by the rapid changes which (economic) globalization causes. Similarly, 'promotion' calls for continuous making and re-making of cultural expressions "to ensure that they are not confined to museums, 'folklorized' or reified" (Ibid.: 5).

The future development of this trajectory remains uncertain, of course, and whether it will succeed in contesting the imaginary of commercial property orienting activity in this field will depend, so I maintain, on a thorough understanding and appreciation of

the double movements and the associated, or indeed consequent need for non-reformist reforms.

Finally, the ability to take a critical stance in these processes is rapidly undermined as civil society actors, publics and communities all over the world, not just of the subaltern kind, are enrolled into and hence integrated into the decision-making processes. In the following section I argue that public participation in development and governance, which constitutes the fifth and final trajectory that underpins the current politics of protection of traditional knowledge, is a neoliberal movement to outsource decision-making as well as undermine post-procedural critique, since who can be taken seriously when they criticise a decision that they participated in making? To be clear, I do of course in no way question the value of people participating in decision-making which affect their lives, rather I highlight the worrying way in which such participation is being co-opted to capital's ends.

2.5 Public Participation in Development and Governance.

In this section, I discuss participation as it developed as a response to unfettered capital expansion in the form of 'developmentalism', and yet was co-opted as a 'technical fix' to improve the outcomes of development interventions. However, these improved outcomes were not necessarily improvements for the so-called beneficiaries of the programmes. Moreover, participation plays an important role in the neoliberal restructuring of governance processes. For these reasons, reviewing the trajectory of participatory approaches to development against the backdrop of the double

movement is necessary for the realisation of the emancipatory potential inherent in participation. I argue that in and through processes of participatory development, capitalism's double movement becomes a singular movement of capital expansion which has already incorporated – and hence disarmed – its own countermovement. In this, neoliberal participatory processes resemble processes of sustainable development (see Section 2.2. above): both seem to collapse the movement(s) of market expansion and its countermovement(s) into a unified movement of apparently conditional expansion – development only if it is sustainable and only if it is participatory. I think of such a 'collapse' not as an overcoming of the double movement dynamic which Polanyi identified, but rather as one of its possible expressions. It might be that this particular 'unified' motion of the double movement is a characteristic expression of the double movement under neoliberalisation, but more analysis than I am able to offer in this thesis would be needed to support such a claim.

2.5.1 Participation as response to the crisis of developmentalism.

The ideology of developmentalism assumes linear forms of social progress, and indeed the universality of such forms (Bodenheimer 1971; Chalmers 1972; Norgaard 1994). In Mark Duffield's words "[d]evelopment is [seen as] a normative process of becoming: a series of interconnecting movements leading from poverty and vulnerability to security and well-being" (1994: 44), and this process is understood as universally shared. Moreover, developmentalism can be understood as the depoliticised approach to development, which sees the latter as a technocratic process to be designed and implemented by expert agents of development rather than "negotiated with and contested by its subjects" (Hickey and Mohan 2004b: 10). This

modernist paradigm has dominated national development strategies and the international aid apparatus particularly since the end of the Second World War. However, it found itself increasingly unable to comprehend let alone deal with the ecological consequences of unfettered growth coupled with unprecedented global inequalities. Beginning a few decades earlier, but culminating in the 1990s, developmentalism was widely declared to be in crisis (e.g. Pieterse 1991; Watts 1995).

Critiques of the dominant development approaches as well as proposals for alternatives entered the stage. An insistence on the greater participation of the people affected by development – its so-called beneficiaries – was common to all of them. Participation refers to "the exercise of popular agency in relation to development" and contemporary development policy would be unthinkable without at least a lip-service paid to the virtues of participation and a recognition of "people as active claims-making agents" (Hickey and Mohan 2004b: 3).

The 'Alternative Development' approach of the Dag Hammerskjold Conference 1974, for example, critiqued 'mainstream' development as exclusionary, impoverishing and homogenising, and proposed more participatory alternatives aimed at developing equitable citizenship in pluralist societies, as well as economic and environmental sustainability (Hickey and Mohan 2004b: 6-8). The 'populist' form of 'participation in development' emerged in the 1980s as a response to the failures of mainstream developmentalism. It placed local realities at the heart of development interventions and insisted on facilitators and enablers rather than directive experts as agents of development, as well as on the participation of the subjects of development at all

stages of the intervention. Yet this approach has failed to engage with the underlying, structural processes of development as historical social change taking place under particular socio-political and economic conditions, and has hence been the focus of a backlash against "participation" in the 1990s (Hickey and Mohan 2004b: 11).

While it is in particular the mainstreaming of the 'participation in development' approach that has been celebrated and criticised in the literature more recently, ideas and discourses of participation have periodically emerged in the history of development practice and theory, and the diversity of participatory approaches should not be overlooked. For example, 'community development' in both the colonial and post-colonial periods of the twentieth century focussed on participation in political processes as an obligation of citizenship, which was needed in order to (re)produce stable rural communities, develop colonial and later state hegemony in remote and isolated areas, and to counteract radical socio-political change. The control of rural populations was central to this approach to participation, and adult education, leadership training and institution building were its main vehicles (Hickey and Mohan 2004b 6-8). Modernisation theory of the 1960s advocated participation in the political system - through voting, party membership, and campaigning - as crucial in the attempt to secure political stability and legitimacy for emerging nation states (Ibid.). Liberation theology and the 'pedagogy of the oppressed' (Freire 1970) in the 1960s and 1970s promoted participation as a right of citizenship that could challenge subordination, marginalisation and structures of oppression in socio-political and economic processes. Popular education and awareness raising constituted the core of these interventions aimed at empowering the excluded to participate in and above all challenge the political systems by which they were marginalised (Ibid.).

2.5.2 Participatory development as 'technical fix'.

Beginning in the mid-1990s, participatory approaches to development have been criticised severely for not living up to their promises of empowerment, emancipation, and progressive transformation for the poor and the marginalised. Instead, participation has become a technical approach to development aimed at containing, channelling and controlling popular agency, rather than engaging with issues of power and politics (See Cooke and Kothari 2004 for the most prominent of such critiques, though its focus was particularly the practice of participatory rural appraisal).

As part of its critique, participation has been charged with achieving little more than the softening of the harsh blows of neoliberalism, stabilising and strengthening neoliberalism and the agenda-setting power of international financial institutions and other development agencies in the process (cf. Bebbington 2004). The key criticisms of participatory development were levelled at its obsession with the 'local' at the expense of a serious engagement with wider structures of injustice and oppression (Mohan and Stokke 2000); at its inadequate analysis with regard to what constitutes power, and how empowerment may occur (Mosse 1994; Kothari 2001); at its lack of understanding of the respective roles that structure and agency play in social change (Cleaver 1999); and at the tendency of certain agents of participatory development to "treat participation as a technical method of project work rather than as a political method of empowerment" (Hickey and Mohan 2004b: 11; see also Carmen 1996;

Cleaver 1999; Rahman 1995). Participation was hence criticised for having been used as a technique in order to 'fix' the problems of previous development approaches, rather than redefining the purposes and goals of development.

Without a well-developed dimension of political economic context and structure, theories and case studies of participation, as well as the strategies for social change based on these, will lack the analytical clarity of what participatory social transformation can or ought to aim at, and which factors might determine when its aims have been reached.

An important conclusion of the critiques of participation is that participation events, such as participatory research projects, consultations or interventions, should not be considered without considering the 'structural' or 'immanent' conditions under which they are performed and take place. Ethnographies of participation as it is actually practised in development projects can hence be of great value in throwing light on the power dynamics that are at play in such interventions, the ways in which it includes/excludes, and whom (Cornwall 2004). It is such an ethnography that is at centre stage in this thesis, especially when I focus on the actual unfolding of the participatory ProBenefit project in Chapter 4.

2.5.3 Neoliberalisation and Partnerships.

Neoliberalism is usually understood as the preference for market mechanisms to organise social relations. It is much less a monolithic project that can be abstractly comprehended as it is multiple enactments and trajectories that need to be understood

in their "messy actualities" (Larner 2000). In this way, I understand neoliberalisation as the regulatory restructuring that, while developing unevenly and diversely across the globe, is nonetheless primarily concerned with imposing, extending or consolidating market discipline (Brenner et al. 2010a; 2010b).

Often, neoliberalisation⁸⁵ is seen as a "rolling back" of the state, or even the death of the state as new forms of horizontally networked institutional arrangements at multiple scales emerge and consolidate as *governance beyond the state*. Attention to these novel arrangements and modes of governing has increasingly been paid (see, e.g. Rose and Miller 1992; Jessop 1998; Hajer 2003), and also made increasingly clear that these political transformations bear less witness to the waning of the state than to a reconfiguration of its particular role and power, what Erik Swyngedouw has called an "ambiguous shift from government to a hybrid form of government/governance" (2005: 2003).

Processes of neoliberalisation include the gradual supplanting of the top-down power traditionally exercised by the state by horizontal, iterative, and participatory network forms of governance. Three aspects in particular characterise the neoliberal transformation of the state-private-civic articulation (Swyngedouw 1997, 2005;

Of course, "[f]rom the perspective of Latin America ... not very much about neoliberalism is particularly 'neo': the continuities with colonial coercion being especially obvious in countries such as Chile where the murder of Allende and other socialists after the 9/11 coup revealed the ways in which Friedman's Chicago boys depended on hidden fists ahead of introducing neoliberal governance through marketized hidden hands" (Sparke 2006: 361-362; cf. Petras 2004). David Harvey holds that Pinochet's coup enabled "[t]he first experiment with neoliberal state formation" (2005: 7).

Brenner 2004). First, the outsourcing (externalisation) of traditional state functions through mechanisms such as privatisation and deregulation, involving a growing number of market and civil society actors in the organisation and regulation of ever more areas of societal life. Second, the delegation of organisational and regulatory tasks to supra-national levels of governance, such as to regional constellations (e.g. the EU or the *Comunidad Andina*) or to transnational institutions or processes (e.g. WTO, IMF, CBD negotiations). Third, the delegation of organisational and regulatory tasks to sub-national levels of governance through processes of decentralisation meant to foster local differentiation and autonomy without diminishing national unity by facilitating an equilibrium between the "centripetal and centrifugal forces" of society (Kauzya 2005). Externalisation, up-scaling and down-scaling of governance gives shape to governance beyond the state that redefines but does not break its relationship to the market and to civil society.

In the process of such redefinition, as new spaces for the exercise of power open up, it is the ability to seize these spaces which will determine who is ultimately part of the networked decision-making and agenda-setting, and partakes of their benefits. Certainly, social actors that were hitherto excluded from processes of decision-making might in the reconfiguration of governance find ways to participate and influence outcomes, however, they (or others) very well might not. Erik Swyngedouw argues that

"[t]he new 'gestalt of scale' of governance has undoubtedly given a greater voice and power to some organisations (of a particular kind – i.e. those who accept playing according to the rules set from within the leading élite networks). However, it has also consolidated and enhanced the power of

groups associated with the drive towards marketisation and has diminished the participatory status of groups associated with democratic or antiprivatisation strategies" (2005: 2003).

These new "inclusive" forms of governance, Swyngedouw maintains, are beset by contradictions and tensions. While the externalisation, up-scaling and down-scaling of government functions promise "enhanced democratisation through participatory governance", in reality they give rise to "non-representational forms of autocratic élite technocracy". Moreover, while the novel governance forms extend participation to some stakeholders on the one hand, they consolidate "beyond-the-state arenas of power-based interest intermediation" on the other. Finally, while horizontally articulated networks profess "improved transparency", actually existing governance associations are often characterised by diffuse and opaque systems of representation which obscure lineages of accountability (Swyngedouw 2005: 2003). Cindi Katz has also raised concerns about, amongst others, "the defanging of oppositional practices and positions" as well as the masking of the degradations of neoliberalism (or even the creation of an alibi therefor) through the rhetoric and practices of neoliberal 'partnerships' (Katz 2005: 623). Partnerships create vectors for the infiltration of the neoliberal ideology into all levels of society. Swyngedouw warns that they might just turn out to be "the Trojan Horse that diffuses and consolidates the 'market' as the principal institutional form" (2005: 2003).

Partnership is also the recurring theme of the United Nations' International Decades of the World's Indigenous Peoples – the first "Partnership in Action" (1995-2004) and

the current "Partnership for Action and Dignity" (2005-2015) – warranting, we might submit, an investigation of the practices of partnership these decadal programmes promote and comprise.

Wendy Larner and David Craig (2005) show in their study of local partnerships in Aotearoa New Zealand that the neoliberal drive towards partnerships in governance assimilates community activists and their oppositional agendas into the variegated projects of neoliberalism. On this account, partnerships can easily dilute activists' demands by "professionalizing" them through training and credentials which shape their political subjectivities, as well as by re-routing their efforts towards fairly pre-set possibilities for action. Partnerships also have an inbuilt process of selection that forces activists to engage in mutually respectful interactions and 'equal' relationships in order to be considered worthy partners in the first place. It is hardly possible to not lose one's 'critical edge' in this competitive situation which pits activist group against activist group in their bid for potential influence.

The accumulating critique of participation as a set of practices by state and corporate actors, reformist NGOs and social movements unaware of the problems and pitfalls that the strong criticisms outline, however, should not be seen as amounting to the necessity of discarding participation by communities. Instead, what is needed is for the participating actors to be indeed in charge of the process in order for the outcome, the decisions that are made, to be representative of their community wishes and made on an informed basis. I present my ethnographic study of such a 'participatory process' in Chapter 4, but before doing so it is pertinent to provide the reader with a

background of the colonial history and political economy of the Ecuadorian region of Napo in which my field work took place.

The aim of the present chapter has been to introduce the reader to the movements of market expansion and countermovements for social and environmental protection which characterise the political tension fields through which the protection of traditional knowledge has gained the particular shape which it has today. In doing so, I hope to have illustrated the different ways in which the double movement of capitalism comes to express itself in different contexts. These incipient outlines for a genealogy of traditional knowledge protection are also meant to contribute to a destabilisation of the hegemonic construction of the protection of traditional knowledge by pointing towards the struggles which constitute it.

To conclude this chapter, a summary of the double movement dynamics I explored above will make explicit the ways in which market expansion in the context of traditional knowledge has been met by a series of countermoves to rein in this expansion in order to avert the most harmful of its effects.

As I have argued in Chapter 1, the countermovements to capital and market expansion are best understood not as class action by the most disadvantaged but as a diversity of societal forces, which restrain and regulate market expansion. This understanding is faithful to Polanyi's own conceptualisation of the countermovement, which he says: "was spontaneous, undirected by opinion and actuated by a purely pragmatic spirit" (Polanyi 1944 [1957: 141]). He elaborates: "the great variety of forms in which the ...

countermovement appeared was not due to any preference for socialism or nationalism on the part of concerted interests, but exclusively to the broader range of the vital social interests affected by the expanding market mechanism" (Ibid.: 145); and "[a]t innumerable disconnected points it set in without any traceable links between the interests directly affected or any ideological conformity between them" (Ibid: 149). "For if market economy was a threat to the human and natural components of the social fabric ... what else would one expect than an urge on the part of a great variety of people to press for some sort of protection?" (Ibid.: 150).

What Polanyi failed to see, or was unable to see at the time, was the way in which the double movement can and does sometimes collapse into a singular movement of already-restrained market expansion — for example in the case of sustainable or participatory development. In such cases, in which both mechanisms have fused, the more radical or transformative strands of the countermovement principle are more easily subdued and sidelined. While market expansion might in this manner be controlled in ways that avoid the devastations of a completely unfettered market, its expansion *per se* is actively supported, and the possibility for a systemic transformation becomes more difficult to realise. As already broached, I think of such a 'collapse' of the double movement into a unified movement of 'conditional' expansion not as an overcoming of the double movement dynamic which Polanyi identified, but rather as one of its possible expressions.

Polanyi's analysis in *The Great Transformation* shows that market expansion has never and probably could never proceed without significant extra-economic action to

control its harmful, and indeed ultimately market-undermining effects. I have touched upon these issues in Chapter 1. My aim was, amongst other things, to point towards the utility of the countermovement principle for capital expansion in general: without a regulating, restraining, and contesting mechanism, capital would be more likely to undermine its own vital conditions.

The double movement dynamic is, of course, a societal one. Different social forces will at different times (or sometimes simultaneously) be working to institute (in the broadest sense of the word) particular practices in particular social formations. Such institution happens most obviously through legislation or the establishment of organisations, but also less formally through the change of customs, traditions, values. While Polanyi's analysis focused on the double movement at the national scale, it is important to note that contemporary movements for market expansion and their concomitant countermovements are not exclusively located at that scale. My illustrations in this chapter should have made obvious the extent to which contemporary countermovements work at multiple scales. They do not spring only from the necessity of maintaining a functioning, if not harmonious, national community (though this motive should not be underestimated) but also to a significant degree from the increasing necessity to maintain functioning transnational networks and relations. After all, the circuit of capital and its expansion are nowadays – if they have not always been – a global affair: depending on and affecting national as well as transnational social and technological networks. In this way, the harmonious functioning of social formations at national or sub-national scales is increasingly dependent on transnational and even global relations; as this realisation grows in society, social movements and institutions addressing issues of transnational concern emerge. Moreover, issues whose relevance seems primarily national or sub-national might under certain circumstances generate a more effective response if raised at other scales. Hence, in order to defend their interests, actors might at different times, or simultaneously, address themselves to institutions, organisations, authorities, and/or peers located at a variety of scales – from local via national and regional to global – depending on where they are able to find access, where their concerns are likely to generate the most useful response, or where they are able to mobilise.

In the context of traditional knowledge, the following dynamic can be observed. After a period of market expansion aided by traditional knowledge as cost-free input into (especially pharmaceutical and agricultural) commodity production, that is after a period of accumulation by dispossession, a series of countermoves were and are being undertaken, especially at the international level, in order to regulate such activities of accumulation. Commodification of traditional knowledge is not to be stopped in its entirety, but it is to be restrained, in particular by means of the requirement of Prior Informed Consent on part of the knowledge-holding communities which is now central to any Access and Benefit Sharing contract. We encountered the key movements which synergetically achieved such restraint in the present Chapter. I will briefly list them here again: the establishment and influence of international NGOs (such as IWGIA, Survival International etc.); the increasing vociferousness of indigenous intellectuals in the 1950s and 1960s; the ILO's Convention 169 on Indigenous and Tribal Peoples; the formation of ECOSOC's Working Group on Indigenous Populations, and the development of the international indigenous

movement more generally – including the UN's Permanent Forum on Indigenous Issues, and UN legislation such as the recently adopted Declaration on the Rights of Indigenous Peoples; UNESCO's Safeguarding of (tangible and intangible) Heritage legislation; conservationist and other environmentalist movements, including the development of the CBD; the rise of No Patents on Life campaigns (and other anti-intellectual property activism); plus, as we shall see in Chapter 3, the consolidation of local, regional and national indigenous movements (e.g. in Ecuador) to protect indigenous communities from the destructive effects of accumulation by dispossession in the context of land as well as knowledge.

These organisations, movements, people and legislations together manifest the countermovement principle in the context of traditional knowledge. Up to now, what this countermovement has achieved is to give shape to a particular configuration of property rights with regard to traditional knowledge: traditional knowledge is not 'free for the taking' any longer, but the knowledge-holding communities (in itself of course a vague term) do now possess decision-making power over and above all rights to the income flowing from the use of traditional knowledge, both key aspects of the capitalist conception of private property. Market expansion with regard to traditional knowledge has hence not been curtailed, but it has, in Polanyi's words been checked "in definite directions" (Ibid.: 130). Such regulation, no matter how important we deem it to be, has also meant the disregarding if not silencing of the countermovement's more critical voices. It is part of the aim of this thesis to highlight the existence and importance of the latter. But let us finally move into the Napo region of the Ecuadorian Amazon and meet its 'traditional-knowledge-holding' inhabitants.

3 Living in Napo: a brief political economy of extraction and colonisation in the Ecuadorian Amazon.

The aim of this chapter is to introduce the reader to the Napo region of the Ecuadorian Amazon and its inhabitants by way of a – necessarily limited – historical political economy of the area. Its purpose is to illuminate the context in which my field work took place and, relatedly, to paint a picture of the historical, political, economic, cultural and local specificities in which both the Access and Benefit Sharing negotiations of the ProBenefit project (see Chapter 4 below) and the struggles of the people with whom I worked unfolded.

Approaching the protection of traditional knowledge from a critical perspective, which aims to take into account the views of the so-called knowledge-holders themselves, requires a historical view that sees bioprospecting as one of a wider set of activities impinging on people's lives. This chapter reveals bioprospecting, the search for commercially valuable lifeforms and their ingredients, as one amongst a long-standing series of extractive activities in the Amazon forest: rubber, gold, timber, oil, and now traditional knowledge. As part of these processes, Europeans continue to compete with each other over the control of indigenous labour indispensable for survival in, let alone exploitation of, the rainforest. Violence, or threats thereof, have been used alongside bribery, trade, ideological conviction and later wages in order to extract time, energy and skills from the people of the forest, largely for the benefit of European and mestizo colonisers (traders, missionaries, administrators). Nonetheless, indigenous inhabitants of Napo were by no means passive victims of exploitation.

They rose in rebellions, learned how to play the colonial actors out against one another, found ways to raise their own and their family's status in the new layouts of social configuration, or migrated deeper into the forests to escape them. However, the genocidal and ethnocidal violence perpetrated upon them cannot be diminished simply by a better understanding of their active resistance and creative adaptation. Numbers suggest consistently that the indigenous population dwindled by ninety percent in the first 50 years of contact.⁸⁶

The rapid colonisation of the Ecuadorian Amazon which occurred in the latter half of the twentieth century, and which was enabled by and in turn fuelled oil exploration and extraction, spawned a more organised indigenous resistance initially supported by sympathetic missionaries (see Section 3.7. below). The rise of this indigenous movement is a clear example of a counter movement rising in response to increasing colonisation and market expansion with the aim to protect (some parts of) society from the detrimental effects of accumulation by dispossession. Ethnocide in Ecuador has led to ethnogenesis (Whitten 1976; Hill 1996) and the 'scaling up' of identity: the formation of clearly demarcated indigenous nationalities as well as a pan-indigenous identity. In this context, I introduce the indigenous federation FONAKIN with which I was affiliated as part of my fieldwork. A short account of the 1970s oil boom and consequent debt crisis and structural adjustments which provoked frequent and widespread indigenous uprisings and catapulted the Ecuadorian indigenous movement

As already mentioned in Chapter 2, Thornton 1987; Ramenofsky 1988; Jennings 1993; Stannard 1993; Rummel 1994; and Shoemaker 1999 are useful references for numbers. See Henige 1998; and Royal 1992 for an overview of the heated debate over the right numbers and methodological concerns over their exact determination.

into a politically relatively powerful position (see Sections 3.8. and 3.9. below) will serve as useful background to understanding the situation into which the ProBenefit project entered in 2004, with its proposal of facilitating a participatory process for the negotiation of a fair and equitable Access and Benefit Sharing agreement with the German pharmaceutical company Schwabe Ltd. From the time of the Conquest via the rubber boom to mass colonisation and oil exploitation, the indigenous inhabitants of the Napo region have experienced a variety of ways in which their labour, skills and knowledge have been used in order to serve other (usually white) people's ends and to further those people's profit at the indigenous inhabitants' expense. Nonetheless, as we shall see in Chapter 4, the ProBenefit project's design and execution failed to take this context into account, making smooth completion impossible. First, however, let me introduce you to the *Napo Runa*.

3.1 Napo Runa: Ethnicity, Language, Culture.

Much of the fieldwork which informs this thesis took place on the fringe of the North-Western Amazon region, in the Andean-Amazonian nation of Ecuador. Ecuador's population is probably almost one third indigenous⁸⁷, and many indigenous nations (as

The 2001 census names only 10 percent of the total Ecuadorian population as indigenous (INEC 2001). Zamosc (2004) holds that while the census was restrictive with regard to ethnic self-identification, it is unlikely that the Indian population exceeds 15-20 percent. Many other sources, however, gauge the number at about 25-30 percent or more (e.g. CONAIE n.d.; Macas 1993; King 1999; see also CIA Factbook available online at:

https://www.cia.gov/library/publications/the-world-factbook/geos/ec.html).

they currently prefer to be called) share dialects of Kichwa⁸⁸, that is, variants of Quechua, the Andean political language of the imperial Inca. When the Spanish conquered the Central and Northern Andes in 1532, civil war was already raging in the heartlands of the Inca Empire from Quito, now Ecuador's capital, to Cusco in Peru (Hemming 1970). How the Kichwa-speaking populations of the Ecuadorian Amazon acquired their language is unclear, but the process is said to have clearly entailed socio-economic relationships between Andean and Amazonian, as well as coastal peoples prior to and outside of the processes of Inca or Spanish conquest (Whitten & Whitten 2008).

In most of the ethnohistorical and ethnographic literature, a distinction is made between the lowland Kichwa-speaking population of the Puyo-Pastaza region (Canelos Kichwa) and the Kichwa-speakers of the Tena-Archidona region, including those who live all along the lower Napo River into Peru, as well as those of the somewhat higher-lying areas in the cloudforest towards the town of Baeza (Quijos Kichwa, or Napo Runa) (see Oberem 1963; Whitten 1975; Macdonald 1979; Muratorio 1991; Uzendoski 2005). This distinction is upheld in order to account for the particularities of the Canelos Kichwa who engage in important ways, including marriage and bilingualism, with Jivaroan Achuar and various Zaparoan cultural groups (e.g. Whitten & Whitten 2008).

I am going to use the spelling Kichwa instead of the Anglicised "Quichua" throughout this thesis. It is the currently most widely used spelling amongst Kichwa peoples in Ecuador.



Figure 3: Family dwelling along the Napo River.

This section is a brief introduction to Napo Runa ethnicity, language and culture. Firstly, *runa* means people, person, human being in Kichwa. Napo Runa are hence the people of the Napo. The Napo is a river which begins its course in the Ecuadorian Oriente, as the Ecuadorian Amazon region is called in Ecuador itself due to its location in the East of the country, in what is today the town of Puerto Napo, about five miles from Tena, and continues into Peru, merging with the Ucayali river in the city of Iquitos to continue as the Amazon River through Brazil and to the Atlantic Ocean. Tena is the capital of the Napo province, and the base location of my field research. Several indigenous organisations of the area, including FONAKIN, have their offices in Tena. Archidona, also about five miles from Tena, is another important

urban centre in the region, and was the seat of an influential Jesuit mission in the eighteenth and nineteenth century.

The Napo Runa, with whom I worked, are a tropical-forest-dwelling people who live in and have participated in shaping the modern Andean republic of Ecuador. While detailed cultural ethnographies and cosmological studies of Napo Runa life can be found elsewhere (Uzendoski 2005; Foletti-Castegnario 1993; Hudleson 1981; Kohn 2002; Macdonald 1999; Muratorio 1991; Reeve 1985; Santos Ortíz de Villalba 1993), a few pointers will serve here as orientation in order to make better sense of the Napo Runa values and understandings that I contrast with the more dominant visions of the protection of traditional knowledge in Chapters 4 and 5.

I understand Napo Runa 'culture' - like all other 'cultures' - as a social process of "transculturation" (Oberem 1980; Uzendoski 2005) whereby identity and difference is formed, performed, reworked and shifted through cumulative everyday, material and symbolic interactions between people of different cultural backgrounds. Throughout centuries of cross-cultural exchanges, both violent and amicable, certain practices, proclivities, and understandings seem to have remained characteristic of Napo Runa sociality – several of these are shared with Amazonian peoples more widely, and are surely at least in part due to the particular ecological conditions in which their lives unfold.⁸⁹ Even though many Napo Runa today engage in wage labour relations, most families' livelihoods are still primarily based on subsistence horticulture, usually with

⁸⁹ See especially Overing & Passes 2000, and Overing 2003 for a good introduction to Amazonian sociality and everyday life.

added small scale production of cash crops, such as cacao or coffee for the market. Collaboration and reciprocity figure prominently in social relations, at least as the normative standard, and many communities still practice the tradition of regular, collective work parties (*minga*) to which each household contributes at least one person to clear a field, build a house, level the football pitch, or whatever else it might be in common with other community members. *Mingas* are seen as signs of a still cohesive community and form part of the identity of many Andean and Amazonian peoples. Hospitality is also crucial, and several Napo Runa myths and legends tell of punishments for those who do not heed this special moral obligation (Goldáraz 2004).

Traditionally, the fundamental building block of Napo Runa society is the *ayllu* – the extended family. *Ayllu* does not necessarily convey a fixed social grouping. Rather, the notion is fluid, constantly shape-shifting as new ties are made through marriage and *compadrazgo* (god parent relations) and always dependent on performative acts of affectivity (Uzendoski 2005). *Ayllu* is applied widely to indicate a relationship of intimacy among people, usually but not always directly of kinship (Whitten 1976). Kinship is understood amongst Napo Runa not only as the sharing of a common substance (such as blood) between people but also a common trajectory that requires the sharing of material things and experiences (Uzendoski 2005).

Even today, the *yachak* ('the one who knows') occupies an important role in Napo Runa imagination and everyday community life. While they are predominantly male, I have been told that "many of the the best *yachaks*⁹⁰ are female", but such opinions vary widely⁹¹. The *yachak* is what anthropologists usually call a shaman. He or she is a powerful healer of illness, and protector of the *ayllu*. He or she can mediate between the spirit world and the world of human beings, an important skill to ensure balance and harmony in everyday life. A good *yachak*, for example, is said to ensure that the river is full of fish and when the rivers run low it might mean that no *yachak* lives nearby, or that he or she has lost her power⁹². The *yachak* is also a diviner, able to make predictions about the future, advise people during interpersonal conflicts or other hardships. He or she will also take on an important role in the counselling of young people, helping to shape them into ethical beings. However, nowadays, not all communities have a *yachak*. Especially in the more explicitly catholic or protestant communities, this role has usually been taken on, or is at least contested by the priests or pastors. Indeed, in some places *yachaks* are feared and have since the early days (mid-15th century) of the Spanish conquest been persecuted for "talking with the

⁹⁰ The correct (Kichwa) plural of *yachak* is *yachakuna*, but for simplicity's sake I here use the Anglicised version *yachaks*.

A curious perspective conveyed to me by Domingo, whose stories I present in Chapter 5, explains how a female *yachak* is by definition stronger than a male *yachak*: "Everyone has a companion spirit. A woman has a male companion spirit and a man has a female companion spirit, who guide them in the spirit world. Because a male spirit is stronger than a female spirit, a female *yachak* is spiritually stronger." Although it is a perspective that could attract some feminist criticism, the female *yachak* nevertheless is by definition, according to Domingo, stronger in spiritual terms.

⁹² In that way the cosmovision of the Napo Runa accounts for the decline of rivers and climatic changes – as melting glaciers, deforestation and the disappearance of *yachaks* go hand in hand – in a manner that, to the European observer, might seem to reverse cause and effect.

devil" – some argue that such demonisation occurred in order to divide and thus conquer local socio-cultural structures (e.g. Sharon 1972; Schultes 1998)⁹³.

The official communities in and through which Napo Runa have been settled since white people first appeared in the rainforest do not always overlap with the *ayllu*. The community, or associations of communities such as agricultural cooperatives, hence constitute a newer, yet no less important social grouping structuring Napo Runa society today (cf. Oberem 1980; Perreault 2002; Woerrle 2005). Communities today possess a president, a secretary and a treasurer who take on certain – often very informally defined – roles in a community for a couple of years at a time, as leadership rotates. This set up allows for the community to be incorporated as an indigenous organisation, then able to affiliate with other organisations into what is called 'second degree' organisations and then federations ('first degree'), and confederations. The 'organisational life' has influenced many Napo Runa, formed

⁹³ Salomon (1983) provides an account of "Shamanism and Politics in Late-Colonial Ecuador" which adds a degree of complexity to the relations between the colonial powers and shamanic culture that is beyond the scope of this thesis. He argues that when "... local crises became visible to them, state functionaries became aware that de facto power flowed through legally invisible channels. Within imperial belief systems, the effects were eminently interpretable as magical. By trying offending shaman-politicians for demonological, not political, crimes, colonial magistrates accredited shamanic powers as real and efficacious. But the effort to remove individual shamans was not efficacious in shoring up weak colonial institutions of native governance; the net effect was to reinforce shamanism as a technique for acquiring office" (1983: 414). As I was told by many of the people whom I met, the practice of vilifying natural healers and undermining their credibility continues to reverberate throughout the Amazon and the Andes especially in times of crisis. When the oil boom in the 1970s (see Section 1.8. below) was resisted by communities often led by yachaks, a new round of witch hunts began. The Association of Healers, ASHIN, about which I report more in Chapter 5 was founded as a response to this renewed demonisation.

their opinions and understandings and offers usually the most direct way to voice political grievances and collectively act upon them. However, I have repeatedly heard the complaint that the larger federations increasingly fail to address community-level problems and concerns as federations use up a growing amount of their funds for overheads, travels and events that many communities feel do not actually end up serving them.

But let me begin the Napo Runa story with the Conquest of the Amazon.

3.2 Conquest of the Upper Napo and 300 years of colonial domination.

After destroying and pillaging the Aztec Empire, Spanish explorers moved south, and soon discovered another great empire filled with gold. In 1531, an expedition led by Francisco Pizarro headed towards the Inca Empire, located mainly in present day Peru and Ecuador. The Inca emperor Huayna Capac and his successor had both died of smallpox before the Spanish even reached their territories. As a result, a succession dispute arose and Huayna Capac's two surviving sons, Atahuallpa and Huascar attempted to share power, an arrangement which soon dissolved into civil war, which was manipulated by Pizarro and the conquistadores to their benefit (Hemming 1970).

In 1534, the Spanish defeated the Inca leader Rumiñahui, conquering Quito. For about 300 years, Quito was the seat of the Royal Audience of Quito, an administrative unit of

the Spanish Empire⁹⁴. "Obsessed" (Hanbury-Tenison 2006: 105) with the idea of finding El Dorado and the Land of Cinnamon, the Spaniards led by Francisco Pizarro, embarked on several expeditions into the Amazon lowlands, which they entered from Quito via the Quijos region, the cloudforest region between the highlands and the Amazon rainforest. The Quijos Indians pushed back the first expedition, but could not defeat Gonzalo Pizarro, dispatched by his brother Francisco, who led an army of forcefully recruited highland Indians into the Oriente in 1541. Pizarro was followed by Francisco de Orellana who continued his journey until he discovered the Amazon River for Spanish America a year later. The town of *San Juan de los Dos Ríos de Tena* was founded by the Spaniards in 1560, and together with the towns of Baeza, Avila, and Archidona, formed the network for the colonial administration of what was then known as the Governorship of *Quijos*, *Sumaco y La Canela* (Means 1934; Reeve 1993; Newson 1996; G. De Angelis 2000; Manning 2000; Nishi 2000; Cleary 2001; Ingram 2002; Ramen 2004; Meltzer 2004; Hanbury-Tenison 2006).

Dominance over the Indian groups of the area was established through *encomiendas*, *repartos*, *doctrinas*, and *reducciones* (Muratorio 1991). The *encomiendas* were allocations of control over territory and Indian labour granted by the Spanish crown to Spaniards as rewards for their services. The *repartos* was a system of forced apportionment of goods to the Indians, usually cotton cloth, threads and needles, and other superfluous goods, which the Indians were then coerced to repay in gold or pita

The Royal Audience of Quito was established by Royal Decree on 29 August 1563 by Philip II of Spain (Law X of Title XV of Book II of the *Recopilación de Leyes de Indias*). It ended in 1822 with the incorporation of the area into the Republic of Gran Colombia, which had been established in 1819.

(a valuable agave fibre). Goods were at times literally dumped near someone's house, and the debt forcefully collected over time. In order to facilitate control of labour and Christian indoctrination by way of the missionary strategies called *doctrinas*, Indians were forced to live in *reducciones*, small village-like settlements, often around a central square or opening, which became the main vectors for the spread of disease and epidemics.

The conquistadores faced two major Indian uprisings in 1562 and 1578-79, which, compounded by smallpox and measles epidemics, as well as retreat into the more remote forest, led to a severe depopulation of the area. Ortegón (1973: 26) states that the total native population of Archidona numbered 2,376 in 1577. This population had dwindled to 237 by 1608 (Lemus 1965: 83). Estimates for the entire Governorship of Quijos indicate a decrease in the population from the original 30,000 in 1559 to 2,829 people in 1608 (Lemus 1965: 77-78)⁹⁵. Depopulation increased in the seventeenth century, and it cannot be denied that "the process of conquest and initial evangelization brought about an 'ethnocidal simplification' of the Amazon's rich ethnic variety" (Muratorio 1991: 42).

The Oriente has for centuries been a stage for conflictual encounters between colonial traders and administrators (*encomenderos*), missionaries, and Indians, representing respectively the three types of economy (extractive, agricultural, and hunting and swidden horticulture) that held sway in the region, and which conditioned local power relations and class conflict.

Figures cited in Muratorio 1991: 41.

"Until well into the twentieth century, the social and political history of the northern Oriente reflected the life of a frontier area, characterized by an extractive economy and a society of gold seekers and rubber tappers, of adventurers, soldiers of fortune, and missionaries protected by the weak presence of the state, which only intervened to foil the exploitation of the natives when the latter threatened the peace of civilian society or the church. The forms taken by social relations in this area must be understood, on the one hand, within the framework of these predominant power structures and processes, and on the other, within the particular conditions of the tropical forest ecology and the economic and social organization of the Napo Runa. Both enabled these Indians to escape oppression and to confront it under arrangements significantly different from those used by the highland Indians, who were faced with a landowning aristocracy and a more powerful presence of the state. In the Sierra as well as the Oriente, however, the class experience was lived as part of the ethnic conflict that subjected the Indians to conditions of cultural and social subordination" (Muratorio 1991: 3-4).

The Jesuits, who established an important mission in Archidona in the seventeenth century and exerted a certain amount of control over the area until the banishment of all Jesuits from the Americas in 1768⁹⁶, competed with the *encomenderos* and traders for Napo Runa labour.

"At the ideological level, the white traders shared the Jesuit conception of the Indians as 'lacking civilisation and discipline'. Unlike the highland

The Jesuits returned in the nineteenth century and established a mission that was to last another thirty years.

landowners, however, the traders did not require the church to ensure such qualities of civilization and discipline in an Indian labor force used mainly in a gold and pita extraction economy. In the Oriente, it was precisely the Napo Runa's 'savagery' and 'unfettered freedom' that allowed them to go deep into the forest to secure those products. The traders, cum authorities, resorted to the missionaries as 'educators and civilizers of the Indians' only when the latter rebelled against the traders' self-interests, and later when the economy of the region required a more settled and regular labor force" (Muratorio 1991: 88).

State-building, the integration of national territory, and in particular the enforcement of borders became a crucial and notoriously difficult project in the remote forest region when Ecuador became an independent Republic in 1830⁹⁷.

Throughout the nineteenth century, mirroring the trusteeship doctrine practised in European colonies worldwide and which characterised international law and jurisprudence at the time (see Chapter 2 above), the Jesuits busied themselves with civilising the unruly Napo Runa. They focussed their energy, often in the form of harsh corporeal punishment, on converting the hunting and gathering people of the Napo, whom they viewed as 'lazy and idle', into a European-style peasantry, settled, hard-working, and God-fearing (Muratorio 1991: 78-81).

⁹⁷ Ecuador and Peru fought three wars during the twentieth century all in part sparked off by border disputes that date back to the Republic of Gran Colombia. In the 1941 war, Ecuador lost a large part of its Amazonian territory. The 1981 war ended in a ceasefire, and the 1995 war led to peace negotiations and the signing of a definitive peace agreement in 1998, putting an end to one of the longest territorial disputes in the Western Hemisphere (St. John 1999).

"Assuming many of the responsibilities and rights associated with the modern state, the Catholic [and later] Protestant missions tried to create nucleated communities or families. By building churches, schools, and health facilities, the churches attempted to lure indigenous families to settle in these church-designated centers. Once families and communities settled in these areas, they developed an increasingly dependent relationship on these missions for resources and norms" (Yashar 2005: 118).

Throughout the colonial and post-colonial periods, indigenous resistance to exploitation remained widespread, taking such forms as flight, sabotage, theft (and other "weapons of the weak" (cf. Scott 1985)) and assassinations of patrons, and historical documents reveal a general fear amongst the white population of an Indian uprising (Muratorio 1991: 119-120).

3.3 Liberalism and the rubber boom.

Things seemed to change for indigenous peoples in the Amazon and elsewhere in Ecuador by the end of the nineteenth century when the liberal Eloy Alfaro came to power through military action and popular support in 1895. His administration aimed at modernisation and was closely allied to the coastal entrepreneurial class (Clark & Becker 2007). It broke with the ideological control of the church by proclaiming the separation between the church and the state and passing decrees aimed at depoliticising the clergy. The decrees also recognised the citizenship of Indians, entitling them to education and judicial protection, and the Special Law for the

Oriente of 1899 prohibited the *repartos* and other injustices, including some of the labour services to which indigenous people were subject on the highland haciendas. It has been suggested that these legal changes had the objective of creating a modern proletarian labour force to work on the coastal plantations (Baud 2007; Mora 1984; Schaefer 2009), initiatives later reflected in the work of the ILO as we saw in the end of Section 2.1. above. Alfaro's employment of radical indigenista rhetoric, however, provided "discursive instruments by which indigenous peasants could formulate their grievances and political struggles" (Baud 2007; 80). The indigenous struggle for land and freedom (especially in the highlands) was hence cast in the ideological framework of modernist nationalism (Schaefer 2009) in a period in which the trusteeship doctrine (see Section 2.1.) provided stability to emerging nation states in crisis: the freedom of the 'Indians' at that time was hence framed in terms of a quasi-citizenship that made it possible for them to enter into (highly exploitative) wage labour relations.

As foreign industrial demand for rubber grew, however, "[n]o amount of well-meaning liberal bureaucrats ... could put a stop to the greed and violence generated by the rubber boom, nor enforce the new legislation with a moderate degree of efficiency" (Muratorio 1991: 100). The production of rubber was vital to industrial growth in Europe and North America from 1822 onwards, and Amazonia remained its only source until 1911. The so-called 'rubber boom' (1880 – 1914) was actually rather the end phase of an almost century-long industry which increased output annually until it was truncated by the introduction of plantation rubber from South-East Asia (Nugent 2000; Dean 1987).

Industrial capitalism, then, penetrated the Amazon in the form of the rubber economy. By the 1890s, the Oriente economy was dictated by exports of rubber to New York via the Peruvian port of Iquitos on the Amazon River⁹⁸. Rubber stations of traders from a variety of nationalities sprung up on Ecuadorian soil, dealing increasingly with British trading companies operating from Iquitos. Amazonian rubber merchants employed whichever strategy necessary to achieve access to and control over the needed Indian labour force, including debt peonage, torture and slavery, as is documented in numerous sources from that period (Hardenburg 1912; Casement 1912)⁹⁹. It was during this time that the economic and political integration of the inaccessible Oriente region became particularly crucial for the national government of Ecuador, primarily in order to prevent the encroachment onto its territory by Peru. The Liberal administration under Alfaro tried to accomplish this by encouraging private enterprise, and by facilitating the extraction of the economically most significant resources of the time (rubber, gold, cinchona bark¹⁰⁰, and tagua¹⁰¹), but it remained impossible to impose a degree of bureaucratic order on the economic chaos of the rubber boom years. In particular this was due to confrontations over rubber and mining concessions in the border areas with Peru, exacerbated by clashes of the military trying to settle the border disputes (Muratorio 1991: 101).

⁹⁸ See archival document from the Archivo de la Gobernación de Napo (AGN), 10 February 1892, cited in Muratorio 1991: 100.

⁹⁹ See also AGN documents from 1880s-early 1900s, cited in Muratorio 1991: 100.

Bark from the quinine containing tree, *chinchona officinalis*, the wonder remedy against malaria, named after the Countess of Chinchon who is said to have been cured with its help from a fever attack in 1638.

Tagua is also callled 'ivory nut' or 'plant ivory' and is still sought out for its ornamental qualities.

Given the total lack of infrastructure, resources and personnel required to appropriately govern Ecuador's frontiers, the state missed out on any fiscal benefits of the export of its natural resources. Rubber and human beings were smuggled into Peru, resulting in increased depopulation as well as the loss of fiscal revenue for the Ecuadorian Treasury. Due to its weak presence in frontier areas, the government also lost tax income for imports of necessities for rubber traders into the Oriente. Public institutions were in chaos all over the Oriente due to the nonexistence of bureaucratic infrastructure and the erratic character of communication networks (mail took several months to reach remote parishes from Quito). Military detachments tasked with the defence of national sovereignty usually spent long periods without medicines, food supplies, or ammunition (Bravo 1920). What is more, because the exploitation of rubber was managed unsustainably, depleting the resource by destroying the trees in order to extract the latex more quickly, it led to continuous migration (forced and voluntary) in search of new trees, making it impossible to maintain, let alone increase, the populated centres so urgently needed for administrative control and continuity (Muratorio 1991: 105). As a result of these particular dynamics and circumstances, the rubber boom in the Oriente enriched only a small group of national and foreign rubber barons¹⁰².

The access to and control of Indian labour in the Ecuadorian Amazon did not require the same amount of systematic terror as was the case in relation to the Huitotos in the

By contrast, the cacao boom at the coast created a powerful national bourgeoisie, generating much more wealth for the government (Muratorio 1991: 106).

Putumayo (Colombia) described in Taussig's well-known studies (1984; 1987), as many Ecuadorian Indian groups had been accustomed to debt-peonage for generations (I discuss debt-peonage below). Nonetheless, abuses and violence were widespread, as were raids to enslave or punish. In the Tena and Archidona cantons, Napo Runa were, ironically, 'protected' from the more violent abuses and displacements of the rubber boom through the exploitation of their labour for the local governmental administration and the missions, whose connection to Quito was stronger due to the relative accessibility of the area compared to other areas of the Oriente at the time. This form of 'protection', however, was violent in a different way.

"Despite the enormous administrative difficulties to regulate and legislate an almost unmanageable economic situation in the Oriente region, the Liberal government tried – as the Jesuits had before – to settle and retain the native labor force... an effort [was made] to rationalize trade, to regulate labor relations, and to discipline indigenous labor through secular education" (Muratorio 1991: 112).

"Forced boarding" was recommended as the "only system" that will "civilise" the Indians by Carlos A. Rivadeneyra, the political chief of the Napo canton in his annual report of 1909. Under this system, Indian children were obliged to remain in a boarding school "until they have become civilized and acquired a trade and a rational knowledge of agriculture, and until they have forgotten the vices and superstitions that prevent the improvement of their race" (Rivadeneyra 1909, cited in Muratorio 1991: 113).

103 Muratorio (1991) provides detailed historical evidence for this claim (especially pp. 99-121).

Despite all this, evidence shows that the Napo Runa of the Tena-Archidona area "were quite aware of the change in political climate brought about by the Liberal administration, and that ... they took advantage of the 'new sympathy' expressed by Eloy Alfaro's government for the Indian cause" (Muratorio 1991: 118). They increasingly presented their grievances to the authorities and insisted on being paid in advance to the point that local officials, dependent on Indian labour for the discharging of their administrative duties, had to urge the Ministry of the Oriente to speed up the delivery of money and cotton cloth.

Radical Liberalism ended with Eloy Alfaro's assassination in 1912, after which the less anti-clerical governments that followed re-established collaboration with the missionaries with the aim of integrating the Oriente more fully into the economic and political life of the nation state (Clark & Becker 2007).

3.4 Early colonisation and the Josephine Mission in Tena.

From 1894, under article 5 of the Law of the Oriente, 'fallow' or 'vacant' land – lands not already occupied by Indians – could be adjudicated to agricultural settlers. A lot of land that had been in use by indigenous families for centuries was soon adjudicated to European colonists in this way. After all, once the Amazonian rubber boom was over, ¹⁰⁴ the traders and rubber patrons had to ensure their subsistence by other means. Many

Natural rubber is still indispensable for certain industrial production, and continues to occupy one third of the world market today (Dean 1987).

returned, with their peons, to the Tena-Archidona area to settle there on a more permanent basis due to its pleasant climate. "Thus, this period marks the beginning of the haciendas in this region and the colonising settlers' involvement in cattle raising and commercial farming on a more regular basis" (Muratorio 1991: 142). The white settlers encroaching on Indian ancestral lands cultivated cash crops, such as cotton, coffee, rice, and sugar cane for liquor.

A governmental decree from 1921 enabled foreign private companies to start official settlements (*colonias*) in the Oriente, which led to such situations as the following described by Muratorio (1991: 143): "In 1926 ... the Colonia Oriental Development Company awarded thousands of hectares to one patron for the settlement of fifty colonists. Actually, the patron settled his own Indian peons from Archidona, Tena and Puerto Napo there, passing them off as colonists in order to gain access to the land and convert the colony into a hacienda. Soon after, he became a manager of that same company, which expanded to include a three-hacienda complex, all with 'debtor peons'". The enclosures, we may say, had come to the Amazon, revealing its near-universal contours. ¹⁰⁵

E.P. Thompson has systematically revealed the contours of enclosure in eighteenth century England and thus the origins and character of capitalist democracy: "For example, in the enclosure of Barton-on-Humber, where attention *was paid* to common rights, we find that out of nearly 6,000 acres, 63% (3,733 acres) was divided between three people, while fifty-one people were awarded between one and three acres: or, broken down another way, ten owners accounted for 81% of the land enclosed, while the remaining 19% was divided between 116 people. The average rental value of the arable land enclosed rose in five years (1794-9) from 6s. 6d. To 20s. an acre; and average rentals in the parish were more than trebled" (Thompson 1966: 217; emphasis added).

In 1922, the Josephine mission accepted the role of administering an Apostolic Vicariate and entered the upper Napo on the trail that the Leonard Exploration Company, a subsidiary of Standard Oil, had blazed after having gained a concession from the Ecuadorian government to explore part of the Oriente in search of oil. While Leonard's geologists left with inconclusive results, the relationship between the missions and the oil companies remained one of mutual convenience and collaboration ever since (Spiller 1974). The Josephines' apostolic jurisdiction encompassed initially 70,000 square kilometres. Their evangelizing ideology aimed at an economic integration of the indigenous *individual* into national development through *productive labour*. They prepared the labour force needed to transform the regional economy by establishing schools and colleges in which Indian children were — and still are to this day — trained in mechanics, carpentry, and other crafts, emphasising such values as individualism, competition and entrepreneurship, alongside the more obvious religious subordination (ibid.).

"[T]he Josephines actively promoted non-Indian colonization and, with the support and blessing of the state, they became the bastion of nationalism and the defenders of the national frontiers in the Oriente" (Muratorio 1991: 163).

Moreover, they systematically promoted progress and technological development, pushing for communication infrastructures to be established to facilitate exploitation of the economically valuable resources of the rainforest, such as timber, minerals and petroleum (Spiller 1974: 96).

The Josephine mission was soon to compete with the Evangelical missions that arrived in the Tena-Archidona area in the late 1920s, but while the latter began to question their evangelization ideology and development practices with regard to the indigenous Amazonian peoples, reverting their schools to the state and their churches to Indian pastors, the Josephines have continued their nineteenth-century ways until this very day. I witnessed myself how the mission had an extra wall built to curtail a traditional right of way in 2007, forcing their Runa neighbours to walk a detour of about a mile from Tena town centre to their homes for no apparent reason other than to limit Runa presence near the entrance to the mission. I was told by many of the people whom I met in Tena of Josephine usurpation of their ancestral lands and the severe physical and mental abuses of children who entered Josephine schools.

3.5 Debt-Peonage.

As a result of the Liberal legislation, the *repartos* and forced labour were replaced by what Eric Wolf calls the mode of production of "commodity peonage": "surplus was not extracted as surplus value but through unequal exchange within the framework of monopolistic and quasi-tributary relations" (1982: 86-87). This was based on the exchange of goods highly valued on the national and international markets for goods of highly inflated price that were of value only to the Indians.

Indians were divided into "debtors" (indebted to a patron), "freemen" (under authority of the European authorities through the *varas* system, made to work on any job required by the government), and "*salvajizados*" (those who had returned to

savageness by eluding control of both patrons and authorities, feared for their readiness to kill). Because the Liberal legislation replaced the forced *repartos* of goods, and instituted cash payments for labour employed, the 'freemen' lost their direct access to such things as salt, tools and cotton cloth to which they had became habituated and which they now considered indispensable for their lives. This meant that many of the 'free Indians' became indebted to patrons nonetheless, as a means to pay for the (overpriced) commodities they felt they required. This situation led to fierce competition between the white patrons and the governmental authorities over access to and control of Indian labour. Patrons opposed the *varas* system of native authorities, and government officials would threaten patrons (and more directly their peons) with use of legal and military force whenever necessary. While the local administrators offered advance cash payments, patrons lured Indians with their trade goods and liquor. This competition lasted until better roads started to alleviate the need for native mail and cargo bearers in the 1940s (Muratorio 1991: 146-148).

Blanca Muratorio emphasises that Napo Runa mostly got into debt voluntarily, as a means to access those commodities (salt, machetes, cotton cloth, shotguns, beads, axes) that had over time become understood as essential to their subsistence and culture. While the tools made their working lives, hunting and horticulture easier, salt and cotton cloth had become a matter of habit, status and religion – and had been adopted as important signifiers of their identity, distinguishing them from the aucas (or more "primitive" forest dwellers) (1991: 151). Ceremonial occasions, such as marriage, required great expenditure on such goods, too (see also Uzendoski 2005).

Nominal wages, not more than a mere formality, and massive trading price differentials explain why debtors could never pay off their debts. A colonising family in Tena is said to have been able to build an entire house, with five rooms and two storeys, for about 200 sucres in the 1920s, whereas an Indian would be charged 220 sucres for a shotgun (Dickey 1924: 598-599).

3.6 Gold, early oil and wage labour.

While the Great Depression had a serious impact on the Ecuadorian economy, it also increased the commercial price of gold, provoking a gold rush in the Oriente. Everybody turned to panning gold, and competition over Indian labour rose once more, while agriculture was virtually abandoned, leading to food shortages in some areas (Uquillas 1984). During World War II, demand for rubber briefly increased, and many Indians tapped rubber again during the five years from 1940-1945 (Muratorio 1991).

This era also witnessed a rise in more overt forms of resistance from the Napo Runa, flight and refusal to work being the most frequent ones. As a patron explained his concern over these "acts of rebellion" to a political officer: "The Indians must be kept continuously indebted and they should never be raised above their own level, otherwise, the day may come when they will rise against the white man" 106. A female

Letter from political chief to commander of the 4th Department, AGN document 31 January 1938, cited in Muratorio 1991: 161-162. See also Porras (1979) for further documentation of the extremely condescending view colonisers had of 'the Indians', which, as I repeatedly

patron wrote to the governor in the same period: "You must see to it that the Indians are fearful and obey what they are ordered to do... I don't know where all this will lead to! The day they disobeyed me I would have smashed their jaws, but I have decided to appeal to the authorities instead, for otherwise I will be left with no personnel..." ¹⁰⁷.

In 1937, Ecuador under the dictator Federico Páez, transferred the oil concession previously granted to Leonard Exploration to Anglo-Saxon Petroleum, a "fictitious front" of Royal Dutch Shell, granting exclusive rights of oil exploration and exploitation for forty years over an area extending to 10,000,000 hectares in the Oriente (Martz 1987: 48). Shell immediately built a landing strip, set up several camps, drilled several wells, brought technicians from England, North America, Holland and Switzerland to the area, and set up a police force. The government sent the military as support to the Shell camps in order to better safeguard this important national resource (Martz 1987; see also Tschopp 1953).

Relations between Runa and 'the Company' changed relations between Runa and 'white' settlers (*blancos*) more widely. Indians working in the oil camps had much better labour conditions than those still working for patrons. Food, housing, transportation, and cash-in-hand wages paid directly to each worker, as well as a generally more egalitarian treatment due to the high presence of Protestant

experienced, continues to this day: "They are lazy" – "They are no good" were common comments even among Tena residents who described themselves as socialists or environmentalists

¹⁰⁷ Letter from Doña Juana Arteaga to governor of Napo AGN document 4 October 1941, cited in Muratorio 1991: 162.

missionaries¹⁰⁸ in the camps meant that some were able to experience a certain amount of freedom as part of their time working for 'the Company' (*la Compañía*).

Blomberg (1956: 151) cites the complaint of a veteran white settler:

"Things are going to hell with these new methods ... I don't know what's spoiled the Indians more, if Shell or the Protestant missionaries. Shell with its high salaries, eight-hour working days, and all that foolishness, and the missionaries with their damn flattening ways. We're no longer the ones who dominate the Indians, they dominate us. Insolent and disrespectful, that's what they've become".

The Napo Runa and other Indian groups worked for Shell as guides, supplying forest game, clearing the forest, opening up trails, building landing strips, and carrying heavy equipment. Some had direct contracts with the company, others were hired out under a contract that their patron had with the company, remaining locked into debt-peonage. Others, previously free, were lured into debt by the goods that patrons brought to the oil camps.

Indian proletarisation was seen at the time by the more liberal state officials as the solution to the 'Indian problem' and its debt-servitude and bonded labour, and there were hopes that Shell would employ workers on a permanent basis. Yet a report of

¹⁰⁸ Protestant missionaries preached and acted upon their conviction of the egalitarian 'brotherhood of Christ' (Muratorio 1991: 167).

1945 by the governor of Napo-Pastaza to the Special Commission on the Oriente of the Constitutional Assembly reads:

"At Shell I encountered a serious problem: all the patrons who claim to be owners of Indians, have turned to the comfortable occupation of renting out the Indians to Shell as if they were beasts of burden. They charge five sucres for each Indian recruit and on top, they get a daily wage as a foreman. As a result, agriculture is abandoned and these white bosses are given to idleness and to the most vicious exploitation of the Indians. I believe that the Assembly should intervene decisively, order a general settlement of the Indians' accounts and seek a way to set the Indians free. There is no room for slavery in our times" 109.

Even though Shell never offered any permanent positions, the experience of wage labour with the oil company familiarised many Indians with a free-market economy, enabling them to sell their labour in other areas of the country. Unsurprisingly it was during the time of Shell that Napo Runa started to consider each other as either 'rich' or 'poor', and that certain class distinctions began to arise amongst the Runa communities themselves.

Inferring from the extensive interviews recorded in Muratorio (1991), Napo Runa felt that "they 'sold' their *strength* to carry loads, their deep *knowledge* of the forest, their hunting and fishing skills, their courage to travel through Huaorani lands, ... their cunning and talent in detecting Huaorani tactics, in order to avoid confrontation"

AGN document 22 January 1945, cited in Muratorio 1991: 168. 109

(Muratorio 1991: 170, emphasis in original). Selling these attributes, they of course also used and thereby honed them, and this strengthened positive aspects of Napo Runa identity and self-esteem. There is a clear parallel here with the issue of 'selling' traditional knowledge as part of bioprospecting projects that I will be picking up again in due course.

In the same time period, education crystallised, for the younger generation, as one of the best ways out of the oppressive debt system ruled by patrons.

"Even if eventually the elders turned out to be right in their assessment of missionary education as the course of acculturation, at that early stage the younger Indians were faced with few alternatives. Either they continued to suffer under the traditional patron system, or they sought independence through the opportunities offered by the mission schools, despite all their limitations" (Muratorio 1991: 172).

At the national level, a stronger awareness of Indian rights formed at this time, too. However, the need to colonise the frontiers in the Oriente became painfully clear after the 1941 war with Peru,¹¹⁰ and the 'pioneer colonist' was glorified nationally as performing a patriotic mission and deserving encouragement and support. But since such support at bottom consisted of the provision of cheap Indian labour, the

Beyond the scope of this thesis, nevertheless suggestive of the power of petroleum companies in the region, Martz (1987: 49) notes that the border conflict between Peru and Ecuador in 1941 was a proxy war between International Petroleum Company, a subsidiary of the Rockefeller-owned Standard Oil, who controlled oil reserves in Northern Peru, and Royal Dutch Shell with its interests in Ecuador.

administration found itself in a conflict with its parallel goal to liberate the Indian from the abuses of the patron system. The 'solution' to this conflict came when increasing numbers of highland merchants settled in the Tena area upon completion of the motor road. The new traders broke up the monopoly on manufactured goods traditionally held by the patrons. As a result, the latter lost their most effective means of controlling Indian labour, and had to resort to paying in cash. However, the improved road network, land shortages in the highlands compounded by droughts in different parts of the country, and the 1964 and 1973 Agrarian Reform Laws, as well as the 1977 Law of Colonisation of the Amazon Region led to mass colonisation of the Oriente and continuous conflicts over access to land. Forested land was declared 'fallow' and opened up to appropriation by those willing to clear, farm and/or graze the rainforest. Both previously landless small farmers and agriculturalists, as well as wealthy landowners and cattle ranchers claimed, logged and worked untitled lands, displacing indigenous peoples ever more from their traditional hunting and gathering territories.

Colonisation was rapid and extensive – Yashar (2005: 113) cites that 2,500,000 hectares were distributed to 55,000 families between 1964 and 1985 – and politicised the affected indigenous people. During this time, the population of the Napo province is said to have quadrupled from 25,582 (in 1962) to 115,118 inhabitants (in 1982) (CONAIE 1989; Yashar 2005). The town of Tena grew from 1,029 inhabitants in 1962 to 5,457 inhabitants in 1982, and is now said to have 15,661 inhabitants ¹¹¹. This

¹¹¹ The first two figures are taken from census reports from *Instituto Nacional de Estadistica y Censos*. The figure for today is taken directly from the municipal government of Tena, and is said to be up to date in 2010.

colonisation in conjunction with the establishment of a functioning communications infrastructure, an increased military presence, and the support of foreign and domestic capital led to an explosion of industrial-scale exploitation of not only oil, but timber, mining resources, and African palm (*Elaeis guineensis*) plantations (for palm oil and more recently for biofuels), and concomitantly, irreversible deforestation and pollution. Moreover, even though the new merchant bourgeoisie and the traditional patrons competed initially, they formed close alliances in politics, and came to share an ideology of white superiority (while many traders are of Indian origin themselves, it needs to be remembered that whiteness is predominantly a social and not racial category, e.g. Whitten 1976).

While many Napo Runa continue to temporarily hire themselves out to 'the Company' — whichever particular one it may be at any given time or place (cf. Muratorio 1991: 179) — most have resisted complete proletarisation, maintaining subsistence horticulture despite the radical reduction of land available to them. Today, most indigenous families also engage in small scale agricultural production and livestock raising, as well as independent gold panning for the market. Universal access to primary and secondary education has enabled some to become teachers and to be employed in the public administration. Let me briefly illustrate the contemporary context for indigenous economic activities with an anecdote. Isabella, the wife of a *yachak* with whom I worked closely, regularly traveled about 7 miles to Tena town centre to sell *yuca* (cassava root) and other produce. One day, I met Isabella as she was making her way home. She smiled: "All *yuca* gone now, but a very long day", and I replied, naïvely, that at least she had some cash now. She smiled again in this

knowing way that always confirms that you are indeed the ignorant, if welcome and friendly outsider: "No", she said with a sparkle in her eye, "but I have a little salt, some soap and just enough to catch the bus home". By the time Isabella returned to her home, she had spent more than ten hours to sell *yuca* that she had grown in her garden. The result, apart from an excursion to the urban scenery, was a little bag of salt and a soap bar. By the time I left Tena in 2008, a gentrification programme was cleaning up the town, replacing the chaotic, plastic-sheet-covered market with a flash new building. All stalls now had to pay a prohibitively expensive fee and all *ad hoc* stalls around the market, along the road past the bus station, and all the way into the centre of town, would be prohibited. Soon Isabella would no longer be able to sell her yucca for money to buy salt and soap without a license which she cannot afford, let alone even apply for without help, for Isabella cannot read and write. This well sums up the political economy of life at the frontiers of capitalism for the subaltern.

However, Runa families also still engage in traditional practices of hunting and fishing whenever they can gain access to areas in which this is still possible, and continue to practise *purina*, the long distance walking to *tambus* (secondary plots with shelters and gardens deeper in the forest).

So far, the incentives of the modern state have failed to achieve what had already previously been attempted with force and the persuasive strategies of the missionaries: to settle the indigenous Amazonians as peasants (Muratorio 1991: 180). While subsistence relations are increasingly threatened, 'the savage Indian' has not been fully integrated into the civilized cash economy. This is arguably in great part so

because indigenous peoples have organised in order to protect their livelihoods, values and knowledge systems. I now turn to a brief history of the rise of indigenous organisations in Ecuador.

3.7 The Rise of Indigenous Peoples' Organisations.

The first rural union in Ecuador was arguably the *Federación Ecuatoriana de Indios* (the Ecuadorian Federation of Indians, FEI), an essentially Marxist organisation tied to the Communist Party which sought to awaken a class consciousness amongst indigenous highland peasants as semi-proletarianised rural workers from the mid 1940s. While it was instrumental in creating important links between communities and thus facilitating exchange and building solidarity, FEI declined in importance following the first land reform, titled the Land Reform, Idle Lands, and Settlement Act, enacted in 1964 (Yashar 2005; CONAIE 1989).

The Catholic Church promoted the Federación Nacional de Organizaciones Campesinas¹¹² (National Federation of Peasant Organizations, FENOC) as an alternative to the Leftist FEI in the 1960s. The post-Vatican II Catholic Church also had an important impact on the networking possibilities between rural communities, taking up the role of mediator and replacing the work of the Communist Party and FEI

¹¹² FENOC was institutionally tied to the Confederación Ecuatoriana de Obreros Católicos (Ecudorian Confederation of Catholic Workers, CEDOC) which was later renamed Central Ecuatoriana de Organizaciones Clasistas (Ecuadorian Centre for Class-based Organizations, CEDOC) when both organisations stepped away from their Catholic roots to embrace a more explicitly class-based agenda.

by, for example, funding rural capacity-building through such organisations as the Fondo Ecuatoriano Popularum Progressio (Ecuadorian Fund for Popular Progress, FEPP) (CONAIE 1989; Yashar 2005). Yashar confirms:

"In most interviews with indigenous leaders, the church was described as a kind of catalyst for them – either because a progressive priest encouraged them and supported them in educational pursuits; or because churches organized schools where they developed skills and contacts" (2005: 104).

Radio programs developed by the church, such as the Escuelas Radiofónicas of the 1960s, which taught basic literacy in Spanish and Kichwa, mathematics, agricultural techniques, health and hygiene, and which were broadcast over large areas, also had the effect of raising awareness amongst rural indigenous communities about shared conditions, promoting rural organising — as a probably rather unintended side effect (Preston 1985; Yashar 2005).

In the Amazon, the mass colonisation of the 1960s and 1970s politicised indigenous communities. This was reinforced by the implementation of state security measures as part of Ecuador's membership in OPEC (1973-1992) which included the appointment of state officers — administrators, police, military and judges — to the Oriente, encroaching not only on their territories, but also on the traditional ways of decision-making of indigenous communities (Sawyer 2004). Accordingly, "[i]ndigenous organizations emerged to combat what was seen as predatory and environmentally destructive land-grabbing" (Yashar 2005: 116). Collective land titling and representation vis-a-vis the state required indigenous groups to incorporate legally as

associations, *comunas*, cooperatives or centres, and hence it was through these statedefined categories that indigenous organisations began to define their collective identities and push for the recognition of communal lands.

The Shuar, until then a semi-nomadic tribe of hunters and horticulturalists (Harner 1984), were the first to organise along explicitly indigenous lines — both in the Amazon and in Latin America as a whole (Salazar 1981). With the help of Salesian missionaries who had entered their territories in 1894, the Shuar formed a series of nucleated centres, connected these via radio, set up small schools and clinics, founded the Fedéración de Centros Shuar (in 1964), and used the new colonisation laws to secure collective land titles (there is disagreement over whether it was the missionaries who pushed for the titling of collective lands or the Shuar Federation itself) (Yashar 2005: 119-120).

"The act of defending... transformed the political, social, and economic organisation of the Shuar. The titling of land and formation of centers presumed a more settled and nucleated social life. Cattle grazing changed the economy from one that had primarily focused on horticulture and fishing. And, the Shuar became increasingly dependent on the organization to provide social, economic and political services" (Yashar 2005: 120-121, citing Hendricks 1996).

In the Andes, ECUARUNARI (*Ecuador Runacunapac Riccharimui*: Kichwa for 'the awakening of the Indians of Ecuador') was founded in 1972. The first communities that organised themselves and then joined ECUARUNARI were parishes with

progressive priests, taking over the role of prime rural organiser from FEI and its connections to the Communist Party (CONAIE 1989; Yashar 2005). Over time, however, indigenous leaders from the Andes as well as the Amazon insisted on the need for greater autonomy from the church, and began a process of independent identity formation, alternating emphases between the dual goals of ethnic and class-based empowerment.

"Despite its almost exclusively campesinista rhetoric, after 1977 ECUARUNARI was actually conducting a dual strategy: to the left and popular sectors, the organization was the voice of the highland peasant, whereas with lowland organizations and state actors, organization activists were negotiating positions as Indians" (Pallares 1997: 252-253, quoted in Yashar 2005: 108).

In Napo, the Josephine missionaries supported the establishment of a peasant union in the late 1950s, amongst other things with a view to legalise landholdings, and hence also settle the Napo Runa more 'properly' (CONAIE 1989; Yashar 2005). Although these early efforts did not result in a lasting organisation, a decade later a group of indigenous teachers, all of whom had been educated by either Josephines or evangelical missionaries, founded the *Federación Provincial de Organizaciones Campesinas de Napo* (Provincial Federation of Peasant Organizations of Napo, FEPOCAN) (Yashar 2005; Perreault 2001). I focus in the rest of this section on the history of FEPOCAN, not only in order to illustrate the rise of the indigenous movement *qua* indigenous movement (rather than as a peasant movement without ethnic emphasis), but also because FEPOCAN later became FONAKIN, the federation

of Kichwa organisations of the Napo region with whom I worked during my field research, and who will feature more prominently again in Chapters 4 and 5 as the indigenous counterpart of the bioprospecting project ProBenefit.

Despite its name implying an institutional reach covering the whole of the province, FEPOCAN's original membership comprised only a small number of communities in the Tena area. While these were all indigenous communities, the federation was explicitly class-based rather than ethnically based in its orientation, and it was supported financially by the national peasant federation FENOC and the confederation of class-based organisations CEDOC (Perreault 2001). Despite the benefits that the new indigenous leaders had received through the training and education of the missions, they remained highly critical of the latter, due to the missions' proselytising, their appropriation of large tracts of lands, and insistence on the Indians' submission. ¹¹³ FEPOCAN's early work focused on organising base communities ¹¹⁴ in the Tena-Archidona area, and on building a political voice for the indigenous inhabitants of the region vis-a-vis the state in its local and national guises. The federation served as a legal and political advocate for its base communities by redressing civil rights violations and insisting on full citizenship rights for indigenous people. Class-based and ethnic discourse were used by FEPOCAN in equal measures during the early 1970s, as it referred "to itself and its constituency as the 'indigenous class', demanding respect for [Kichwa] language and cultural traditions while at the same

Enlightening in this context are the interviews with indigenous leaders replicated in Yashar 2005: 122-123.

An indigenous federation's *base communities* are the community organisations which make up the federation.

time advocating economic and political modernization along vaguely Marxist lines" (Perreault 2001: 389).

As it became clear that the concerns of its constituent members were in many ways inimical to the interests of peasant colonists, the federation changed its name to Federación de Organizaciones Indígenas de Napo (Federation of Indigenous Organisations of Napo, FOIN) in 1973, 115 as a way to identify itself as an explicitly ethnically based organisation and to emphasise the problems that were unique to indigenous communities in the area. But while the federation actively sought to represent expressly indigenous interests, it never ceased to voice solidarity with working-class struggles and maintained its close relationship with FENOC and CEDOC throughout the 1970s. Due to the particular concerns of the Indian communities regarding colonist encroachments of their ancestral lands, the legalisation of land claims became one of FEPOCAN's primary objectives, as it was for the majority of emerging indigenous organisations in Latin America. In this way, the federation worked with the governmental Instituto Ecuatoriano de Reforma Agraria y Colonización (Ecuadorian Institute for Agrarian Reform and Colonization, IERAC), throughout the 1970s and into the 1990s. FEPOCAN also received assistance from the Catholic-church-aligned NGO FEPP, whose country-wide work focussed in particular on the legalisation of title to indigenous communal lands, foregrounding the needs of entire communities over those of individuals. Moreover, the federation received considerable development aid for agricultural, health, and training projects from its inception. These projects were mostly designed to propel

¹¹⁵ The name change was formally instituted only in 1978.

agricultural modernisation and included assistance for cattle production and the marketing of non-traditional crops such as coffee. This was of course in line with the wider emphasis of the military government at the time (1972-1979) on modernisation and development of the Oriente as a means to national integration and progress, which is similar to the emphasis of current Ecuadorian government of Rafael Correa, to which I turn in Section 3.10. below. Perreault (2001: 391) quotes a 1974 letter to the ministry of agriculture which optimistically discusses a proposed development project involving FOIN, describing how the project will "accelerate the process of transformation of the virgin jungle into cultured lands, orderly reforested with selected species".

During the latter half of the 1980s, the orientation of the federation shifted in response to new social and political openings, including a growing discourse of ethnic revalorisation in the country from which emerged and which in turn was strengthened by, new regional and national indigenous organisations, such as the the *Confederación de Nacionalidades Indígenas de la Amazonía Ecuatoriana* (Confederation of Indigenous Nationalities of the Ecuadorian Amazon, CONFENIAE), and the *Confederación de Nacionalidades Indígenas del Ecuador* (Confederation of Indigenous Nationalities of Ecuador, CONAIE), today one of the most influential indigenous organisations of any Latin American country (Perreault 2001). This shift coincided with the environment generally and the predicament of rainforests and indigenous peoples in particular gaining increasing popular attention in other countries, particularly in the industrialised West, and an increased focus on these concerns by national and international NGOs and funding agencies. Indigenous

organisations in Ecuador have always been dependent on outside funds, or what Alison Brysk calls "foreign aid as a counterweight" (2000: 120). The Danish NGO IBIS, for example, provided \$1 million dollars in such counterweight to CONAIE for bilingual education programs, as well as \$35,000 annually for its operating budget (Brysk 2000: 121). Indigenous organisations in the Amazon Basin, triggering suitable imagery of the ecological rainforest Indian under threat, rapidly "became the foci of development interventions on the part of international organizations such as Cultural Survival and the World Wildlife Fund, as well as national organizations such as Fundación Natura" (Perreault 2001: 392). The shift also coincided with the worldwide rise in neoliberal restructuring. The new civilian administrations of the 1980s replaced the corporatist regime, its institutions and redistributive policies, with a neoliberal one. The whole of Latin America saw a decline in state services in the 1980s and 1990s with soaring debts and structural adjustment programmes, as well as a rise in state repression to subdue resistance and protest. Agricultural prices declined severely and the crisis brutally hit indigenous peasants of the highlands in particular (Yashar 2005). Draconian government measures of the Conservative administration of Léon Febres Cordero (1984-1988) "sought to eliminate stimulus programs, abolish protection and subsidies, reduce price controls, promote exports, open up the economy to the international market reduce public spending, devalue the currency, and foster increases in interest rates" (Zamosc 1994: 51) and had market-oriented peasants "[c] aught in the crunch of inflationary increases in the price of all basic necessities, reduced opportunities for obtaining credit, exorbitant interest rates, and contraction of state supports and services" (Ibid. 52).

"With the neoliberal reforms of the 1980s, the need to defend and legalize access to lands became all the more compelling. And those Andean leaders... who had initially seen land as a largely productive material resource were convinced by their peers [from the Amazon] that land was also a cultural and political basis for indigenous survival... Land reforms have come to represent, therefore, a defense of the very space in which indigenous people define and govern themselves" (Yashar 2005: 139-140).

Neoliberalisation, while suppressing and curtailing possibilities for more explicitly class-based politics of redistribution, opened new political spaces for a politics of ethnicity. The shift towards a discourse of ethnic emphasis amongst the indigenous federations is reflected in their reworked demands with regard to education, land and collective rights for indigenous peoples. In this way, the federation's insistence on bilingual education shifted from one that was based on demands for access to educational opportunities equal to that of the dominant mestizo majority, to one of the revalorisation of Runa culture (Perreault 2001). This must have been at least in part due to the increased availability of Spanish state education, which compounded with the growing experiences of pervasive racism that the colonisation of the Oriente brought into Kichwa communities, meant that fewer and fewer Runa children were learning Kichwa as a first language. Moreover, the federation started to place an emphasis on territorial rights over and above rights to land as a base for subsistence. In the notion of territory, land as a productive resource and as a source of identity, governance and the future were combined. Rights to territory comprised collective claims to social and political self-determination over more extensive tracts of land, and were foregrounded especially during a dispute between the Huaorani people of the Cononaco region, south-east of Tena, and foreign oil companies who had entered their ancestral lands. A Catholic bishop and nun were speared to death when they attempted to make contact with a group of Huaroani in order to solve the conflict peacefully. Following this widely publicised event, CONFENIAE mounted a campaign in defence of Huaorani territorial rights (CONFENIAE 1988; Perreault 2001). 116

The concept of ethnic nationalities also emerged during the 1980s. However, it gained particular salience with the emergence of the Pachakutik movement, the political arm of CONAIE, in 1996, and the latter's involvement in the 1997-1998 Constitutional Assembly that rewrote Ecuador's constitution to include, amongst other things, extensive collective rights for indigenous communities. One of Pachakutik's primary demands continues to be the recognition of Ecuador as a plurinational state, granting territorial rights and a degree of political autonomy to each of its ethnic nationalities, and while Pachakutik did not succeed to introduce the concept of *plurinacionalidad* into the language of the constitution, it nonetheless placed it firmly into the national debate (Perreault 2001; Zamosc 2004). In line with this new regional and national discourse of *plurinacionalidad*, FOIN changed its name to the *Federación de Organizaciones de la Nacionalidad Kichwa de Napo* (Federation of Organizations of the Kichwa Nationality of Napo, FONAKIN), reflecting and strengthening its shift of

Granting legal land titles to entire indigenous peoples (i.e. rights to territory) began systematically only in 1990s. Moreover, even when territorial claims are legalised, ownership of subsoil resources remains with the state. Collective legal titles typically provide that indigenous peoples may not "impede" or "obstruct" oil development or mining operations in their lands (see, e.g., Ecuadorian Institute for Agrarian Reform (IERAC), Providencia No.900001772, 3 April 1990, which adjudicates legal title to 612,560 hectares of ancestral lands to the Huaorani; in Kimerling 2006).

orientation "from a regional indigenous organization which technically could include any indigenous group in western Napo province to an explicitly ethnic organization which represents the [Kichwa] nationality" (Perreault 2001: 393).

As the local and provincial organising spread through the Amazon in the 1970s and 1980s, and especially with the end of the Ecuadorian military regime in 1979, when the new administrations began to voice a more open cultural policy toward Indians (Yashar 2005: 140-144), the leaders of several indigenous organisations began to discuss the possibility of forming a regional federation representing all of the different indigenous groups of the Ecuadorian Oriente. In 1980, the Confederación de Nacionalidades Indígenas de la Amazonia Ecuatoriana (Confederation of Indigenous Nationalities of the Ecuadorian Amazon, CONFENIAE) was founded. CONFENIAE has been beset with internal battles and splitting during much of its lifetime, including the parallel existence of two sets of *dirigencias* (boards of directors) during part of my fieldwork (2006-2007). Very often such internal factionalism resulted from disagreements over the stance with regard to the oil companies, with parts of CONFENIAE and its leadership demanding a share of the proceeds of oil production, and even contemplating the establishment of an entirely indigenous oil company, and the other part being radically opposed to the presence of oil companies in indigenous territories at all. Despite such difficulties, however, CONFENIAE played a key role in the formation of Ecuador's prominent national indigenous organisation the Confederación de Nacionalidades Indígenas del Ecuador (Confederation of Indigenous Nationalities of Ecuador, CONAIE).

Leaders from the Andean ECUARUNARI and the Amazonian CONFENIAE began conversations regarding the possibility of a national federation probably around the time of the 1977 First Conference of Indigenous Peoples in Sucúa in the southern Oriente (Pallares 1997: 241, quoted in Yashar 2005: note 88 at 130), and founded the *Consejo de Coordinación de las Nacionalidades Indígenas* (The Coordinating Council of Indigenous Nationalities, CONACNIE) in 1980, and later CONAIE in 1986. This process of 'scaling up' of identity was not necessarily straightforward:

"To forge a national indigenous organization required the adoption of a shared identity that did not naturally exist. Indigenous leaders needed to find a common denominator that would encompass the otherwise distinct and diverse cultural, historical, and social traditions between regions. Some Andeans felt little affinity with Amazonian Indians (who had been portrayed as "savages" in national Ecuadorian imagery) and therefore wanted ECUARUNARI to emerge as the national federation (rather than forge a new national organization). Some Amazonians felt that their Andean counterparts had lost much of their indigenous heritage and cultural identification. In other words, not all communities naturally wanted to take part in a national indigenous federation. In this context, the role of networks and shared leadership proved essential in creating the ties among communities, scaling up identities, and creating a baseline of trust (or at least familiarity) within a broader movement" (Yashar 2005: 131).

Yashar adds that the regional organisations ended up referring to themselves as "indigenous nationalities" to highlight their cultural diversity, yet historical commonalities (see also Lucero 2003).

3.8 Oil boom, debt crisis and neoliberalism.

Despite the sporadic activity and oil explorations, the coastal banana plantations producing for export were Ecuador's economic axis for most of the twentieth century. This only changed with the oil boom of the early 1970s. In 1967, a consortium of foreign oil companies (Texaco and Gulf, both now part of ChevronTexaco) discovered commercial quantities of oil in the reserves of the Northern Oriente, which ignited an oil rush celebrated as the salvation of Ecuador's economy and end of the country's chronic 'underdevelopment'. The discovery of these large reserves of 'black gold' made the full integration of the Amazon region a national imperative – and for the first time a real possibility, due to the increased expenditure on infrastructure in the region.

Political regimes have always changed with considerable frequency in Ecuador, and turnover at high levels and shifting alliances within and between parties make politics volatile (Martz 1987: 5-6). When Texaco discovered oil in 1967, Ecuador was governed by an interim president, replaced a year later by the veteran *caudillo* José Velasco Ibarra through democratic elections. Velasco Ibarra had been president already five times, and this time, disbanding congress and suspending the constitution, he assumed dictatorial power in 1970. He was removed by a military coup in 1972 amidst waves of popular protest against the president, continuing what political scientist John Martz has aptly named the country's "historic pattern of ineffective government giving way beneath the burdens of economic adversity and diminishing political legitimacy" (Martz 1987: 66; Kimerling 2006).

The new 'revolutionary nationalist' Government of the Armed Forces, led by General Guillermo Rodríguez Lara promoted a program of modernisation for the benefit of all Ecuadorians based on 'black gold'. Belonging as it did to the state, oil was viewed as enriching everyone in contrast to the bananas, cacao and coffee which benefited almost exclusively the coastal elites who owned the plantations (Kimerling 2006). In 1972 Texaco completed the construction of a 313-mile pipeline for the transportation of crude oil from the Amazon region to the Pacific Coast, crossing the Andes Mountains, and began its export. "The 'first barrel' of Amazon crude was paraded through the streets of the capital, Quito, like a hero" (Kimerling 2006: 415).

The military government began its ambitious restructuring with the 'Comprehensive Plan for Transformation and Development 1973-1977', which set forth concrete policies to achieve three fundamental objectives: national integration, improved living conditions, and strengthened economic output through the more rational use of natural resources. Unsurprisingly, the Plan disquieted traditional elites. In order to fend off these unfavourable policies and the threatening nationalisation of oil extraction, Texaco together with other international companies and supported by traditional national elites launched a counter-offensive. Rodríguez Lara was removed from power in 1976 and replaced by a three-man junta, the *Consejo Supremo de Gobierno*, which promoted conservative economic policies in favour of the status quo, and saw the country return to civilian rule in 1979 (Kimerling 2006; Martz 1987). By that time, alarms over the impending depletion of oil reserves grew, as did calls for renewed foreign investments in order to develop new fields, helping to shift the balance of power firmly back to the international oil companies. As Martz concludes: "[o]

ccasional spurts of more independent and nationalistic petroleum policy were not sufficient to vitiate the multinationals' superiority" (Martz 1987: 391-392). The health of the oil industry has been a central concern of the state since the oil boom began, and almost all economic policies and national development plans of the governments since are linked with petroleum policy (Kimerling 2006; Martz 1987). The industry is the primary source of state revenue, accounting for almost half of export earnings and one-third of tax income. But as Ecuador is a relatively small oil producer on the world stage, its petroleum policy does not influence the international industry significantly, making Ecuador and its oil industry vulnerable to global market forces and pressures. Moreover, "[b]ecause of its oil reserves, Ecuador has been able to secure massive loans for its size and has accumulated a staggering foreign debt over the years" (Kimerling 2006: 423). What is more, distribution of the economic benefits has been very asymmetric and poverty levels remain high, while the gap between rich and poor has recently still been on the increase (e.g. World Bank 2004).

The economic growth of the initial oil bonanza that boosted Ecuador's gross national product (GNP) to \$5.9 billion in 1977 from \$2.2 billion in 1971 (Martz 1987: 4), could only be sustained through increased foreign borrowing which, compounded with inflation, culminated in a serious debt crisis in 1982. As international economic realities asserted themselves in this way, Ecuador finally yielded to the pressures by aiming to attract renewed foreign investment through an overhaul of its hydrocarbon and tax laws (Kimerling 2006). Judith Kimerling emphasises that even today, "[n]

Figures taken from U.S. Energy Information Administration, Ecuador Country Analysis Brief (2009), available at http://www.eia.doe.gov/cabs/Ecuador/pdf.pdf Last accessed 6 January 2010.

early four decades after the oil rush began, Ecuador continues to rely primarily on foreign companies to finance costly exploration and production activities and to transfer new technology. This economic and technological dependency, coupled with the importance of oil revenues and investment to the economy, give foreign companies enormous power in their relations with the government" (2006: 426). This dependence on foreign oil companies has marked Ecuador's policies with regard to indigenous peoples and the environment until this very day. Even current president Rafael Correa's pseudo-nationalisation has turned out to merely replace some foreign companies with others, moving the focus of oil relations away from the United States to China and other Latin American countries.

While there have been several laws regulating environmental pollution since the early 1970s already¹¹⁸, in practice foreign oil companies have ignored these laws and the government has failed to implement and enforce them with devastating consequences for Amazonian forest dwellers. The frequent oil spills were never treated as environmental or human health issues, but strictly as economic concerns. The company never developed policies regarding the mitigation of environmental damage and clean-up of oil spills, and neither were measures taken to provide clean water supplies to communities whose local waters were polluted, or to compensate them for the damage to crops and natural resources (Sawyer 2004; Kimerling 2006). What is more,

^{118 1971} Law of Hydrocarbons, 1972 Law of Waters, 1974 Law of Fishing and Fishing Development, 1976 Law for the Prevention and Control of Environmental Contamination (copied almost verbatim from a Mexican law).

"Texaco did not instruct its Ecuadorian personnel about environmental precautions or monitoring, and oil field workers— who had been trained by Texaco—were so unaware of the hazards of crude oil during the 1970s and 1980s that they applied it to their heads to prevent balding. They sat in the sun, or covered their hair with plastic caps overnight. To remove the crude, they washed their hair (and hands) with diesel. Similarly, many workers took jars of crude to parents suffering from arthritis. Those rumors, attributing medicinal powers to Amazon crude, are not entirely surprising given its status as the harbinger of a great future for the nation and Texaco's neglect of environmental and health concerns" (Kimerling 2006: 437, based on interviews with company employees).

Subcontractors to Texaco used to dump unprocessed oil on the roads in order to control the bothersome dust during the dry season, having been told by foreign workshop leaders that this practice is widespread in the U.S. as it also nourishes the brain and prevents ageing. The smell of crude welcomes everyone who travels to Coca, ¹¹⁹ a major oil-producing centre in the northern Oriente.

The publication of environmental lawyer Judith Kimerling's important study *Amazon Crude* (1991) awakened consciousness in Ecuador and abroad to the seriousness of the situation and coincided with the national and international preparations for the high-profile Earth Summit, the 1992 United Nations Conference on Environment and Development (UNCED), which declared the current course of development

¹¹⁹ Coca is officially called Puerto Francisco de Orellana, and is the province of Orellana to the North of what is now the province of Napo. The Napo River flows from near Tena to Coca and on to Iquitos in Peru where it meets the Amazon River. My fieldwork took place in all these locations.

unsustainable. The elevation of the long-standing grievances of local communities to an international environmental and human rights concern empowered the local population and Ecuadorian NGOs, and it is since that time that environmental sensitivity must be and has at least been feigned by government officials and oil companies alike (cf. Kimerling 2006). As noted in Chapter 2, the Huaorani people have been decimated as a result of the oil boom, and are now facing extinction. Whether or not this increased lip-service paid to the environment and social justice will translate into actual, and meaningful changes on the ground, is yet to be seen. So far change has occurred mainly on paper and in discourse, including the constitutional changes of 1984 concerning the right of individuals to live in an environment "free from contamination", the 1998 recognition of extensive group and environmental rights, and the surprising 2008 amendments of the rights of *Pachamama*¹²⁰ ('Mother Earth'). Yet, implementation of significant environmental rights remains incomplete at best, reflecting the serious gap between legal ideals on the one hand and social and political realities on the other (Kimerling 1995; 2006). Moreover, "[t]he average lifespan of an Ecuadorian constitution is about a decade" (Wood 2009). Indeed, Ecuador has had twenty constitutions since becoming a republic in 1830, making lasting impacts dubitable. Constitutional law has been notoriously easy to manipulate or disregard. Throughout Ecuador's history, the judiciary has neglected the impartial administration of justice, failing to enforce or promote the rule of law (Corral 1994;

There are four explicit 'Rights of Nature' in the current Ecuadorian Constitution. The first, Article 71, states that "Nature or Pachamama, where life is reproduced and exists, has the right to exist, persist, maintain and regenerate its vital cycles, structure, functions and its processes in evolution". The Constitution can be found online, for example in the Political Database of the Americas at http://pdba.georgetown.edu/Constitutions/Ecuador/ecuador08.html. Last accessed 29 November, 2009.

Kimerling 1995). Ecuadorian courts are generally seen as politicized, inefficient and corrupt, and the majority of Ecuadorians have little respect for the judiciary (Kimerling 1995; 2006).

The legacy of the ChevronTexaco pollution disaster is well known, and sometimes described as the 'Amazonian Chernobyl' (e.g. Kendall 2008). The class lawsuit is still ongoing, with about 30,000 local people claiming that eighteen million tonnes of oil and waste products were dumped into unlined pits over two decades, in defiance of international guidelines. This has led to a catastrophic degree of serious health problems and fatalities in the area due to heavily contaminated groundwater (Kimerling 1995; 2006).

As the disastrous consequences of an extremely irresponsible form of oil extraction have been highlighted, bioprospecting projects are portrayed as a clean and just alternative to oil which will finally bring wealth to the people of the region. In 2003, after a badly executed consultation regarding oil exploration in the province of Napo which ended in a public outcry (Grefa 2005), the Napo was declared an 'provincia ecológica' by popular vote. 'Sustainable development' was to be promoted, and bioprospecting projects, such as ProBenefit, fitted this new provincial aspiration. However, as I have argued and will argue more fully in Chapters 4 and 5, this latest form of capital expansion continues to destroy the subsistence possibilities and value practices of the indigenous Amazonian population. For that reason, organised resistance has increasingly been directed at bioprospecting, too. In the next section I

turn to the political significance of several indigenous uprisings in Ecuador in order to complete this chapter's account of the context in which my field work took place.

3.9 Indigenous uprisings.

CONAIE coordinated its first Indian uprising in 1990. Massive mobilisations paralysed the country for days on end, demanding amongst other things a solution to land conflicts. The administration of president Rodrigo Borja had to give in and endorsed a land acquisition programme coordinated by a Catholic NGO. Only two years later, coinciding with the Quincentenary of Christopher Columbus' arrival in America and the 500 Years of Resistance campaign, CONAIE sponsored the famous caminata - a 240-mile march of Amazonian Indians to the capital city of Quito in order to demand the recognition, demarcation and titling of indigenous territories (Becker 2008; Zamosc 2004; Whitten 2003). In 1994 a coalition of indigenous federations, including CONAIE, once again paralysed the country in protest against a proposed Law of Agrarian Modernisation, which would abolish communal property and privatise irrigation water. When the military refused to repress the uprising, the government (this time of president Sixto Durán) was forced to negotiate with the Indian organisations and to amend the bill. In 1995, CONAIE together with trade unions and other urban organisations formed a popular front for the 'no' vote in a referendum designed to strengthen executive power and implement further neoliberal changes. Their mobilisations were once again successful. However, effective policy change did not result from CONAIE's social mobilisations, which "proved adept at toppling governments but could not prevent the adoption of similar policies by their successors" (Schaefer 2009: 410). CONAIE hence decided to launch a political party, the *Pachakutik*¹²¹ Movement of Plurinational Unity, shifting some of its strategic focus onto electoral campaigns. Pachakutik has served as a means for securing positions of local and regional power in areas where indigenous people make up a high proportion of the population.

When the president at the time, Abdalá Bucaram, announced his structural adjustment package in 1997, mobilisations again filled the streets of the country. The opposition in congress used these protests to remove Bucaram from his post. In the process, CONAIE extracted the promise that the new president would convene a constituent assembly to rewrite the country's political Constitution. Pachakutik obtained 10 percent of the seats in the assembly, and its delegates pushed through several provisions and rights that gave indigenous peoples a certain amount of territorial self-determination, at least on paper. The constitutional reform, unsurprisingly, brought however no substantial policy changes, nor did it contain any provisions to deal with the neoliberal politics that were devastating the country's social fabric (Schaefer 2009).

Jamil Mahuad won the elections of 1998. The Ecuadorian economy plunged into its worst crisis since the 1930s (Zamosc 2004). Two decades of neoliberal experiments had left most Ecuadorians in greater poverty than ever before, while debt service consumed almost half of the total annual state budget. As global oil prices fell, and the coastal banana plantations were devastated by the El Niño phenomenon, exporters

121 Pachakutik means something akin to 'time of resurgence' in Kichwa.

could not repay their loans and the banks plunged into crisis despite the government's bailout programme. The crisis generated a massive flight of capital, made possible through previous deregulation and the mobility of money. When it became clear that the country would not be able to repay its external debt, Mahuad tried to negotiate a deal with the International Monetary Fund (IMF). Its conditions were: to dollarise the economy, to eliminate subsidies on electricity, petrol, and gas, to privatise public enterprises, to reform the tax structure and to abstain from bailing out the banks. This deal provoked popular protests and alienated bankers and large businesses (Zamosc 2004). Ecuador was shaken by further mobilisations with increasingly broad participation. In the final days of 1999, and during the first days of 2000, the protests became so intense that they culminated in a popular-military coup. The dollarisation of the economy nonetheless went ahead, but the rest of Mahuad's measures were annulled. Vice president Gustavo Noboa headed the country until the next elections in 2002, in which Lucio Gutierrez came to power through an improvised alliance with CONAIE and Pachakutik. However, his popular rhetoric soon gave way to a discourse of inevitable austerity measures and further neoliberal change. The indigenous and other social movements saw Gutierrez's shift as betrayal, and the alliance with his party broke down (Lucero 2008; Macdonald 2002; Zamosc 2004). This brought internal divisions within the indigenous organisations to the surface – several Amazonian federations continued to support Gutierrez, who was born in the Amazon region and had pumped some money through his clientelist ties into some municipalities. Other, smaller confederations also made use of this time to exert their influence over and against CONAIE. CONAIE was unable to bring about the kind of mobilisations it had roused in the past, and it became evident that the Indian movement was in crisis. Moreover, even though indigenous leaders have, through Pachakutik, occupied political offices in Ecuador's National Congress and state bureaucracy since the mid-1990s, this has been misinterpreted by many people outside of Ecuador as a sign of unprecedented indigenous political power. Yet, it is crucial to understand, as has been pointed out to me repeatedly during my time in Ecuador, and as Judith Kimerling summarises, that "[o]ccupation of ... public offices has not been accompanied by meaningful decision-making power or the empowerment of local communities. On the contrary, political participation through political parties has weakened – and dispersed – the organized indigenous movement by shifting the priorities of many leaders away from the needs of local communities (who feel abandoned) to the pursuit of public office, and by fomenting corruption and the emergence of an indigenous political elite that is isolated from indigenous communities. At the same time, considerable external pressures have been applied by private and public actors in an effort to use and divide indigenous organizations" (Kimerling 2006: note 58 at 433).

CONAIE's move from "a politics of influence to a politics of power" (Zamosc 2004) has undeniably come with its own pitfalls. Leon Zamosc also suggests that some of the power of the indigenous movement in Ecuador derives from the fact that its demands have never been very radical. After all,

"they have not questioned private property, the class structure, or the capitalist organization of the economy. It cannot even be said that the popular groups are trying to gain a larger slice of the national 'pie'. In

essence ... these are defensive struggles, focused on preventing further deterioration of the situation of the weakest sectors" (2004: 144).

Gutierrez nonetheless did not complete his full term in office. He was ousted in early 2005 when the military withdrew its support for Gutierrez after mainly middle class protests in Quito over his increasingly overt nepotism and corruption. Vice-president Alfredo Palacio saw the country to its next elections in 2006.

3.10 Afterword: Correa and the criminalisation of protest.

Rafael Correa, the 'white' and foreign-educated populist, became, after winning the 2006 presidential elections, the first president whose policies seemed to lend some credibility to his declared anti-neoliberal socialism. Under his leadership, Ecuador has joined the ranks of Latin American countries who have taken the so-called 'Left Turn'. Correa's administration pursues a strategy the centrepiece of which is a strong central government with the ability to regulate and to set the parameters for markets, rather than vice versa. As such it aims to shift the country's trajectory away from the direction followed since the 1980s. Fundamental to this strategy is the recovery of the policy space that had been ceded to the private sector and to the international agencies and markets (Jameson 2008). Correa called for another Constitutional Assembly and the Constitution was once again rewritten in 2008 with the participation of a range of social movements. However, as political scientist Catherine Conaghan has pointed out:

"During his first year in office, Correa turned himself and his presidency into the political system's center of gravity. He is the leader and his is the office that defines the country's agenda. Others can do little but follow or watch. The most telling measure of Correa's centrality to the political system is how much rides on his desires and his vision of the future. With no meaningful opposition from the parties or civil society, and with the president's own organization more an electoral movement than a governing party, Ecuador's political development seemingly hinges solely on Rafael Correa: his personality, his ambitions, and his decisions about what kind of 'left turn' best suits the country. That one man's intentions weigh so heavily in determining the trajectory of change is a worrisome condition as Ecuadorians write their republic's twentieth constitution" (Conaghan 2008: 59).

Particularly worrying, for example, is Correa's intolerance towards protests around oil wells and other production structures. In November 2007, Correa declared a state of emergency in the Amazonian province of Orellana, following road blocks and protests in the oil-producing community of Dayuma. Local residents were voicing their anger at the government's failed promises to deliver infrastructural improvements while they continued to suffer social and health problems due to oil explorations. The army violently repressed the protest, arresting 23 people including the governor of Orellana. This incident caused an outcry in the country and beyond, including amongst members of Correa's own party. A letter of solidarity with environmental, human rights and indigenous organisations was signed by many activists and intellectuals. It asserted that Correa's "promises of change are diluted by oil interests" (cited in Denvir & Riofranco 2008).

It has been argued that Correa's 'zero tolerance' stance is related to his project of constructing a new East-West trade axis between Brazil, Ecuador, China and other countries throughout Latin America and Asia. This geoeconomic realignment – which replaces the dominant North-South axis of trade relations – is also known as the Multimodal Megaproject Manta-Manaus, referring to the Ecuadorian coastal port of Manta, and the Brazilian Amazon port of Manaus which will be the project's two central hubs (Denvir & Riofrancos 2008).

In this way, the signatories of the solidarity letter state that in Ecuador, there is "the possibility of realizing change in favour of the dispossessed and needy...What is at stake is whether we will have a sovereign country for all, or if we will just shift from North American hegemony to Chinese and Brazilian hegemony, from Occidental [U.S. oil and gas company] to Petrobras [Brazilian state oil company]" (cited in Denvir & Riofranco 2008).

In the meantime, CONAIE has changed leadership and Marlon Santi from the Amazonian Kichwa community of Sarayaku¹²² is its current president. Santi's election represents a return to the confederation's more militant roots, as well as a total rejection of oil activity in indigenous territories. CONAIE has regained some of its strength of earlier years. To what extent it will be able to influence the reconfigurations of trade and political orientation under Correa and subsequent

¹²² Sarayaku Runa are often called the Zapatistas of the Amazon, as they have achieved semiautonomy and evicted oil companies from their territory.

administrations of course remains to be seen. As a Sarayaku friend told me during the election campaign, "Correa will be great for the middle classes, for us he will be a disaster". Indeed, Correa has labelled indigenous peoples as 'infantile' and he hopes "that the Leftist radicals who do not believe in the oil companies, the mining companies, the market or the transnationals go away" (cited in Denvir 2008a). As Monica Chuji, a Kichwa activist and former member of Correa's political party worries:

"[H]e campaigned with a strong environmentalist discourse ... [But] I began to see a continuation of the same old line and of the extractivist model ... In fact, there was a deeper radicalism: 'here comes large scale mining, period. We'll continue with extracting oil, period.' There wasn't a discussion about a post-oil economy ... The people mobilized in Dayuma and were repressed. There was a mobilization in Cuenca [city in the Andes] against mining projects and the president got on the radio and said, 'If twenty of these crazy ecologists are protesting, I'll call 20,000, or 200,000, residents to confront them.' What is this? What sort of regime is this? This is socialism of the 21st century?" (cited in Denvir 2008b).

The Amazon region of Ecuador remains one of conflict. The last year of my field work, 2008, was the *National Year of Asphalt* in Ecuador, paving the way for further warfare on subsistence.

123 Correa made this statement on his weekly radio programme on 7 June 2008.

4 Negotiating Access and Benefit Sharing in Napo: misunderstandings, frictions and value clashes.

This chapter provides an ethnographic account of the German government-funded ProBenefit bioprospecting initiative of which I was a participant observer from March 2006 until the end of its activities in the Amazon in May 2007. In particular, I discuss the misunderstandings, frictions and value clashes which characterised ProBenefit during its period of engagement with the Kichwa people of Amazonian Ecuador represented by FONAKIN. As a volunteer and independent adviser to FONAKIN, I was able to work closely with ProBenefit's indigenous participants and learned about their views through extended interactions which continued until after the project's end.

I argue that the problems ProBenefit had to face were rooted in ProBenefit's structural inability to question some of its own fundamental assumptions regarding the value of traditional knowledge, the threats it faces, and the strategies of protection it requires. This inability had to do with the project's time frame, the obligations to its funders, and deep-seated cultural assumptions. In conjunction with a failure to take into account the historical power asymmetries which we discussed in Chapter 3 above, this structural inability hampered the smooth completion of the project and ultimately led to the (inadvertent) eclipsing of other understandings of what was at stake in terms of traditional knowledge protection — including those that were clearly voiced during the capacity building course which ProBenefit organised. I conclude the chapter with a brief discussion of the way in which these alternative understandings were eclipsed

during the project's activities. This leads us to the next chapter in which I illustrate and discuss such alternative visions in greater detail.

The present chapter should be understood as describing a situation in and through which the hegemonic understanding of traditional knowledge protection came to manifest in practice. This is of course only one of many such (actual and possible) situations. However, as I have argued when discussing the methodological approach of critical ethnography in Chapter 1, it is only through an appreciation of the concrete details of such situations that we come to gain an understanding of what (the hegemonic construction of) 'traditional knowledge protection' actually means.

4.1 Thick Bioprospecting in the Amazon: a win-win-win-win scenario?

Pharmaceutical biodiversity prospecting has been presented as a win-win-win project (Takeshita 2001), through which new important treatments for diseases can be developed (win 1), while simultaneously promoting the conservation of biodiversity as a reservoir of future genetic resources (win 2), as well as compensating source country collaborators and hence stimulating economic activity in those, often developing countries (win 3). ProBenefit ("PROcess-oriented development of a model for equitable BENEFIT-sharing for the use of biological resources in the Amazon Lowlands of Ecuador"), a project funded with 1.04 million Euro by the German Ministry for Education and Research¹²⁴, was presented as a win-win-win project

This funding was made available under the Ministry's biosphere research programme BioTEAM.

which would additionally involve indigenous communities in the project realisation and execution. In this way, ProBenefit would respect and promote indigenous rights as well as contribute to capacity building of indigenous organisations. Indigenous peoples' participation would endow ProBenefit with a fourth 'win', further increasing the beneficial character of bioprospecting projects.

At its launch in January 2003, ProBenefit consisted of five project partners: the Institute for Biodiversity-Network (an expert association for biodiversity research), the Institute of International and European Law of the University of Göttingen, the Department of Plant Ecology of the University of Göttingen, Future Technologies Consulting (the consultancy branch of the Association of German Engineers' Technology Centre Ltd.), and the pharmaceutical company Dr. Willmar Schwabe Ltd. Later, and in order to fulfil its objectives of developing a model access and benefit sharing agreement, ProBenefit enlisted the Ecuadorian Ministry for Environment, and the indigenous federation FONAKIN (Federation of Organisations of the Kichwa Nationality of the Napo region) as its Ecuadorian governmental and indigenous partners. It was individuals from the Institute of Biodiversity-Network that originally conceived of the idea to apply for funding for a project that would investigate the feasibility of fair and equitable Access and Benefit Sharing as outlined by the CBD, and more particularly its Bonn Guidelines. The Bonn Guidelines on Access to Genetic Resources and the Fair and Equitable Sharing of the Benefits Arising from their Utilization was adopted by the CBD sixth Conference of the Parties (COP) in 2002. These voluntary guidelines are meant to assist governments and other stakeholders in developing an overall access and benefit-sharing strategy, and in negotiating contractual arrangements for Access and Benefit Sharing (ABS). Crucially, they include the requirement to obtain prior informed consent from relevant indigenous and local communities. Partly as a consequence of the fact that the guidelines were developed at the first meeting of the Ad-hoc Open-ended Working Group on Access to Genetic Resources and Benefit-Sharing that took place in 2001 in the German city of Bonn, Germany is strongly committed to making ABS work. Support for a project such as ProBenefit from the German government was hence unsurprising.

A partnership with a private company was a requirement on part of the funders, and some of the big pharmaceutical corporations – Merck, Bayer, and others – were first approached, but declined "due to the reputational risks involved" as a ProBenefit team member explained to me. Dr. Willmar Schwabe Pharmaceuticals is what is called a medium-sized enterprise with 727 employees in its German headquarters, and about 3700 employees worldwide as part of the Schwabe Group, comprising subsidiaries and joint ventures in eighteen countries. Schwabe produces phytomedicines, i.e. plant-based medicines and health products since 1866, relying on a high-tech manufacturing process. Many of their products as well as manufacturing processes, such as special extraction methods, are protected by patents. Schwabe agreed to be part of ProBenefit not merely as a way to research new plants, but also in order to develop what could be marketed as 'fair trade' health products. ProBenefit was set to run for five years until the end of 2007 and was made up of two consecutive project phases:

I was told this in a conversation with the Schwabe representative who travelled to Ecuador with the ProBenefit team in March 2006.

Phase 1: Entry into a model agreement with all actors representing relevant interests in the spirit of the CBD on access to natural resources in a part of the Ecuadorian Amazon region.

Phase 2: Ethno-botanical and pharmacological investigations for the possible production of a plant extract with documented medicinal effect.

It was made very clear in all of ProBenefit's publications that without the successful completion of phase one, the activities planned for phase two would not begin. In this way, ProBenefit was not merely a bioprospecting project, though it was of course *also* one. ProBenefit made the constraints within which contemporary bioprospecting endeavours have to unfold into its primary objective: its aim was to "develop *a suitable procedure for equitable benefit-sharing* for the use of biological resources and the associated indigenous knowledge"¹²⁶, and not (or not chiefly) to develop the use itself, as is the case with other bioprospecting projects (such as the various incarnations of the ICGB¹²⁷, cf. Berlin et al. 1999; Berlin & Berlin 2004; Greene

¹²⁶ This aim is quoted from ProBenefit's website. Available at http://www.probenefit.de/index_en.html

The International Cooperative Biodiversity Group (ICBG) is a public grants program sponsored by the US National Institutes of Health (NIH), the National Science Foundation (NSF), and the United States Agency for International Development (USAID) and its goals are clearly oriented to the aims of the CBD: to search for potential new drugs through bioprospecting, to promote a sustainable use of biodiversity, and to foster development through benefit sharing with developing countries – and the specific local communities involved if appropriate. Public-private sector partnerships are required by the ICBG grant protocols. One ICBG grant was implemented as an agreement between the Aguaruna of the Peruvian Amazon, Washington University, a Peruvian university and museum, and Searle and Company, a pharmaceutical sub-division of Monsanto. Other grants included funding for research by the Virginia Polytechnic Institute and State University, Conservation International, Missouri Botanical Gardens, the pharmaceutical giant Bristol-Myers Squibb and a pharmaceutical company in Suriname; research by the

2002; Hayden 2003a; 2005; Rosenthal & Katz 2004; Rosenthal 2006; or the InBio-Merck agreement¹²⁸, cf. Martinez-Alier 2002). It is because of these (self-imposed) more-than-legal parameters that I like to call ProBenefit a thick bioprospecting project, additionally encumbered with voluntary layers of obligations: "It is expressly stressed that all botanical or pharmaceutical investigations take second place to the superordinate goal of first creating the basis for transparent and participative agreement on the use of the biological resources" 129. In order to develop said *suitable* procedure, ProBenefit intended to "explore new models for sustainable use of biodiversity in the Ecuadorian Amazon region" in line with the guidelines developed through the 1992 UN Convention on Biological Diversity (CBD). Even though the novelty of the envisioned models is arguably a mirage (after all, the idea was for a German pharmaceutical company to develop marketable products on the basis of an Amazonian plant, in short, the basic model was not terribly new), the exploratory nature of ProBenefit needs to be underlined. The ProBenefit project team went, in the words of one of its members, "cluelessly" to the Amazon. This is true insofar as, despite extensive prior research on the legal framework governing the particular two-country situation of the endeavour, the way in which this framework would mould (and the ways in which it would not mould) the activities on location

University of Illinois at Chicago and institutions in Vietnam and Laos; and biodiversity research in Panama.

¹²⁸ The 1991 agreement between the Costa Rican quasi-governmental *Instituto de Biodiversidad* and the pharmaceutical giant Merck to exchange access to its inventories of plant samples for about 1 million dollars and the promise of royalties on ensuing profits from potential patents was heralded as a model at the time.

This quote is taken from the official objectives of the ProBenefit project, replicated online at http://www.probenefit.de/projekt/ziele/ziele_en.html

¹³⁰ Quote available online at http://www.probenefit.de/index_en.html

was completely unknown. There had not been a similar process in the region, and in fact there had been hardly any experience with thick bioprospecting projects – projects which made the creation of a participatory process of reaching an agreement their primary objective – anywhere in the world. The outcome of ProBenefit's endeavours was hoped to be a model ABS procedure, "maybe the most ethical one world-wide", as I was told by a ProBenefit team member.

After a couple of decades of 'biopiracy' scandals, bioprospecting initiatives have acquired a sizeable, transnational audience keen to monitor and ready to decry their activities. Relatedly, such projects need to engage in some form of public relation: especially given the public interest that bioprospecting has accrued by repeatedly upsetting ethical sensitivities, bioprospecting projects need to and do present themselves publicly, on websites, printed matter, in meetings and conferences, in a particularly favourable light. This need for a particular kind of posturing, a particular kind of performance of legitimacy is of course not unique to bioprospecting. However, bioprospecting is one of those technoscientific endeavours hit by a rather bright and large spotlight. This heightened public visibility affects the practices that constitute bioprospecting projects. In the case of ProBenefit the constant threat of biopiracy allegations led to its ethical 'thickness', and influenced all of its decisions and activities. Constant concern regarding the 'international legitimacy' of its actions interestingly limited the 'local legitimacy' it was able to achieve amongst its indigenous public, as shall become clearer in due course. However 'clueless'

Genomics and the nanotechnologies are likely to get even more airtime, but proteomics, for example, does not (McNally forthcoming).

ProBenefit's initial approach might have been, the project was of course nevertheless based on a series of assumptions.

"Expected benefits of the project:

- 1. A model agreement on the use of biological resources in harmony with the goals of the CBD and derivation of rules for future Access & Benefit-sharing projects,
- 2. Development of alternative sources of income by the discovery of new plantbased pharmaceuticals,
- 3. Capacity-building and a contribution to rural development,
- 4. Transfer of technology and methods for the search for plants with potential medicinal effects,
- 5. Support in the upgrading and maintenance of indigenous knowledge,
- 6. Incentives for the protection and sustainable use of biodiversity."132

As a project, ProBenefit was based on the belief that (sustainable) income-generating use of biodiversity would lead to its increased conservation, as long as local people partook in the income generated. These assumptions underlie the discourses that inform and draw upon such international frameworks as the CBD's, and are also explicitly espoused by the main driver behind ProBenefit, the Institute of Biodiversity Network. There are two interrelated sides to this hegemonic construction of the economic value of biodiversity conservation. On the one hand, biodiversity is

Expected benefits replicated online at http://www.probenefit.de/files/info_english.pdf

increasingly capitalised. In Martin O'Connor's terms, nature "formerly ... treated as an external and exploitable domain is now redefined as itself a stock of capital" (1994: 126). In this way, it needs to be conserved and regenerated as a reservoir of capital value, rather than subjected to limitless exploitation. On the other hand, the conservation of biodiversity is itself capitalised. This is to say that conservation activities are rhetorically cast as feasible only with adequate financial return. Economic value becomes the only reason for action of any kind. This is the ideology of homo oeconomicus which undergirds the discourse of sustainable development and orients the CBD. ProBenefit was constituted by the performance of activities that were meant to be, and were continuously represented as practical realizations of the CBD, as well as international and national guidelines and declarations of indigenous rights regarding their traditional knowledge¹³³. It was firmly based on the assumptions that characterise the theoretical framework of the CBD. ProBenefit's inability to revise some of these assumptions in the light of its work with representatives of indigenous community organisations contributed to the conflicts which I recount below, and led to the eclipsing of alternative visions and understandings that were raised by its indigenous participants. In this way, ProBenefit constituted an insidious imposition of a particular system of values. This imposition was not planned or intended, but rather an inevitable side effect of the project's set up and constraints. Crucially for instance, ProBenefit team members were accountable to their funders, to whom they had of course certain contractual obligations, such as reports on expenses and progress, a responsibility that impeded a more flexible approach to working with their indigenous

Explicitly named were in particular Decision 391 of the *Comunidad Andina de Naciones* (CAN, Andean Community of Nationas), ILO 169, and the Political Constitution of the Republic of Ecuador.

partners, and hence contributed to the project's ultimate failure. I illustrate this further in the rest of this chapter.

4.2 ProBenefit's Need for an Indigenous Partner, and its Envisioned Challenges.

Cori Hayden's work on bioprospecting in Mexico (e.g. 2003a; 2004) explores the ways in which a variety of publics (public domains, public spheres, public accountabilities) get produced – and disassembled again – in and through the performances of bioprospecting. She examines the effects of such 'public-izations', especially in terms of the new forms of inclusions and exclusions that they forge, and points out that "these publics are crucial resources which prospecting participants and their critics invoke, materialize, and contest in their efforts to define the limits and obligations of contemporary resource appropriation" (Hayden 2004: 118). Particularly significant is the way in which the public (domain) is construed as a 'safety zone' for bioprospectors (Hayden 2003b). Desperate to avoid allegations of biopiracy, that is, of the illegitimate appropriation of community resources (interestingly construed as nonpublic), bioprospecting participants in Hayden's ethnographic study attempted to collect plant samples for screening only from sites "safely located in the public domain" – such as from government land by the side of roads, and from urban markets (interestingly construed as public). Commercially expedient biodiversity research takes place today in a highly volatile political and regulatory environment. The distinction of publics from non-publics and the definition of their respective valencies are thus crucial sites of contestation in this field. Hayden's contested publics of bioprospecting mediate struggles over rights, entitlements, and obligations, in particular with regards to flows of resources – both biogenetic and financial. Hayden is interested in the way in which publicness gets inscribed into particular resources, spheres, knowledges and social groups, and then erased from them again. She has shown repeatedly how the attribute of publicness does a lot of work in the legitimating of bioprospecting and other corporate resource extraction, in the (re-)distribution of so-called benefits, and the managing of liabilities.

ProBenefit was also in need of a particular public. After all, the norms and rules governing bioprospecting endeavours, such as ABS guidelines, specify processes of public engagement and consultation: scientific projects seeking access to biogenetic resources need to consult with the affected local 'public', or even obtain their prior informed consent and agree on benefit sharing mechanisms to remain in the realm of legality. The attempt to evade this public engagement and its complications is of course what led the Mexican bioprospectors of Hayden's study to seek out domains that could be understood to be public in a different way: the affected local public could by way of their affectedness lay claim to the desired resources in such a way as to impede the prospecting activities to the point of shutdown. ¹³⁴ In order to circumvent public engagement, then, engagement of public domains was sought, and in that process the 'affected local public' was (re)envisioned as a quasi-private 'community' diametrically opposed, by virtue of its rights to its knowledge and associated biogenetic resources, to the public domain (cf. Hayden 2004).

That this potential shutdown is a real 'risk' has been shown in several other studies (e.g. Berlin & Berlin 2004; Greene 2002) and will be corroborated by the case of ProBenefit discussed here.

From engagement, via consultation, then negotiation, to the (possible) agreement resulting in an Access and Benefit-Sharing Contract, ProBenefit needed to enlist the relevant indigenous public to participate in its process. Without this public's participation, ProBenefit could not proceed, let alone achieve its objectives. In this way, ProBenefit's existence and potential success was predicated on the availability and participation of this public. So, who was this relevant public ProBenefit aimed to engage with, and where was it to be found? Certain criteria were available at the outset: to operate within the realms of legality, ProBenefit needed to consult with "the affected local, indigenous or afro-descendent communities" ¹³⁵, that is, the communities whose territories and knowledge the project intended to gain access to in order to enable scientific study of the medicinal properties of promising plant candidates with a view to the potential development of a new plant-based pharmaceutical or nutraceutical product. In this sense, the relevant public was an instance of the liberal democratic vision of a public as "those affected" and hence subject to the same criticisms and complications, such as what affectedness is constituted by and who can make such a decision (cf. Marres 2005; Archibugi 2003).

At the time, Ecuador had no explicit ABS regulations. However, CAN 391 (Art. 7), and the Ecuadorian Constitution (Art. 84) both stipulated that access to biogenetic resources and related traditional knowledge required the consultation and prior informed consent of the affected indigenous, afro-descendent or local communities. When ProBenefit executed its study of the legal situation (see Woerrle 2005), the Ecuadorian *Ministerio del Ambiente* (Department of the Environment) was in the process of considering a draft proposal for a national Access and Benefit Sharing regulation (*Propuesta de Reglamento de Acceso a Recursos Genéticos*; on file) redacted by the *Grupo de Trabajo de Biodiversidad* (Working Group on Biodiversity), which reinforced and clarified the requirement of a *consulta previa* – a consultation and consent procedure – for any access to genetic resources and traditional knowledge sought.

Very early on in the process, ProBenefit made the provisional decision to aim for bioprospecting in the Sumaco Biosphere Reserve, a biologically very diverse area comprising a variety of different ecosystems at different altitudes (from lowland rainforest, through cloudforest to high altitude páramo grasslands) that was already under protection as UNESCO reserve since the year 2000 and is funded by the GtZ (German Technical Cooperation). It was thought that the local communities in the area were already acquainted with foreign research and development programmes and would hence be favourably inclined to ProBenefit's proposals. When part of the ProBenefit team headed out to Ecuador in early 2004, a year after the project had officially started, they identified a total of 37 organisations ¹³⁶ (from government agencies to local indigenous associations) that were in turn provided with information about the project and its objectives. Reactions were divided, ranging from complete rejection and immediate allegations of potential biopiracy (by more radical environmentalist NGOs) via concern (e.g. CONAIE) to open-mindedness and general interest by the majority. Research into the legal and socio-historical situation of conducting public consultations in the region continued until December 2004¹³⁷ when a three-day workshop was held in Archidona with the participation of 35 representatives of indigenous or quasi-indigenous organisations, 30 of which came from the projected project locality. The workshop's purpose was to discuss the legal

^{136 17} of these organisations could be classified as 'indigenous', and 11 of these were of the projected research locality. My own experience confirms that this is quite an extensive selection of organisations active in the area.

Most of this research was conducted from Germany, but the project team's anthropologist also spent one month in Ecuador to conduct interviews on the matter.

framework of and indigenous participation in the procedure of accessing biological resources in Ecuador. This workshop was a crucial step in the development of a participatory methodology for the public consultation process that ProBenefit needed to engage in. It was also the occasion for one particular line that was repeated to me several times, and over which minor conflicts arose at a later stage of the public engagement process. ProBenefit's anthropologist said at some point: "If you don't want to participate, then we will have to go somewhere else". Even if this was meant as an assurance that no bioprospecting would take place in this area if people did not volunteer to participate (which is what he told me later), it is of course also impossible to not understand this as a threat in the sense of 'somebody else will participate somewhere else and they will then be possible benefit recipients'. The indigenous participants wondered and worried about this attitude until the very end of the project. Under the constant threat of biopiracy allegations, the German ProBenefit team, on the other hand, worried about legitimacy, transparency and accountability - especially when the conclusions of the initial workshop became clear: to obtain 'ethical access' to biological resources for research was going to be a process full of pitfalls, possibilities for conflict and complications.

The recommendations with regard to the public consultation and obtaining of prior informed consent (compiled by ProBenefit's anthropologist in retrospect and after further discussions with indigenous 'experts' and other individuals present at the workshop) were as follows: In terms of obtaining authorization to access the *land* on which scientific investigations were to be conducted, the actual land owners (individuals and collectives such as communities and associations or cooperatives)

needed to be consulted and their permission sought. For access to and use of traditional knowledge, the affected indigenous peoples needed to be consulted and their prior informed consent obtained. Given that there are an estimated 60,000 -100,000 Kichwa living in the Ecuadorian Amazon region (plus some more in the adjacent Peruvian territory), full consultation within the parameters of the project seemed well-nigh impossible. It was hence proposed to form an indigenous working group that could develop an 'indigenous framework' for basic access conditions. Extensive capacity-building for such a working group was considered indispensable, and it was supposed to be provided by independent, and ideally indigenous professionals with expertise in the subject area. The consultation based on the conditions framed by the indigenous working group would then proceed via the mechanisms of the representative indigenous organisations, and especially federations, such as FONAKIN and others to ensure the greatest possible coverage. This would be made more problematic if the knowledge in question were shared amongst other ethnic groups and possibly in other Amazonian countries. It was noted that before the consultation regarding consent, an information process was necessary, which would probably have to take the form of at least several successive asambleas in the communities themselves to clarify the project and its objectives, enable internal communication and support opinion-forming processes. For access to the *qenetic* resources, permission by the state (as legal proprietor of the genetic resources within its territory) needed to be solicited, and the affected peoples needed to be provided with information only (this was the juridical state of affairs in Ecuador at the time, based on CAN 391 and other legal instruments). For reasons of best practice and safety, ProBenefit recommended obtaining consent from the affected peoples also. There was concern that a veto by indigenous peoples would not be accepted by the Ecuadorian state and such a situation would lead to serious conflicts, especially if it was felt that a precedent had been set either way.

The more complicated aspects of the processes to obtain 'ethical access' had to do with contradictions in the theory. On the one hand, the access conditions (such as research locality, definition of resources to be investigated, expected benefits to be shared, benefit recipients, intellectual property allocation, etc.) needed to be clear before the actual consultation could meaningfully begin. On the other hand, however, they were only fully definable after research had in fact begun. Moreover, even if access conditions could be defined in close cooperation with the affected indigenous peoples, and consent obtained based on a participatory consultation process, since the Ecuadorian state would only then consider authorizing the ABS agreement, conflicts might nonetheless flare if revisions were retrospectively required by the governmental authority. The solutions proposed as routes through this quagmire were either to design a consultation and consent process that would take place in several phases, or to draw up a proposal to be voted on that contained different scenarios based on divergences in initial conditions (e.g. a plant with widespread use might require different definition of benefit recipients than a plant with highly localised habitat used only by a small portion of the population). Furthermore, it was proposed to accept only a decision (a consent) made by consensus, even though the prevalent method for decision-making in most general assemblies of federations such as FONAKIN was by majority vote¹³⁸. It was felt that this was necessary in order to pre-empt any conflicts and ensure the sustainability of the project. It was also recommended to ensure the collective decision was made and clear *before* any scientific research would begin. These precautions – creation of an indigenous working group, an extensive information campaign, consultation with indigenous communities over and above the legal requirements, and consensus decision-making – were thought to legitimise ProBenefit's activities and create a 'safe' domain within which the project could unfold.

After further discussions in May 2005, FONAKIN became the official indigenous counterpart of ProBenefit with contractual obligations to oversee the coordination of a delegation of indigenous representatives from various organisations (not all affiliated to FONAKIN). This delegation was to participate in a capacity building workshop series (6 4-day modules over 3 months), after which they would form an independent working group that would design and perform the actual activities constituting public consultation. ¹³⁹ I discuss the details of the aftermath of the capacity building course in Section 4.7. below. First, however, let me discuss what I believe to be the underlying

¹³⁸ Yet FONAKIN's majority vote in practice looked much more like consensus decision-making. I return to this below.

It bears mentioning here maybe that it is ironic how usually public consultation is supposed to circumvent representative organisations (such as local governments, say) in order for it to be truly *public*. In the indigenous case in Ecuador, this point highlights a particular tension in the indigenous movement. It is unthinkable for an outsider to do anything 'legitimately' in indigenous territory without approaching the overarching indigenous federations of the area first. At the same time, the grassroots feel very badly represented by these federations, which are said to be corrupt, and often run over decades by members of the same families. This might simply imply that there is no one indigenous public, in the same way as there is no unified national public sphere.

problems of the entire endeavour in the following sections. Using examples from the capacity building course and other ProBenefit events, I comment on the disparity in expectations regarding the partnership, as well as on the way in which the relevance of equitable Access and Benefit Sharing to the lives of indigenous people was assumed and, ultimately, imposed rather than discovered as an actual priority of people. I also discuss how the messiness of real public participation conflicted with the requirements of public legitimation. I argue that the myth of a level playing field and what we might call the the historical 'naivety' of the ProBenefit team members is likely to have complicated an already difficult situation and troubled an incipient 'partnership'. These issues hark back to and are meant to illustrate some of the problems which I discussed in Chapter 2, Section 2.5., regarding public participation in development and governance.

4.3 The Rocky Road of Partnership: on being unprepared.

After the capacity building workshop, once the indigenous working group was officially formed, and the German team had returned to Germany awaiting a proposal for continuation and plan for consultation, progress rapidly stalled. Communications between the two parties broke down for almost six months, then picked up but were mired by a series of misunderstandings. The project ended without any wider public consultation, nor any agreement being reached.

From ProBenefit's point of view, the results of indigenous participation were disappointing. No dialogue with Schwabe Pharmaceuticals was entered into; the

benefits that were offered by the company (capacity building, working group formation, travel possibility) were neither recognised as such, nor made sufficient use of. Moreover, the indigenous counterpart never elaborated any proposals for expected benefits, nor were any conditions or contractual guidelines articulated, despite the support available from 'native experts' (ProBenefit 2007). This outcome ran counter to ProBenefit's expectations. The project had assumed that participation would work due to the strong political organisation of indigenous communities in the Ecuadorian Amazon, in which the structures for consultation and negotiation were in place. Moreover, it had been assumed that whoever wants to participate in the project will also actively collaborate, and that signing an agreement (e.g. the agreement between FONAKIN and ProBenefit) would mean that the process is being taken seriously. Also, ProBenefit had been aware of the scandalous consultation carried out by oil companies in the Napo province in 2003, and therefore assumed that as long as the planning and realisation of a public consultation was participatory, acceptance of the process would be high and co-responsibility of all project partners would be assured (ProBenefit 2007).

In the closing workshop that took place in Quito in October 2007, and in which 22 participants from 17 organisations took part, ProBenefit presented the results and its analysis of the process. It ought to be mentioned that this workshop primarily addressed governmental and non-governmental organisations working on ABS issues, and only two indigenous delegates attended, representing FONAKIN and the governmental Indigenous Development Council (CODENPE). ProBenefit's conclusions, both presented and further participatively elaborated in the workshop

centred on different versions of one main point: co-responsibility. It was maintained that without all actors actively and responsibly performing their role in the process, ABS negotiations and agreements are bound to fail. The need for the risk of involvement to be calculable for the company was underlined, as otherwise engagement would be invariably deemed too costly and unsafe. Without any kind of investment, however small, on the part of the participating indigenous organisations, any company would find it difficult to place confidence in (the goodwill of) the indigenous partner. Moreover, it was concluded that ABS cannot be developed if knowledge holders cannot define their expectations of benefits and propose guidelines for their sharing. ProBenefit's final report (2007) states: "property obliges", thereby implying that now that indigenous peoples have been afforded property rights in their knowledge, they also have to strengthen their organisations so that they can make proper proposals for benefit sharing. This, in my view, twists beyond all recognition the rationale behind the demands for collective rights in their knowledge that indigenous movements have insisted upon. The main concern of indigenous peoples has always been the defence of their territories and self-determination; facilitating legal access, on the other hand, is primarily in the interest of scientists and companies ¹⁴⁰. Indigenous peoples' claims for rights in their knowledge are firstly a strategy to bolster territorial self-determination; the fact that such rights might enable them to receive benefits or compensation for access provided is only a side-effect.

¹⁴⁰ This point was also made during ProBenefit's closing workshop by the Ecuadorian indigenous lawyer Rodrigo de la Cruz.

Nonetheless, ProBenefit's position was clear: ABS processes require 'strong partners' with the education, understanding and capacities necessary for the task at hand. Indigenous organisations need to be prepared enough to engage in negotiations with companies and to conduct consultations with their base communities; to this end their ABS expertise needs to be strengthened, as well as their management skills and strategy development. In the ProBenefit case, FONAKIN was simply not strong enough a partner (ProBenefit 2007; Krück 2008). However, turning these conclusions around, we might reasonably ask whether ProBenefit was prepared enough for its engagement with the Napo Runa.

To be legitimate, ProBenefit needed to ensure maximum transparency and participation, yet time and financial constraints, including lack of continuous involvement to more fully get to know the working conditions of the indigenous counterpart, as well as their motivations for participation or their most pressing other concerns, meant that ProBenefit dictated much more what participation meant than they were able to acknowledge. Legitimate participation could only occur within a framework of dialogic rationality, yet the colonial nature of this framework was disregarded. Such disregard was enhanced or even enabled by the relative cultural hybridity, or so-called acculturation of the Napo Runa that made it easy to overlook the sometimes very different cultural understandings that animate their world view and lifeways. This cultural hybridity also meant that many of the Napo Runa involved wanted to manage and excel in this framework, yet struggled to do so and simultaneously resisted its more exigent demands. It is amongst other things this kind of contradiction – between the desire for Euro-American development and economic

possibilities on the one hand, and suspicion of and resistance to Euro-American development interventions and corporate organisations on the other — that ProBenefit insisted needed to be 'dissolved' (by the indigenous organisations themselves) before any serious work on such issues as access and benefit sharing would be feasible. The indigenous organisations, it was concluded by the ProBenefit team in its closing workshop, needed to define and clarify whether they were inclined to allow access to their resources and knowledge or not, otherwise any engagement process would be futile. "Where not responsibility and coherence, but this 'over-emotional' mindset characterises the interaction, an ABS agreement will be impossible" (ProBenefit 2007). Examples of what this supposedly 'over-emotional' mindset looked like in practice are to follow.

4.4 Contriving Relevance.

Even though the communities 'affected' by bioprospecting are arguably much less 'affected' – or in importantly different ways – than those affected by, say, prospecting for oil or other subsoil resources, simply due to the difference in impact of the respective activities to a community's life (compare oil wells with plant sampling), it seems nonetheless plausible¹⁴¹ that the affected communities would be those in whose territories or vicinity the proposed research activities would take place. This point on

Note here that this need not be plausible at all: one only has to remember the Mexican ICBG case where benefit recipients – the relevant public – were associations and other groups that were in fact completely disconnected from the sample gathering which took place in urban markets (Hayden 2003a; 2004).

affectedness is important because it illustrates the contingency of the significance of public engagement in this case. Affectedness and relevance need much more political work to be established in the context of bioprospecting: people drinking from polluted rivers, birthing malformed children, dying of cancer, and losing their foodstuffs to pools of crude oil are much more radically, directly affected by the activities of the oil industry than people whose affectedness by the pharmaceutical industry is contingent on the political construction of their property relations to certain plants and of their knowledge as commodifiable. Why all this laborious constructing of affectedness? To construe indigenous peoples as affected by bioprospecting (due to their rights to their knowledge) offered itself as a useful tool to frame certain economic injustices, and was hence advanced by non-governmental organisations pushing the indigenous cause. At the same time, however, this construal insidiously supports the view that people's interests are primarily defined economically, and in terms of property. It downplays the possibility that people might actually not care about a pharmaceutical corporation elsewhere holding a patent on an active ingredient of a plant of ancient use. Yet this attitude might be more widespread than expected. Indeed, I have found that the relevance of the protection of traditional knowledge as protection from misappropriation had to be actively 'created' for people to conceive of it as a threat relevant to their lives.

During the preliminary workshops and the follow-up discussions with FONAKIN, it was decided that participants of the capacity building course had to fulfil certain criteria to be considered as candidates for the working group in formation. As it turned out later, of the 25 participants, only a small minority could claim to unequivocally fit

all the criteria. It was FONAKIN's responsibility to ensure delegates were of the 'right kind' 142. At least 50% of the participants were required to have "affinity with traditional medicine", and gender balance was aimed for. Even though FONAKIN had a say in the definition of the selection criteria, it was impossible to find many suitable candidates under these conditions. According to the selection criteria, the participants should:

- 1. Belong to the Kichwa people of lowland Ecuador.
- 2. Speak both Spanish and Kichwa.
- 3. Have a certain level of formal education (at least primary school).
- 4. Fulfil at least two of the following criteria: (i) experience with projects of sustainable or community development; (ii) leadership experience in an indigenous federation or similar; (iii) affinity with traditional medicine (be a shaman, midwife, healer, health promoter, or similar).
- 5. Have sufficient time available to participate in all the modules of the course and later to continue work as part of the indigenous working group.
- 6. Submit a letter of support of the delegating organisation, and a letter of support of one's home community.

The difficulty in finding relevant delegates conforming to these criteria was due to the fact that someone with formal education, as well as leadership experience and knowledge of traditional medicine would be unlikely to have the time or the interest to

This responsibility was set out in the agreement signed in May 2005 between ProBenefit and FONAKIN.

become part of the working group. After all, such combination of skills is not that common among Napo Runa and employment or otherwise remunerated activity would be open to someone with such experience elsewhere. Participants of the capacity building course repeatedly highlighted that their time away from home and family without pay was difficult to justify. Remuneration was a conflict point that continued throughout the duration of the project and affected German-indigenous relations during the whole of the capacity building course as well as in the aftermath. The indigenous participants insisted that it was important they should get paid for their absence from home. The German team members explained again and again why this was impossible, how they needed to be careful to not be seen to 'buy' indigenous allegiance, how the whole course was already a major expense (25,000 US\$), and how the participants were learning something that could be useful for them in the future ¹⁴³. From the German perspective, the capacity building course was a good in and of itself, and the training provided would serve participants even outside of the project itself. From the indigenous delegate's point of view, participation in the capacity building course meant absence from home without pay and without clear benefits for the future. Would they be employed through the project afterwards? Would the course prepare them for managing potential conflicts which may arise with regard to ProBenefit? Was ProBenefit trying to manipulate them? These were questions that occupied many delegates from the beginning. Their concerns were not alleviated as the course progressed.

¹⁴³ While the fear of being seen to 'buy' allegiance is understandable, this is a typical case of development worker- indigenous peoples interaction involving people who get paid asking other people who do not get paid to give up economically (in its broadest sense) useful time.

That only a fraction of the course participants did indeed fulfil all the selection criteria raised grave concerns about 'proper process', representativeness, legitimacy and transparency amongst the German team members. Worse even, at the end of the course, it also turned out that two signatures had been falsified, and hence two course participants were not actually the representatives of the organisations that they had claimed they were. One of the signatures had been falsified by a young man who had simply wanted his cousin to also be part of the course "to be able to share the experience". The other signature was interestingly falsified by one of the main leaders of FONAKIN. The 'fake' delegate purportedly represented Salud Indígena, the governmental health organisation providing services in indigenous communities, staffed mainly by indigenous people themselves. The leader of FONAKIN had close connections to Salud Indígena, but wanted a close ally to participate in the course who was not a member. The exasperation of the German team was unsurprising, and these incidences are likely to have led to ProBenefit's conclusion that "decision-making is ... often intransparent [sic] and precarious" and that indigenous organisations ought to "strengthen the stability, transparency and accountability of organization structures to become more reliable for conceivable ABS partners" (Krück 2008).

The first few sessions of the capacity building course were characterised by a lot of mobile phone use, joking and flirting on the part of the indigenous participants, who seemed to make use of the setting for what the Germans thought of as "disturbing" sociability. In the evenings, several of the male participants would indulge in alcoholic beverages to the point of getting severely intoxicated together with the people living in the community in the vicinity of the workshop venue, which led to a series of

absences during the morning sessions. It was hence reiterated again and again that this course was "important", and that the participants had tasks to fulfil "on behalf of all their communities" and, in fact, "their whole people". It was also during these first sessions in particular, that it was repeated how unique ProBenefit was, and what a great opportunity it would be for the Kichwa people, all indigenous nationalities, and Ecuador as a whole, if the participants made the best of this course. Certain "ground rules" were then participatively elaborated, mobile phone use banned, and greater attention pleaded for. The indigenous representatives themselves came up with these rules when the task was presented, and over the three months a particular project ethos came to characterise interactions, with participants disciplining each other if necessary to pay attention, participate, and turn up on time for the morning sessions. The relevance (of ProBenefit, of commercialisation and protection of traditional knowledge) to Napo Runa lives was assumed and continuously performed (through reiterations by the German team in particular, but not only, also by me for example, as well as increasingly working group members themselves). The performance of irrelevance, however, was never taken as a legitimate expression of one's opinion or standpoint. In this way, forms of non-participation, such as when participants chatted and giggled amongst themselves about their private lives during the capacity building course, or when nobody turned up to working group meetings to design a consultation process, were not interpreted as pointing towards potential flaws in the project, but as indications of the incapacity of the participating indigenous organisations.

4.5 Prescribed Participation: conflicts of autonomy and guidance.

Participative methods almost invariably increase group cohesion, and can trigger a feeling of co-ownership of the group process. Yet, such niceties can be deceptive: while authority is being decentralised through participative methods, certain unquestioned norms, values and power structures are easily internalised. The 'identification with' and 'co-ownership of' projects that use participative methods are often effective in producing successful outcomes in terms of project implementation. However, as discussed in Chapter 2, participation does not in and of itself lead to emancipatory or empowering results (cf. Cooke & Kothari 2001). Indeed, an emphasis on the micro-level of intervention (participatory, decentralised, horizontal project activities and decision-making processes) can obscure and sustain broader, macro-level inequalities and injustices (geo-political asymmetries, institutional racism, gender inequalities, global colonial relations). On a Foucauldian view, participation can be a technique through which existing power relations express themselves in new ways – through the now self-disciplining participants.

Participation in ProBenefit formed the delegates' understanding of the issues of traditional knowledge, including their understanding of their own role and task in the protection of traditional knowledge, in a terms of a particular 'ProBenefit-ethos', yet not successfully, that is, lastingly or entirely so. Despite the insistence on an (ultra) transparent and (highly) participatory approach, ultimately the most vital aspects of the process were still defined by ProBenefit. The process still unfolded on their terms (partly to counter corrupt tendencies of indigenous organisations), which were basically terms of a particular understanding of legitimation (one infused with images

of openness, dialogue, transparency, rationality, etc., all to be found in the conventional ideas about the public sphere; see, e.g. Fraser 1997). While it was possible for indigenous participants to insist on a neutral working group to be formed (which fits with the imaginary of ethical legitimation of participatory approaches, and also would overcome the logistical difficulties of consulting directly with 60,000 – 100,000 people living in more or less remote rainforest locations), it was not possible to extend the project time frame or to mess up the criteria of transparency and representative participation. It was also impossible to ask for clearly defined aims (exact locality, definition of minimum benefits to be expected) as that would have preempted the participatory process – *as envisioned by ProBenefit*. In the end however, as we shall see in subsequent sections, when the indigenous working group was offered more 'definition' (in terms of a draft ABS proposal), they were scared and outraged, again highlighting the contradictory expectations held on both sides. However, the communication failure that led to the misunderstandings and conflicts at that time clearly also played a significant role in this rejection.

In this case, it seems that the vicissitudes and messiness of real public participation conflicted with the requirements of public legitimation. The former happens with real people, the latter with (more) ideal members of civil society. In our case the problem is that the ideal version requires people to have a certain amount of education, a certain robustness of interests in the issue, a sense of civic duty beyond the immediate collective unit or some other real motivation, a certain general mobility, faith in the participatory process. These attributes were not wide-spread amongst the working group members. Neglect, wilful delay, sabotage are all "weapons of the weak" (Scott

1985), often used by the subaltern to exert a form of power over the processes affecting their lives. The question is, of course, why this should not be seen as a 'legitimate' form of expressing one's attitude or (unarticulated) opinion. Could it not be that if the primary concern of indigenous communities is their struggle for self-determination over their territories, that neglecting or even sabotaging projects such as ProBenefit is the 'best' or most easily available way to exert some power in this regard? Is this not a form of participation, too? After all, *stopping* things from happening might in fact *necessitate* delaying tactics.

4.6 The Myth of a Level Playing Field.

The niceties of participation hid the deeper conflicts at the heart of ProBenefit, conflicts which harked back to colonial relationships with a history of 500 years, and which manifested themselves as seemingly unrelated frictions or complications throughout the project duration. It was difficult for the German team to understand and accept the suspicions with which they were faced, despite the transparent and participatory process which they had worked hard to achieve. As one team member remarked: "It is always the same. Every time we go over and over the same issues, that we are not here to steal anyone's knowledge. That if we were, we could have long done so! That after all, FONAKIN and other organisations themselves decided on this particular process. It is quite exhausting." For the indigenous delegates their worries were legitimate. As one participant put it: "They [the ProBenefit team] have not come here for charity! This is a business proposal. They think they will make some money.

But how are we to understand what is going on?!" – "First the white foreigners came to steal outright, now they come to make business. What is the difference?"

During the evaluation and feedback session of the 'Planning Workshop' (in which the working group was officially formed and its tasks were elaborated), many questions were asked regarding the expenses of the project so far. 25,000 US\$ had been spent by Schwabe Pharmaceuticals Ltd. to fund the capacity building workshop, and this did not include the salaries of the ProBenefit team members. Everybody seemed silently impressed. Soon thereafter a discussion arose about the proposed 10 US\$ daily salary for members of the working group. "We earn more as farm workers when we get hired with machete, or when we go to town with our produce" complained someone, and others nodded their heads. ProBenefit's anthropologist explained: "We have analysed the [2003] public consultation by the oil companies [that took place in the region and turned into a complete scandal], and the oil company paid the indigenous facilitators of the consultation very well and so there were lots of accusations that people had been 'bought'. To avoid such a situation, we decided together with FONAKIN to pay the working group the same salary that indigenous health promoters working in communities get, and that is 10 US\$." Another German team member added: "And if we paid a lot more, there is the risk that you would only participate for the money's sake! Of course you could ask the company to pay a lot more, but then they might well refuse to continue the project" – "And remember" the anthropologist continued "you do not need to live off this salary only. Most of you will need to work only two or three days per week on the project."

Discussions over remuneration and the general asymmetry of the salaries continued after the meeting in smaller groups, and in Kichwa. I was later told that none of the delegates ever thought it was fair. They understood the work of the working group to be work for the company and for ProBenefit, and they knew only too well that Europeans generally earn more than US\$ 10 per day. "It's different to be a health promoter" explained a middle-aged woman and mother of six to me "you are doing something for your community, people appreciate that you visit, they might provide you with some food, too, and you learn important things about illnesses, which are very useful when someone in your family gets ill." The work of the ProBenefit working group was never considered on similar terms. On the contrary, it was generally viewed as risky, potentially creating conflicts and upsetting people. Nonetheless, as long as the working group existed, some of the more committed members repeated phrases which had been used during the capacity building course: "This work is very important." – "Our knowledge is our intellectual property, someone needs to make sure everyone in every community understands that." - "We need to protect our knowledge, we should take this responsibility serious, and maybe we get some benefits from the company Schwabe." This changed again once the project had come to an end, and the working group dissolved.

During its closing workshop, ProBenefit emphasised that a sense of mistrust rather than pro-active dialogue suffused the project. It was argued that remaining in a position of mistrust even when goodwill is being professed and even when juridical mechanisms are in place to ensure the respect for indigenous rights, cannot but complicate intercultural communication. Relatedly, it claimed, to blame others and

take on the role of the victim impedes the recognition that cooperation with project partners could lead to development, commercialisation and modern exploitation of biological resources and traditional knowledge. When such an emotionally animated attitude overrides responsibility and coherence in dialogue, an ABS process and agreement will be impossible. The process would simply become too unreliable and economically risky (ProBenefit 2007).

It is interesting how readily it was assumed that a partnership could be constructed simply through a transparent and participatory process. That the expenses were paid by ProBenefit (or directly by the company) seemed to be taken as the (only) necessary levelling of the playing field. Trust was then assumed to be only a matter of transparent dialogue. However, the power asymmetry of the whole endeavour could not simply be readjusted through a participatory consultative process. The economic injustice ethical bioprospecting professes to redress has, as we all know, a formidably bloody and brutal history of over 500 years. To leave completely unaddressed the fact that, from a certain perspective, the phenomenon of ProBenefit looks like: 'big company with masses of money announces its imminent arrival and shoos everyone about to enable its operations, offering small presents to a select few in return' is bound to be an unconvincing approach to build trust and create partnerships with indigenous Amazonians. This approach is not specific to ProBenefit, but extends to other experiences of working with indigenous peoples: the historical context is rarely taken properly into account and a familiarity with the situation 'on the ground', especially in terms of people's perspectives being informed by often brutal historical realities, is often lacking.¹⁴⁴ The repeated comments by more than one ProBenefit team member referring to the "unbelievable patience" and "goodwill" of and "great risks taken" by the participating pharmaceutical company Schwabe indicate the belief on the part of the project team that the interaction was occurring on a relatively level playing field. However, an expense of about 25,000 US\$ in 2006 (Schwabe Pharmaceuticals Ltd. paid for the capacity building course), given net sales of 490 million Euro in 2007 (and Research and Development expenses of 27 million worldwide in the same year) simply does not back this view.

4.7 Friction and Failure.

What follows is a description of the key moments that defined the ProBenefit process after the completion of the capacity building course. This should illustrate the ways in which the complications and ultimate failure of ProBenefit (ProBenefit came to an end before Phase 1 had been completed) found their roots in the contradictory expectations held on both the German and the indigenous side. I maintain that these expectations in part result from each side's respective location in a historical, colonial relationship that extends far beyond the particular here and now of ProBenefit.

A parallel lack of consideration of historical context is noted by Paul Oldham and Oscar Forero in their work with Mapuche in Chile (personal communication).

4.7.1 Asamblea Ordinaria.

FONAKIN's Asamblea Ordinaria is something akin to a Annual General Meeting. It usually lasts three to four days and is attended by both post-holding (i.e. leaders or directors, dirigentes) and non-post-holding members of FONAKIN's 'base communities' (that is, all the communities and associations that make up the federation). The decisions taken at the *Asamblea* overrule those taken by the Council (Consejo), whose members usually receive a wage (when there is money available) and are responsible for the day-to-day running of the organisation. Decisions are usually taken by majority vote, and even though everyone can participate in the very long discussions that precede any decision-making, communities usually have only one vote each. I say 'usually', because it does not take much involvement in the indigenous movement in Ecuador to realise that the closer the organisation to its base communities, the more negotiable its rules. The legitimacy and bindingness of a decision taken is not so much based on the exactitude with which a decision-making procedure was followed (the exact number of votes, say), but rather on a general sense that it had been preceded by proper discussion and that the decision finally taken was undeniably the majority's opinion. This is in line with Schaefer's understanding of Andean and Amazonian community politics as "a shared process of deliberate initiative through which the community decides on how to organise the joint process of economic, social and cultural (re)production" (2009: 401). 145

But see Perreault 2002, and Woerrle 2005 for the view that majority vote has replaced consensus decision-making in Amazonian Kichwa communities and organisation.

At the Asamblea Ordinaria of 2006, which took place on May 25 – 27 in the remote, but road-accessible community of Nukanchik Allpa de Kanambu, ProBenefit was presented by its anthropologist to all the assembled by means of a powerpoint projection onto one of only two walls of the school building. The project, and FONAKIN's involvement in it, was discussed late at night as part of the mesa de discusión (thematic discussion table) on natural resources and biodiversity. A few members of the working group were at the table to express their opinions and provide some feedback from the capacity building course. They struck me as a little intimidated. Some of the long-standing leaders of FONAKIN and its base organisations, mainly older men who visibly wielded some power during the discussions, were very suspicious of ProBenefit, a project that Rosa Alvarado, FONAKIN's president had endorsed, however carefully, with consent of the Council only. This was the first time it was being debated in an Asamblea. "We have learned a lot, but we need to learn more" explained someone from the working group, and tried to justify the group's function: "The protection of our knowledge is very important" -"Yes" said someone else "the working group can help everyone understand this." The anthropologist, in the meantime, had gone to bed. "He never lets us finish what we have to say, he cuts us off" said one of the young women about him. "He is the one who said the company would go elsewhere if we don't want to participate" pointed out someone else. Everybody started talking about the ways of the tall German anthropologist, whose experience of working with traditional healers in the area had made him move more confidently, and maybe less carefully, among the Kichwa people than any of the other ProBenefit team members. "He has no respect" - "He is manipulative". I was amazed at the force with which these impressions were suddenly the project completely for any collaboration to continue. "Wow!" I wrote into my notebook. "The irony! He was the one employed to ensure the cultural appropriateness, sensitivity etc. of ProB! Surely this is a prime case of using the weapons of the weak!? He's been turned into a real scapegoat! He needed to be killed so that the old, powerful sceptics wouldn't tear the whole project apart!?" This initial feeling was later substantiated further when several people told me that they retrospectively felt a little guilty about this incident: "He wasn't really so bad", a comment which could indicate that blaming him fulfilled some other function. A confident woman explained later that "he was very difficult, but all we wanted is that he change his ways, but it was so late at night, and all wanted to get the discussion over with, so the leaders (dirigentes) kicked him out and that was that". Apart from this decision, the following article was included in the resolutions taken at the Asamblea:

Art. 19. That in order to avoid any risks to the natural and cultural heritage of our Kichwa nationality of Napo with respect to the ProBenefit project, its process be evaluated after the socialisation phase (*etapa de socialización*) at the base community level, so that the Extended Council (*Consejo Ampliado*), Assembly (*Asamblea*) or Congress (*Congreso*) of FONAKIN may decide on the continuation of its subsequent phases, such as the prior public consultation (*consulta previa*) and the proposal for negotiation.¹⁴⁶

In Spanish: Art. 19. Que con la finalidad de precautelar el patrimonio natural y cultural de nuestra nacionalidad Kichwa del Napo con respecto al proyecto ProBenefit, luego de la etapa de socialización a nivel de las comunidades de base, se evalúe su proceso para que en Consejo Ampliado, Asamblea o Congreso de FONAKIN, se decida la continuación de las siguientes

This resolution was crucial as it determined certain requirements for the continuation of ProBenefit, namely a process of 'socialisation' at the community level (which was understood as an information campaign, where the project would be made known to and discussed in FONAKIN's base communities), followed by an evaluation and subsequent decision regarding any further activities by one of FONAKIN's decision-making authorities (all of which are collective gatherings). In other words, without a phase of community level 'socialisation', there was no mandate, not for the working group nor for anybody else, to continue the ProBenefit process.

4.7.2 Interim.

I left Ecuador for five months straight after the *Asamblea Ordinaria*. I later learned that the working group found it difficult to accomplish the tasks that they had participated in setting for themselves during the planning meeting. "Only five or six people turned up for the first meeting. We didn't know where the money for the travel would come from", I was told by one of the more enthusiastic members. ProBenefit had committed to paying travel and other expenses for the first meeting. After that, the working group had to arrange for expenses to be paid by the company. However, to be reimbursed, expenditure needed to be documented, and the documentation sent off to the relevant person. The effort required to accomplish this task did not seem to match the benefits that being part of the working group might have ultimately provided. Francisco, the elected coordinator and most committed member, explained: "If you

etapas, como la consulta previa y propuesta de negociación.

have to spend several hours at a street corner trying to sell some plantains to get hold of the coins you need to get back home, you think a lot before a trip into town." Money – coins and bills – is not something that is always available in an indigenous household. It is usually possible to borrow a few coins from some neighbour or the community shop keeper, but without a sure way of returning them or some other favours relatively soon, even that possibility can fade. Others commented: "I don't have many clothes [nice clothes to go to town in], and when they are all dirty, I need to wash them first. Sometimes that means that I don't go at all." – "We were supposed to send the information to ProBenefit by email, but nobody [that turned up at the first independent working group meeting] knows how to use email, and it also costs money to use email in the *cabinas* [phone and internet shop]" - "They said that the company will maybe pay ten dollars to each per day of work, but that is not a lot and we don't know how they are going to send the money [to us]."

Nonetheless, the working group managed to meet up three times, in varying, always small sizes. The members present decided they should just go ahead despite their reduced number and start to write a work plan with budget that they could send to ProBenefit. So Francisco, the coordinator of the working group, and Jefferson, FONAKIN's "director of education" (*dirigente de educación*) who had a university degree (*licenciatura*), started drafting a proposal asking for a utopian 450,000 US\$ for the socialisation of ProBenefit to the communities. Jefferson later told me, he had "no clue" what he was doing, as he did not fully understand the project. While not having been part of the capacity building course, Jefferson had the formal writing skills that nobody in the working group had. Their third meeting was interrupted by the allegedly

very drunk vice-president of FONAKIN who prohibited any communication between the working group and ProBenefit without prior presidential approval, an approval which at the time was impossible as Rosa, the president, was running for local government and away on her election campaign. The working group did not meet again after this incident until I returned to Ecuador in November 2006.¹⁴⁷

Once I was present, the working group suddenly worked again. I understand this change in dynamic to be related to three hitherto unmet needs which I was able to fulfil. Firstly, I was able to provide vital support for the accomplishments of seemingly minor tasks, especially those that involved expense. I provided the 50 cents needed for a bus ticket or phone call, I could help with anything that involved writing, especially on a computer, and I could offer training in web browser and email use. While an email account had been opened for the working group coordinator, Francisco did not actually know how to access nor make use of it. Maybe in order to avoid embarrassment, he never mentioned this to the ProBenefit team, who presumably never thought to ask. Secondly, I was able to devote most of my time, energy and initiative to the pushing forward of the working group. Nobody else had been able to commit to that extent before. Thirdly, the working group needed somebody with the social position and articulacy necessary to make certain demands on FONAKIN's

¹⁴⁷ While projects can seem to proceed frustratingly slow when working with the indigenous movement in the Amazon, this is usually not the case when funding, even if limited, is made available upfront. This is illustrated by the fact that four members of the working group were invited a couple of months after their last meeting to participate in the running of a workshop on the protection of traditional knowledge and intellectual property in three different communities, the money for which had been secured from the NGO Global Green Grants by an indigenous ally of FONAKIN. It was a successful event.

leaders, in order to 'get things done', or at least not hinder the process. It seemed that as a friendly, white outsider, I had more chance than the working group members to do so.

4.7.3 Proposal for a 'Socialisation' Process.

Though the working group remained reduced in size, we (I was adopted as a kind of facilitator) collectively drafted a proposal for the 'socialisation' of ProBenefit. It was based on the extensive notes that I took during our meetings where we discussed all aspects of the task at hand, such as why is socialisation necessary, what is it intended to achieve, how can it realistically be accomplished, who needs to be involved, how much time and money is needed, etc. While, upon request, *I* wrote the draft (a pretty common role to play for a researcher in an indigenous setting), it went through several revisions with input from both within and without the working group. On December 28, everyone agreed it was ready to be sent to the German ProBenefit team, and Francisco, by now trained in email use, did so electronically.

The working group asked for a total of 107,000 US\$ over 14 months to complete the socialisation process in about 300 communities.¹⁴⁸ I had warned the group repeatedly that it was unlikely that the proposal would be accepted as it was very late in the overall process (ProBenefit's funding would run out in November 2007, several

About two thirds of the budget was meant for salaries, and the rest for office rental, overheads, and workshop expenses. 25 US\$ pay per day were requested per person as opposed to the 10 US\$ that ProBenefit suggested. This was justified by reference to examples of other development projects and the additional benefits that accrue to the health promoter work on which the sum of 10 US\$ was based.

months *before* the end of the proposed socialisation phase), and the funding requested was likely to be much higher than ProBenefit and the company would have expected. Nonetheless, everyone wanted to go ahead "for the learning experience". Moreover, apart from the fact that it had been decided in the Asamblea Ordinaria that ProBenefit could continue only after a socialisation phase, such a phase was also considered of utmost importance by all working group members due to the politically sensitive issue of the commercialisation of traditional knowledge. The proposal stated that socialisation "does not only include the presentation and clarification of the project to the base communities, but also the collection and discussion of whatever worry, doubt, or question that might be raised by the members of the communities, so that such feedback can be included in the deliberation with regard to a possible negotiation with the company and the State."

Francisco, whom I had supplied with 3US\$ to ease his journeys into town to check his email account for possible replies, did so every day or two, and informed me frequently in distress that there was "still no answer". I explained that offices in Germany were probably closed for at least a week over the winter holidays.

4.7.4 A first response.

On January 12, Silke, a German who lived permanently in Ecuador and had been hired by the ProBenefit team as a local contact point, turned up in Tena and met with the working group. She explained that the German team had received the proposal but how they were surprised that it was not a plan for a process of negotiation and consultation, but one for socialisation. "The socialisation was supposed to happen

during the capacity building course last year, you were all supposed to discuss ProBenefit in your communities." She emphasised that there was simply no time left for a socialisation process, and that the German team suggested drafting a proposal for negotiation themselves, which the working group could then discuss and realise a consultation process for. All members of the working group expressed shock and upset. They felt "pressurised" and "scared". Somebody said: "the communities are already criticizing us now, saying that we are making a profit from their plants". Francisco explained that "without a process of socialisation, nobody will understand whether to say yes or no in the consultation". And Carlos, one of the younger members educated to degree level, was clear "this is too fast for us". Temporality in indigenous communities does not necessarily comply with European project cycles and deadlines.

Silke suggested organising a meeting — which one of the German team members might be able to attend, after all she was only a kind of go-between and could not take any decisions on behalf of ProBenefit. The discussions went on after Silke had left. Everybody asked me for my opinion in a way that made me feel uncomfortable. "Please, what should we do?" they asked, "please". I worried about undue influence, and my role in this process. Would my opinion shape theirs in a problematic way? How open should I be about my criticisms of the endeavour to commercialise biodiversity and traditional knowledge, pharmaceutical companies, the whole global political economy, the values and norms of European modernity? How justified were these criticisms in the first place, given the very real and acute need for money among Amazonian peoples? "You need to decide how important it is to you to work with this

company" I said. "Remember that they cannot promise anything in terms of money or other benefits to come out of the process, because they themselves do not know whether they will find any plant that can be commercialised, but of course some of you are likely to receive a salary, at least temporarily, while you work on the consultation, and maybe during the research phase?" I scrambled for words "I worry about drawing up a contract too fast, because a contract can set a precedent – does everybody know what a precedent is?" No, so I explained what a precedent is with many short words. The problem I saw with Access and Benefit Sharing contracts was the way that they can end up undermining, for example, discussions at the UN Indigenous Forum on collective rights to traditional knowledge. To express such rights as the right to give or deny consent to an ABS contract is just one, and a very narrow, version of what such rights might look like. In order for indigenous peoples' rights to be a sharp, emancipatory weapon, care needs to be taken that the particular ways in which they get realised are not simply diluted versions of what they could have stood for. To perform the right of self-determination as a right to a mere veto is a particularly impoverished version of the possible.

4.7.5 Declaration.

Based on the worries that the working group had, the resolutions taken at FONAKIN's *Asamblea*, and some further reflections on the importance of a process of socialisation in which 'the affected' Kichwa communities could be directly (and not just by proxy) involved, the working group wrote a 'declaration' with my help, explaining to ProBenefit, to FONAKIN's Council members, and members of other organisations, the reasons and need for a socialisation phase. In this declaration it was made clear

that it was impossible to move into a phase of negotiation regarding an agreement with the company without a prior period of socialisation, through which all communities would be made aware of ProBenefit and the issues involved in a negotiation with Schwabe Pharmaceuticals Ltd.

The declaration was presented at the extraordinary meeting which took place on January 23, and to which the German team had been invited but at which they could not be present. During the meeting, Alexis, one of the working group members who had mostly shown a lot of enthusiasm for the project, emphasised to the gathered organisation leaders: "We have not been 'capacitated' but taught to be corporate negotiators". Rosa, an elderly, barely literate midwife with extensive knowledge of healing plants complained: "They [white foreigners] have always said we are stupid, now they suddenly want our knowledge, but they do not want to wait until we have made our own decisions, in our own way". This disparity in expectations about participation and deliberation in decision-making was a key obstacle to a successful collaboration.

The time frame of ProBenefit, and the speed at which things were supposed to happen, constituted another worrying point: "They complain we are so slow, they don't respect [us], they only put pressure so we sign the contract". The risks of the project were repeatedly highlighted, above all the potential conflict with other federations "Everyone thinks we are selling our plants for our own profit." This was understood as one of the crucial reasons for insisting on the need for socialisation. General mistrust of companies and development organisations suffused the atmosphere: "They only

steal anyway, when have they not robbed us?!" - "They think we are stupid, how can we trust them?!" Nonetheless, self-criticism was also raised "We didn't manage to meet up regularly" - "We didn't know what to do next, we never had an [instruction] manual so we could understand how to continue" - and, referring to the drunken vice-president: "We all know whose fault it is that communication with Germany broke up". The lack of funds was also lamented: "We could not inform all members of the working group because there was no money to send [radio] messages through all the necessary [radio] stations". On the basis of these sentiments, the text of the declaration was discussed and revised, then sent to Germany by email the same day.

The working group received a response to the declaration while I was away for a month in the form of another visit by Silke. "They always use her as an intermediary, it does not seem right" wrote Francisco in an email to me. "They want to know who wrote the declaration and who was present at the meeting [of January 23] ... and they congratulate us for the declaration but say it would have been good to send it after the capacity building course, that now it is very late... they say there is no order in the project". The working group received a formal (email) response by ProBenefit on February 12, reiterating the congratulations, and lamenting the lack of communication during six months prior to receipt of the socialisation proposal. The email made clear that the ProBenefit team accepted the rejection of the suggestion to collaboratively draft an Access and Benefit Sharing contract, but due to the limited time remaining could not see how the process could continue. ProBenefit hence invited the working group to participate in an evaluation workshop sometime at the end of March.

4.7.6 Evaluation workshop.

During the evaluation workshop it became obvious that ProBenefit had taken the declaration to mean a rejection of all possible interaction between the working group/FONAKIN and ProBenefit unless ProBenefit agreed to fund a process of socialisation. I was told by several German team members that they were "quite surprised, shocked even" by the declaration, that they had not even had the time to meet to properly discuss the proposal for a socialisation phase, when suddenly the declaration arrived. It transpired that Silke's visit and the information she had passed on to the working group in mid-January was not meant to be an 'official response' to the proposal. After several months of silence, the working group seemed suddenly to respond too quickly, even by German standards. A fair amount of annoyance and frustration was also expressed by German team members: "What the hell were they going to 'socialise'? Everyone in the communities would have asked them anyway what the company was promising, how much money or what else exactly they could expect to receive in return for their collaboration. Without a draft contract what could they have talked about?"

"It's true", I wrote into my notebook, reflecting on the conversation I had had, "most people [in the communities] would want to know exactly how much money they would get for signing the contract. But isn't that exactly the problem? Everyone seems to stop thinking when there is some promise of money at the horizon. Wouldn't it have been much better to be able to respond: we don't know what we can expect, let's rather think about whether we want to participate in their research at all, whether we want them to take away any of our plants, who do we think has the right to make such

decisions? What problems will there be? Let's look at other peoples' experiences, and all the conflicts they've had even though they were promised some money."

From the working group's point of view, the ProBenefit project had always been an ambiguous undertaking. Convinced by the capacity building course that the protection of indigenous knowledge from misappropriation ought to be one of their organisations' key priorities, they held that the ProBenefit process might offer them the opportunity to raise awareness about the importance of this issue. Yet many of them felt that they had somehow been 'pushed' to struggle for this cause, when their own personal dreams and ambitions lay perhaps elsewhere. The relevance of the work they were supposed to do as the ProBenefit working group remained mainly someone else's: "The company wants us to make all these decisions. We never asked for the company to come here! At least we should be able to make our decisions in our own way." ProBenefit was too tied up with a company's agenda, however benign, to not be seen as a risky engagement. And while Napo Runa had been accustomed to hire themselves out to companies for decades, they had also the experience of 500 years of shifting forms of colonial relations which they were very experienced at sabotaging, resisting or turning to their own advantage.

From the German team's point of view, ProBenefit had been a difficult process in which to balance often opposing interests and different cultures. "Schwabe does not understand how it can take so long to draw up a draft ABS agreement. They see this project as a risky economic investment and waste of time. We have to constantly persuade them to be patient and stick with it. And the working group and FONAKIN

just don't understand what it's like. I think they see the company as a *Geldkuh* [money-producing cow]." The German team members whom I met were all passionate about biodiversity conservation and the possibility for win-win scenarios through fair and equitable Access and Benefit Sharing agreements in the spirit of the CBD. In this sense, the suspicion and lack of apparent enthusiasm of the indigenous participants was disappointing: "They are making a great opportunity look like a threat."

4.7.7 Carta de Aclaración: Clarifying Letter.

Upon my suggestion, the working group decided to write a clarifying letter to ProBenefit after the evaluation workshop. The letter clarified that there had been a misunderstanding during the meeting with Silke in January, which left the working group under the impression that the German team wanted to push them into premature negotiations of a contract draft. Nonetheless, the group insisted that it was impossible to negotiate an ABS agreement without a period of socialisation, but that they never intended to preclude any further work with ProBenefit or involvement in activities that did not include such negotiation. The letter also listed a series of important areas in which capacity building was still needed, and for which the working group invited support. Moreover, it clarified that as far as the group was concerned, negotiation of a draft agreement would involve a certain commitment to a real agreement in the future, and that they could under no circumstances make such a commitment at this stage (before a socialisation process). However, they would be happy to exchange views and expectations with ProBenefit and the company regarding the potential benefits to be shared: "An exchange for us is not the same as a negotiation". The letter was sent on April 4.

4.7.8 The End.

The response that the working group received a month and a half after having sent the clarifying letter stated that all the proposals made by the working group (especially those clarified in the last letter) were very much in line with the ideas ProBenefit had of an interaction with the working group. Everybody present when the letter was read out seemed very confused. "Why do they say *now* that they always wanted a socialisation phase?" Unfortunately, the letter continued, there was now simply no more time left for any further activities at the local level, as ProBenefit was entering its last phase during which its final report needed to be redacted, and funds had run out. Everyone grumbled in Kichwa, then agreed: "it's better that it's over!"

We still met several times, to discuss possibilities for an independent working group on biodiversity and traditional knowledge, and I wrote some funding applications to this end. But as time went on, hope and interest dwindled. I continued to be in touch with the most active members, in different, though thematically related settings.

4.8 Eclipsing Other Visions.

The problems ProBenefit had to face were rooted in ProBenefit's structural inability to question some of its own fundamental assumptions regarding the value of traditional knowledge, the threats it faces, and the most adequate strategies of protection. Its 'CBD assumptions' eclipsed other possible ways of understanding what was at stake.

In many ways, this might have been a problem of 'late' participation. After all, communication with indigenous organisations only began once the project had been conceived and was under way. Despite its willingness to delegate authority and of course responsibility regarding the consultation and negotiation process, the project was never meant to be a project primarily *for* indigenous peoples. Neither was it a project for Schwabe Pharmaceuticals; rather it was a knowledge-producing initiative informing the processes of the CBD, and the wider Access and Benefit Sharing 'community'. In this way, the relevance of the aims and objectives of ProBenefit remained unexamined, and it remained a classic case of 'them' participating in 'our' project (Cooke & Kothari 2001).

The capacity-building course was pedagogically progressive, interactive, making use of a variety of participatory methods and involving workshop facilitators experienced in popular education techniques. The themes covered were all at least marginally relevant to the envisioned tasks of the working group¹⁴⁹ and time was usually taken to

The themes covered were: Module 1: Basic concepts of Western botany: plant, cell, gene, biodiversity; Introduction to company Schwabe and its work; Botanical classification and setting up a herbarium. Module 2: Introduction to the development of new phytopharmaceutical products; Commercialization of phytopharmaceutical products; Legal requirements for trade in medicinal plants and products. Module 3: Bioprospecting – previous experiences in Ecuador; National and international legal framework for access to genetic resources and associated traditional knowledge; Introduction to intellectual property rights; Intellectual property rights and traditional knowledge; Mechanisms for the protection of traditional knowledge. Module 4: Commercial use of medicinal plants and sustainable development: risks and opportunities; Facilitation methods and presentation techniques. Module 5: Negotiation and conflict management; Consulta previa – Proposals for and legislation regulating consultation in indigenous territories in Ecuador; Facilitation methods and presentation techniques. Module 6: Equitable Benefit-Sharing; Legal contracts; Course evaluation.

allow for discussion in Kichwa when some of the older participants asked for clarification. However, as the course unfolded, I could not help but notice that the 'risks of commercialization' presented were limited to the overharvesting of rare wild species and the environmentally negative impacts of industrial monoculture. Social conflicts that might arise between and within communities and organisations were highlighted at various points but always put down to illegitimate access or unfair benefit allocation which the participatory process ProBenefit had initiated was supposed to ensure avoidance of. The possibility of conflicts over values other than economic ones was ignored, despite constituting a real worry for the leadership of FONAKIN as well as several of the delegates. The indigenous movement is not homogeneous with regard to its opinions, ambitions and strategies, and not all indigenous organisations condoned FONAKIN's involvement with ProBenefit, some simply because of their conviction that traditional knowledge is not for sale to pharmaceutical companies.

What does the ProBenefit experience tell us about the failure of bioprospecting contracts more generally? From a critical ethnography perspective, the failure of bioprospecting contracts has of course to be explored on a case by case basis. Nonetheless, certain key aspects seem to be common to many bioprospecting endeavours. It is important to note, however, that we do not hear very often about 'failed' projects, more common are reports of conflicts and problems arising from already signed contracts (e.g., Hayden 2003; Greene 2004; Gal 2005; Vermeylen 2007).

In these cases, we can identify in particular three key points of conflict regarding the issue of legitimacy. One, there is usually a dispute or at least an unclarity about *who* the legitimate contracting parties are. FONAKIN was chosen (and postured as) the appropriate representative of the Amazonian Kichwa people of Napo. However, FONAKIN is merely the largest and longest established of a whole series of Kichwa federations in the area, many of which were criticising FONAKIN's involvement with ProBenefit. Two, there is still today a distinct lack of concrete national legislation as to *how* to implement or enforce ABS contracts, and hence there is a scope for quite different interpretations of how to legitimately realise international guidelines on local ground. Three, bioprospecting endeavours have so far unfailingly raised different, indeed conflicting expectations as to process and outcome on parts of all parties involved (including inflated expectations of financial gain on part of the indigenous communities). As I have illustrated in this chapter, such conflicting expectations are often due to very different historical and cultural standpoints.

What is more, however, bioprospecting transforms "common heritage into a stream of compensation" (Brush 1999: 538). Monopoly privileges that one group of people (community, or organisation) can gain through an ABS agreement imply that other groups – who share the same knowledge and resources – are excluded from such gain. In this way, the tension bioprospecting causes is the same kind of tension which most processes of privatisation (of something which was hitherto held in common) cause. Indigenous groups hence often occupy the ambivalent position of protesting against the exclusive appropriation of their knowledge and resources while at the same time seeking clearly defined rights and a better negotiating position for bioprospecting

contracts.¹⁵⁰ This ambivalence in itself means that ABS negotiations take place on shaky ground. The ultimate failure of such negotiations or the conflicts which a signed agreement provokes are thus unsurprising. The dynamics and processes which lead to such failure or conflict require the kind of detailed attention to the actualities of a situation as I have aimed to provide in the present account of the ProBenefit case.

Berlin and Berlin (2004) argue with respect to the Maya-ICBG bioprospecting project that it failed due to the interference of non-governmental organisations which "took away" local community autonomy from indigenous communities that had agreed to participate in the international drug discovery and conservation project. Berlin and Berlin argue that the NGOs agenda to discredit sustainable development projects as colonialist impositions thus disempowered the indigenous communities to determine their own development priorities. While it can certainly not be denied that indigenous organisations' and other NGOs' wilful stalling of bioprospecting processes and ABS negotiations can lead to their failure or premature conclusion, an important question is why such stalling is aimed at. Not always can the agendas of non-governmental organisations be dismissed as knee-jerk reactions based on unreflected political ideologies. The *pragmatics* of life under capitalism – i.e. the near inevitability of the money economy, the urgency of having to find sustainable ways to conserve natural resources within the dominant paradigm of market valuation - might make it more difficult to take a principled stance against the expansion of capitalist relations of production, however, doing so cannot and should not be discredited as blinded by ideology. Whatever ulterior motives the NGOs in the ICBG-Maya case (a local

150 This is reminiscent of E. P. Thompson's notion of "enclosure from within" (Thompson 1991).

healers' association and the well-known Canadian campaign group RAFI, now ETC Group) might have had, they have also based their actions on a considered perspective of bioprospecting as colonial and capital expansion, which I have aimed to back up through my analysis of the details of the ProBenefit case. It is *because* Access and Benefit Sharing is not simply *the* solution to the four-fold conundrum of conservation, innovation, development and indigenous people's rights, but rather a very particular, market-based solution that it generates so much dissent and dissonance amongst different local, national and international groups and interests. As long as commodification and other forms of market expansion continue to affect people's lives in ways that conflict with the non-market values they hold, their manifestations (such as bioprospecting projects and ABS agreements) will continue to produce social tension, disagreement and struggle.

In the next and last chapter of this thesis, I address the variety of views on traditional knowledge, its value and need for protection that I was confronted with during my fieldwork. This will show that the protection of traditional knowledge is understood, imagined and discursively employed by its 'holders' in ways that are very different to the dominant discourse of protection which runs through Access and Benefit Sharing endeavours. The diversity of values which can get sidelined or eclipsed during projects such as ProBenefit thus becomes visible.

5 The Hidden Variety of Protection: Napo Runa stories of what is at stake.

In this chapter, I present and discuss a series of conversations and events at which traditional knowledge protection figured in ways very different to its hegemonic construal as intellectual property protection. 'Protection of traditional knowledge' is understood and used by the people whom I met in the Amazon in ways and to ends that sometimes overlap with, yet in many ways differ from the schemes and objectives pursued by ProBenefit, and other Access and Benefit Sharing endeavours. In Section 5.2. I present a number of interactions which took place during the capacity-building course of ProBenefit and which highlight the ways in which dominant understandings of traditional knowledge, and the issue of its protection were perpetuated, while alternative understandings of what was at stake were disregarded and subdued. As we shall see in Section 5.3, Napo Runa 'knowledge holders' interpret the notion of traditional knowledge as sometimes meaning spiritual power, or ethical conduct; sometimes traditional knowledge is used to refer to the increasingly irrelevant lifeways of the older generation and an intimate acquaintance with the landscape; sometimes traditional knowledge even acts as a proxy for the value of Napo Runa culture as a whole.

I argue that the dominant discourse of protection – the one developed and employed in national and international policy making settings and which animates projects such as ProBenefit – colonises our understanding of what is at stake in the protection of traditional knowledge, and perpetuates background assumptions ultimately

instrumental to the continued expansion of capital. More specifically, I argue that the focus on the threat of misappropriation (i.e. on a kind of theft) obscures the way in which traditional knowledge is also threatened by loss and erosion. Borrowing from Joan Martinez-Alier (2002), I conclude that the struggle surrounding the protection of traditional knowledge is not only a struggle regarding access over resources, but also a struggle over meanings and values. I urge that the idioms in which these struggles are carried out continue to (or begin to) transcend the language of market valuation, in order to keep alive the plurality of values through which people make sense of and give meaning to their worlds.

To begin with, however, let me clarify the obvious, yet crucial point that the solutions we develop depend on the problems we perceive. The way in which we construe traditional knowledge, and the threats which it faces will hence determine the kind of protection which we develop and perform. It is in this way that the hegemonic construction of traditional knowledge protection colonises people's understanding of what is at stake.

5.1 Protection, Value, Threat.

The notion of 'protection', whichever way we may turn it, implies a possibility of threat or harm, and the normative element of inclining to avert it. We make sense of notions of protection in relationship to ideas of the value of whatever is to be protected, and the threat with which it is (potentially) faced. Consider "seat belts protect the driver and passengers of a vehicle": we infer that people are usually likely

to value their lives and that life-threatening situations can occur during participation in traffic. "Protect your skin from UV rays": we come to understand that prolonged exposure to UV rays may damage our skin, a part of our physical organism we do or ought to care for. "The mollusc's only protection is its shell": we know that most life forms will tend to develop means to survive the predatory attacks they are likely to be subject to. And while bubble wrap might protect a precious bowl on its journey through the mailing system, it is unlikely that sunscreen, safety belts or a shell from the beach will.

In devising strategies of protection, we need to take into account what exactly needs to be protected from what. And since any strategy of protection sets out to achieve certain objectives, but, obviously, not others, articulating the objectives for the protection of traditional knowledge is a crucial aspect in considering which forms such protection might take. Conversely, a particular strategy of protection can tell us what is being valued about whatever is being protected, and what the threats from which it needs to be protected are perceived to be. As I have explained in the previous chapters, existing schemes of protection of traditional knowledge set out to achieve either the prevention of misappropriation and misuse (that is, the prevention of unapproved appropriation and subsequent commercial exploitation, e.g. 'biopiracy'), or the prevention of erosion and loss of traditional knowledge. Unsurprisingly, most international effort is put into protection from misappropriation and misuse¹⁵¹, such as

Only the protection of traditional knowledge as a cultural heritage really addresses the issue of preventing its erosion and loss. But even the UN Convention for the Safeguarding of the Intangible Cultural Heritage is not unproblematic with regards to the mechanisms of protection it proposes, as we have seen in Chapter 2.

through (quasi-)intellectual property protection, or Access and Benefit Sharing agreements. I say unsurprisingly because such mechanisms of protection legalise access to and facilitate commercialization of traditional knowledge — which is important in a climate in which biopiracy scandals are very bad for the health of a corporation's public image, and therefore its bottom-line. As should be obvious, a protective system based on an understanding of protection as primarily the capacity to exclude the unauthorised use by third parties will look very different from an approach which regards protection as an instrument to preserve traditional knowledge from uses that may erode it or negatively affect the life or culture of the communities from which it springs (cf. Correa 2001). In the latter case, protection would imply active involvement in creating positive measures to support and enhance the livelihood and cultures of communities; in the former, the main role of protection is to establish, administer and enforce rules of access and use.

Most often, the predicament of traditional knowledge is presented as an economic problem and the sharing of benefits (in whichever particular shape) as its fundamental solution. As we have seen in the last chapter, this was also the view underlying the rationale, objectives and approach of the ProBenefit project. Traditional knowledge was understood as threatened by potentially unfair appropriation through private interests, as well as by increasing loss within communities as these underwent rapid changes in lifestyle. A fair and equitable Access and Benefit Sharing contract with a pharmaceutical company was promoted as an ideal solution: any appropriation by outsiders would occur under strict conditions, consented to by the legitimate owners of the knowledge in question – the threat of misappropriation would hence be averted

through ethical appropriation; moreover, the economic benefits gained from such an ABS contract would valorise traditional knowledge within the communities, and especially amongst the younger generation, leading to a renewed interest to maintain and transmit it. In this way of course, the value of traditional knowledge is cast solely in market terms, at the same time as human motivation is reduced to the function of an economic cost-benefit analysis. Other ways of understanding what is at stake are eclipsed by this hegemonic construction of knowledge, its value, threats and means of protection.

In this context, it is interesting to note that many NGOs and other indigenous peoples' allies or activists continue to perpetuate the discourse of property/theft with regards to traditional knowledge. It says on the website of the Coalition Against Biopiracy: "Biopiracy is theft!", thereby not only construing traditional knowledge as a form of private property, which is in itself a questionable move, but also conflating the two objectives of protection. Patenting something that finds its origin in traditional knowledge (i.e. misappropriation) does not make the knowledge disappear from a community's life the same way that stealing a tangible object does. Its very noticeable and locally lamented disappearance is due to processes of modernisation, development, proletarianisation, destruction of forests and other ecosystems, and not due to processes of misappropriation and misuse. In this way, the 'biopiracy is theft' discourse has done an unfortunate lot for the conflation of the two objectives of protection. It would be surprising if it had not contributed to the dominant attitude that preventing misappropriation and misuse will also prevent erosion and loss.

In what follows, I examine the concerns of some of the so-called traditional knowledge holders with whom I worked, and from whom I learned in the Amazon. Their concerns, I believe, speak of a variety of ways in which their knowledge is understood to be 'threatened', what is being valued about it, why it ought to be 'protected' and how such protection would best be achieved. Their concerns also bring to light a variety of different meanings of 'knowledge' itself. In the next section, I present a number of interactions which took place during the capacity-building course of ProBenefit and which highlight the ways in which dominant understandings of traditional knowledge, the issue of protection, and its difference to scientific knowledge, were perpetuated, while alternative understandings of what was at stake were disregarded and subdued. This is meant to show that ProBenefit, despite best intentions, imposed a value system and world view on its indigenous participants. The ProBenefit team and most of the teachers and facilitators it hired for the course were unable to see or consider these alternative understandings, a point which contributed to the strong sense of asymmetry felt by the Kichwa participants, underlining their historical sense of injustice.

5.2 Notes from a Capacity Building Course.

The premises of AMUPAKIN (*Asociación de Mujeres Parteras Kichwas del Alto Napo*, ¹⁵² see Fig. 4 below) are located on the outskirts of the community of Sábata, a typical near-urban indigenous settlement of wooden shacks and houses circling a

152 Association of Traditional Kichwa Midwives of the higher Napo region

football field. A big, yellow concrete arch and iron gate mark the entrance. Behind it appear several new-looking concrete buildings: the main health centre, a conference venue, a laboratory for the production of shampoos and natural medicines, and three cabañas, the mosquito-netted accommodation for visitors. Tucked away beyond view is a wooden ramshackle hut with tin roof, an open fireplace and a gas stove: the kitchen. All is set amongst overgrown flower beds, herb and vegetable gardens and surrounded by what are, by Amazonian standards, small trees. The construction of the "House for Life" (casa para la vida), as AMUPAKIN's premises are known as, began in 2001 with the financial support of the Spanish Red Cross that has left its mark in the form of a metal plaque on a concrete rock-imitating mound which everyone who enters passes. The "indigenous" and "traditional" mingle here with the "modern" and "exogenous" apparently unproblematically. As two midwives walk barefoot and with machetes and medicinal barks in their shigras (carrier nets made from tree fibres) over tiled floors through whitewashed halls and past a computer to the cobbled-together kitchen out back in order to prepare a remedy against headache, the co-location of high- and low-tech artefacts in time and space seems a completely unsurprising manifestation of a post-colonial, globalising world. The women of AMUPAKIN move confidently in this setting, it is their "own place now", as is being emphasised to me at various points. Yet this setting also easily obscures an asymmetry: the *simultaneity* of barefootedness, computers, barks and concrete does of course not necessarily bespeak their symmetry in terms of influence on and meaning for people's lives. Living in contemporary Amazonia is characterised by a multitude of struggles, for survival, enjoyment, for the continuing relevance of indigenous purpose, dignity, understandings and practices, and for what constitutes all of these, and thereby a good life (Overing & Passes 2000). New needs and desires replace the old, yet not without conflict. The first impression of AMUPAKIN does not yet reveal the friction between *shigras*, barks and dry, hardened feet on the one hand, and tiled floors, digital machines, and institutional plaques on the other.



Figure 4: AMUPAKIN cosmetics laboratory, Archidona 2008.

On a hot and sunny Thursday morning in March 2006, a group of people started to gather in the conference building. The room was bright, the ceiling high and the windows big. The floor had been swept, and heavy, light-coloured and lacquered tables and chairs form a U-shape, opening onto a whiteboard and flipchart. A few white people, whom I knew to be German, were busy with papers and boxes, and a very European-looking Ecuadorian woman was talking to one of the midwives.

Everyone else, about twenty people all Kichwa but me, stood or sat quietly about. Soon, a desk was set up and topped with papers and a laptop. One by one the course participants were called up to the desk. Each one received a schedule, a pen, and a notebook, and was clearly explained to stay on site for the full four days of each course module, and that they were from this point on accountable to their organisations as delegates and that they could not be replaced by anyone else at any point. Everyone signed their names on a register, then took a seat along the U-shape, and the introductory session of the first module began.

My own presence was warranted as a volunteer and independent adviser to FONAKIN. Rosa Alvarado, FONAKIN's president at the time, had welcomed me warmly into the organisation just a few weeks earlier. There had been foreign PhD student collaborators before. Everyone seemed generally happy to have me hang around their concrete office building in which Amazonian mould is winning its battle with industrial wall paint. During my various stays, I fixed printers, set up fax machines, solved computer problems, corrected spelling mistakes, transformed handwritten notes into PowerPoint presentations, and showed my European face to visitors. I also wrote some funding proposals, and a few position papers for FONAKIN. "None of us knows anything about the protection of traditional knowledge and intellectual property. It's a new issue and politically very controversial. We have been severely criticised by other [indigenous] organisations just for signing the contract with ProBenefit. It is good that you are here, I want you to follow the whole process, and make sure that nothing goes wrong" Rosa said to me shortly after I had arrived. "I wonder what 'wrong' means in this context", I wrote into my notebook

that day. It transpired over time that FONAKIN, like all other organisations, had to constantly negotiate its (various) role(s) with regard to its members, the Ecuadorian indigenous movement as a whole, the Ecuadorian state, national and international funders and project partners. Things could hence 'go wrong' in a variety of ways, a damaged reputation within the indigenous movement and discontent amongst its members being amongst the *very* wrong. As a primarily representative organisation, FONAKIN's legitimate authority depended on good relations with its base communities, as well as other federations.

The first evening, after dinner, a party was organised to celebrate the start of the course. Several women briefly danced to some contemporary Kichwa music, one of the German facilitators got most people involved in some Bavarian Yodel exercises and dancing, and one of the older men crudely dramatised a shamanic healing ceremony which the Bavarian then had to imitate. Everyone seemed thoroughly amused. Florinda, one of the oldest midwives, ended the evening with a song about her grandfather's life and a call to all indigenous organisations that they may not forget that Napo Runa life really is in the forest. The song struck my European ears as more of a weeping. It was made up on the spot, which is a sign for a competent Kichwa singer: the ability to perform there and then moving, melodic poetry full of "old words that our grandparents used". "Do you hear?" I was asked by a young man next to me "she knows a lot of traditional knowledge". "Yes" said another "she gives advice of how to live well, she reminds us what is important, she knows a lot". This was my first direct encounter with a perspective on traditional knowledge as ethical rather than more purely empirical in kind. All day long we had been talking about

traditional medicines, and how valuable this information about biological resources was for the whole of humankind, and how the elderly were like libraries, full of such important information. Yet Florinda was singing about being a bird, a toucan woman, about being full of yearning for her people to return to the forest. Her performance was proof of her 'traditional knowledge', which in this context meant a connection to and understanding of particular *values* rather than *data sets*. Such knowledge is of course uninteresting as far as pharmacological research is concerned. Yet it was of obvious concern to Florinda and others around her. Protection of such knowledge would look very different to fair and equitable ABS arrangements.

The following two days were spent learning about cells, genes and biodiversity. At one point, the husband of one of the midwives commented: "But the properties of plants can change! Their medicinal powers can become stronger or weaker when they get relocated or cultivated or tended to. Also, different properties of the same plant are more or less prevalent at different times. That's why we time the harvest. Sometimes it is better to harvest at night or during full moon, sometimes not." - "Yes" said somebody else "and also plants don't heal if you do not have a spiritual connection with them." Others nod. "Aha" said the facilitator, and continued to explain genetic inheritance while ignoring this traditional understanding of medicinal properties. A few PowerPoint slides later, the difference between biological and genetic resources was being defined. "This is a *very* important distinction" emphasised the facilitator. A *genetic resource* is the genetic information contained in any part of a living organism, however small, while a *biological resource* is the whole of a living organism, or at least a significant part of it. The CBD deliberately refers to genetic resources only.

"You need to understand that access to genetic resources is not the same as access to biological resources. If the genetic information contained within a living organism is being scientifically or commercially used, we have to talk about access to genetic resources. However, if it is a whole plant, or a part of it, such as its sap, that is being used scientifically or commercially we are talking about access to biological resources. The company Schwabe that would like to do some bioprospecting in the area is seeking access to the biological and not the genetic resources." - "Indeed, we are not interested in patenting genes" agreed the German representative of the pharmaceutical company who was present. "So, we can do away with myths now" explained the facilitator, "bioprospecting is not always bad! As long as it is done legally and with the consent of the communities, it could be a good thing. Bioprospecting is not biopiracy." - "Shamans have also always done types of bioprospecting" added one of the German team members, "in fact, they are like little companies, for you also have to pay them when they provide their services."

I am recounting this particular exchange about biopiracy to illustrate how simple answers often foreclosed serious discussion about contested issues during the capacity building course. Time, of course, was limited, and since a lot of subjects were supposed to be covered, lengthy discussion often needed to be cut short. In this case, however, one of the most crucial questions of the whole endeavour — when is bioprospecting legitimate? — was being brushed aside with simplistic explanations. This meant that participants often failed to receive the kind of information that is necessary in order to form an opinion about complex matters. In a not-yet submitted doctoral dissertation, Jodie Chapell argues, for example, that there are many

biopiracies, and that the patenting of genetic materials only constitutes one such piracy. Moreover, patents on entire plants can be held in the United States under the U.S. Plant Patent Act of 1930, and indeed such a patent was granted to Loren Miller in the highly controversial ayahuasca patent case, which involved a protest by the Cofán people of the Ecuadorian Amazon (Fecteau 2001; Moghaddam & Guinsburg 2003; Dorsey 2004; Schuler 2004; Shiva 2007). Moreover, Schwabe Pharmaceuticals patents all its products. While these patents are not for actual plant varieties, they are usually for plant extracts based on biological materials and not genetic information.

A similar incident concerned trade in plants and knowledge. While the facilitator explained the concept of agrobiodiversity, an inflatable globe was being passed around. She asked: "Did you know that plantains and bananas originally come from Africa?" – "No! They come from here. They are our *comida típica* [traditional food]" was the united response – "No, no. They are from Africa. You see, different cultures have always exchanged and traded things and knowledge." Based on this information, we then stuck pictures of different plants and foodstuffs on the globe corresponding to their place of origin. Again this example illustrates how complex issues were being obfuscated by simple answers. While it is undeniable that different social groups have always exchanged material objects and knowledge, the modes of such exchange vary widely. The plantains and bananas which actually originated in South Asia and not in Africa (Simmonds & Shepherd 1955; Harlan 1971; Zeller 2005), for example, reached South America as part of the colonial trade system which moved slaves and exotic products in various directions across the Atlantic, and decimated indigenous populations (as discussed in Chapter 2). The rhetoric of 'people have always

exchanged things, why stop now?' does not take account of the historical and political context in which such exchange is taking place and by which it is determined. Instead of more in-depth discussion of such issues, we engaged in a little trust-building exercise to activate the mind through a little bit of movement: everyone formed a circle, and one person with blindfolded eyes stepped in the middle. He or she was pushed around and caught as she fell and stumbled from one side to the other. Such dínamicas as they are called, were used often during the course. A useful method to enhance concentration, learning effectiveness and group cohesion, the deployment of such exercises ultimately serves those in whose interest the course content is.

Later the same day, the delegate from Schwabe Pharmaceuticals passed around little sealed plastic bags. The first one contained whole dried gingko biloba leaves, the second one powdered gingko biloba leaves, the third one a gingko biloba leaf extract, a very fine, yellow-brown powder, and the fourth one a handful of coated tablets, redbrown in colour. He also passed around the very same tablets in their shiny product packaging, including the package insert. The package read TEBONIN®. The 27-step manufacturing extraction process is patented internationally, and so is the extract EGb 761® itself. Nobody mentioned that at the time, I found it out later on the internet. Dazzled by the sparkling products that can be made out of some leaves, the course participants asked many questions: "What is it for?" – "Where do the leaves grow?" – "How do you make the extract?" The German delegate explained how a difficult extraction process is required, involving a lot of the state-of-the-art technology that his company owns. "Would the extraction process happen here in Napo, or would it all be in the labs in Germany?" asked someone. "This is not clear yet" answered the German

delegate, "If a trustworthy, reliable counterpart can be found here that has the relevant capability for extraction, then yes, it's a possibility that it could happen here." — "Mixing and exchanging our knowledge with Western science is fine, but my worry is that the company will have all of the lucrative benefits and the local organisations are left with nothing, no money and no knowledge, especially for the future and for the children. One hope is that the company would move all of the production process over here." — "Well, yes, there are unclarities about the laws and potential partners, but it is not impossible. There always is the possibility of creating a multinational company if we find the right counterpart" explained the German delegate. I am later told by a few course participants that this incident made them feel uncomfortable: "He could not answer our questions" — "They are making empty promises! And who will eat the pills they make? White people." — "When he talks of making a company here, I don't believe it's any of us that he will employ. They will get people from Quito."

"So where does traditional knowledge come from? How is it established?" asked the delegate from the German pharmaceutical company, sweating visibly, his naked legs covered in insect bites. His PowerPoint slides were in English, and hardly visible on the wall of the bright workshop centre, so he waited patiently for the translation of his question and the ensuing discussion in Spanish and Kichwa to end, wiping his brow. This question was more engaging than the previous ones. Everyone started speaking at once: "The plants tell us." – "Yes, the plant spirits talk." – "When somebody in the family is ill, it's the plants that will tell us how to prepare them and make medicines from them." – "The *yachakuna* [traditional healers, shamans] speak regularly to the plants, so they know." – "When I was a little boy, and my mother was very ill, one day

this plant – it grows here outside in the garden, I can show you – this plant came and it was laughing and dancing around in the house and we were a little scared but it told us to boil it and prepare a tea and then it left, so we found it again and made a tea and soon my mother was feeling better." The translator hesitated at first, then explained the answers of the Kichwa workshop participants to the pharmaceutical delegate. "Well," said the delegate after a little confused pause, "okay, yes, but traditional knowledge comes from ..." he paused again as he flicked the remote control to populate his slide with prepared answers that fly across the screen in swoops before settling down as bullet points. "Well," he commented the slide, "it comes from accidents and coincidences, from one's own experience and self-testing, from hearsay, from knowledge exchange and from literature." The translator translated and everyone remained quiet. Shortly after, the elderly midwife sitting next to me started to whisper angrily with a young man who nodded back at her. The pharmaceutical delegate, however, continued his PowerPoint presentation.

The inability on the German side to acknowledge or even register this very different understanding of the origin of traditional knowledge, which constitutes a central aspect of Napo Runa cosmovision¹⁵³, was lamentable. It maintained the gap between the two sides, and prevented a deeper understanding and exploration of the issues at hand.

153 Cosmovision is the preferred term amongst indigenous peoples and rights activists, replacing the more European cosmology or myth.

In the literature documenting, explaining or analysing the legal guidelines referring to 'traditional knowledge', traditional knowledge is usually defined as "knowledge, innovations, and practices of indigenous peoples and local communities" (from CBD Art 8j), and often described as "inter-generational and orally transmitted" (e.g. Posey 2002; Howell 2004; see also the Bellagio Declaration¹⁵⁴). Its origin is hence located in the distant past, embedded in the ancestral practices of indigenous communities. The emphatic concern with origin in most contemporary dealings with traditional knowledge must have to do with the importance of origin to intellectual property law. Intellectual property protection is dependent on the origin of the intellectual work to be clearly traceable to a particular juridical person, such as *Ulysses* to James Joyce or Windows Vista to Microsoft. The assumptions underlying such originary ideology are tenuous, and an exploration of its ideological connections to creationism and doctrines of free will promises to be interesting at least. Unfortunately there is no scope for such an exploration here. Suffice here the flagging up of 'origin' as a significant discursive device in the performances of intellectual property protection and contestation. In this context, what would it mean for knowledge to originate in one's relationship with a plant spirit? I realise that entertaining such an idea will be rather difficult for most readers. Nonetheless, such ways of speaking about and understanding aspects of the world encode particular attitudes and values. For example, this view of knowledge speaks of an intimate relationship between people and plants. It speaks of an understanding of plants as teachers and helpers. It speaks of the necessity to foster

A group of lawyers, academics and activists drafted and signed this declaration during the 1993 Rockefeller Conference 'Cultural Agency/Cultural Authority: Politics and Poetics of Intellectual Property in the Post-Colonial Era'. It can be accessed online at http://www.case.edu/affil/sce/BellagioDec.html.

good relations and to learn to listen to what plant spirits may say. "Plant spirits talk a lot" an old female healer told me while weaving a *shigra*. "The problem is, most people don't know how to listen. They run past the little plant on their way into town. They miss the whisper of their name. 'Nina, Nina' it will call you 'Nina wait and listen what I have to tell you'". These understandings, visions and values are, I maintain, what 'traditional knowledge' – the knowledge of the Other – really has to contribute to the contemporary world. Another remedy for high blood pressure or obesity is merely a contribution to the wallets of the pharmaceutical industry. Indigenous activists participating in high-level fora such as the CBD can sharpen their teeth by insisting that what is at stake in the context of the protection of traditional knowledge are lifeways, values and practices to which the hegemonic constructions of common sense are blind and indeed antithetical.

5.3 Rainforest concerns.

In this section, I present a series of conversations and encounters which I was part of outside of the ProBenefit setting. These make even clearer that projects such as ProBenefit, and the discourses which they introduce and perpetuate, veil the plural understandings and valuations of knowledge and people's concerns in this regard.

5.3.1 Wizards and Fighter Jets.

"How do you protect your knowledge?" I asked a middle-aged *yachak* ['one who knows', plural *yachakuna*], a traditional Kichwa healer, wizard and community

adviser, as we were preparing a large amount of *ayahuasca* brew, the hallucinogenic drink 'that makes you see', and ultimately, 'know and heal'. "You need to be strong to protect yourself" he answered, pressing the vine and leaves deeper into the boiling water with a wooden stick. "You need a lot of energy, sinzhi [force, strength, especially spiritual in kind], to protect yourself from attacks. Your enemies will always try to attack, make you ill or eradicate you completely. It is dangerous to be a yachak. That is why many are secret. But only a very powerful brujo [Spanish for warlock/male witch, referring to yachakuna who practice black magic, harming others can get past my defences. I have many secrets, including a whole fleet of fighter jets, spiritually, that protect me. Sometimes I just use a mirror", he laughed "and send the misdeed back to the one who sent it". "So, by protecting yourself from spiritual attacks, you protect your knowledge?" Domingo looked at me with the indulgent pity reserved for the stupid. I tried again: "I mean, what happens to your knowledge when you get attacked? Does it disappear?" - "Your power disappears. When you get attacked and you cannot protect yourself, you become weak. Maybe you get ill, maybe you die." - "But if you get ill, and then recover, you will still have your knowledge?" I insisted, starting to be unsure about whether I was making any sense. What was this thing I called knowledge? "Will you still know which plants to use to heal someone, for example, or will you forget such things?" - "It's not enough to know which plants heal. You need to have the knowledge to make them heal. That's why we diet155. It

A *yachak*'s diet refers to the abstention from certain foods, as well as activities, during certain periods. In particular, after drinking ayahuasca, salt, chilli, alcohol and fatty meats, such as pork should be avoided. Someone who is learning to heal is expected to abstain from sexual intercourse for several months at a time. There are times when one should not touch any object that might be either too cold or too hot.

gives us *sinzhi*." He paused. "When they attacked my uncle, a very good *yachak*, and he got very ill, when he then recovered, he could not understand the [*ayahuasca*] visions. He could see, but he could not interpret them. For a long time he was no use as a healer. And he could not see the future very well. Not even the tobacco helped him. They took his power."

It was through conversations such as this one that I realised that for many of the people whom I met and worked with in the Amazon, spiritual power and valuable knowledge were so closely linked as to practically be the same thing. Such power/knowledge is understood to be in danger of attack and even destruction from the negative energies of certain people, places and spirits that intentionally or unintentionally affect its holder. A 'powerful' *yachak* 'knows' not only in the sense of having access to a vast internal repertoire of information about such phenomena in the world as plants, animals, landscapes, diseases, spiritual energies, and the ways these relate to one another, but also in the sense of (what we might call) her or his power of intuition being highly accurate. ("You've had a bad dream" said Ana to me unfailingly when I had had one, and I never met her early in the morning when my tensed body could have still betrayed a nightmare.) This is not so much *knowledge held*, as an *ability to know*. It is a particular form of perceptiveness, which, I was told, is a skill not unlike "a skill to play the piano". You can learn it, but "you will probably learn it better if you have the talent and the desire".

This ability to 'know' things that were seemingly imperceivable became more and more a feature of ordinary reality, the longer I spent time with traditional healers from

the forest. Some people are able to know surprising details about others in a (for want of a better word) intuitive way, as if they had been told, or as if there were conclusive clues in someone's body language, or gaze or particular scent. A visiting colleague, who had been suffering from recurring lower back problems for five years, and who did not speak Spanish, so did not articulate her complaints to anybody but me, was told by two different yachakuna on different occasions that she had blue light pouring out of her kidney, a spiritual injury that must have been provoked by a desert spirit in a far away country. Neither of these yachakuna had ever been in a desert, nor had they been told either about my colleague's back pain, or its sudden origin during a trek through Botswana's drylands. The healer's knowledge in this context is thus more like the capacity to see or hear (in the very moment of ocular or auricular perception) than the capacity to recall or remember (memorised past experience and 'stored' information). 'I know' in this sense would have to be understood rather as a statement akin to 'I see' than to 'I have mental access to certain (more or less corroborated) information about something'. This distinction is not exactly the same as the standard distinction in epistemology between knowing-that and knowing-how-to, made prominent particularly by Gilbert Ryle (1949). The standard view holds that to know how to do something, one does not need to know that something is the case. In this view, knowing-how-to is irreducible to any form of knowing-that. For example, to know how to ride a bicycle is a state of being different from and independent of knowing that holding one's balance is dependent on certain laws of physics. Whether or not this standard view is analytically correct, 156 the healer's knowledge I am trying

Amongst analytical philosophers there is a long-standing debate whether this standard view is correct (e.g. Snowdon 2003). Some (so-called intellectualists) hold that certain knowing-thats are always necessary for any knowing-how-to, whereas others (anti-intellectualists) insist that

to point at might be a knowing-that (someone has had a bad dream, or has a strange injury, or has unwittingly eaten a magical flower) which is based on a knowing-how-to ('read' or 'perceive' apparently imperceivable signs with regard to, for example, other people). It is a kind of knowledge that is based on real-time perception (like vision or sound), that might of course be mistaken, but not necessarily more often than people misinterpret what they see or hear.

For the purposes of this chapter, it suffices to remember that what exactly knowledge is, what it does, what it means, and what people value about it, does not become clear simply by invoking the term. What it might be threatened by, and what protecting it would involve, is hence even less obvious. For Domingo, at least in the context of our conversation above, protecting his medicinal knowledge meant to summon spiritual fighter jets, to practice his diets, and to generally take care of his different powers and energies. As we have seen, the discussions in international policy making for a revolve around very different ideas of protection for traditional knowledge. Is Domingo's understanding of protection irrelevant to these discussions? Do his protective strategies fail to address more pressing issues of traditional knowledge? By whose standards? Who decides?

5.3.2 Diets and Charlatans.

My conversation with Domingo does of course not take into account the wider context in which the protection of traditional knowledge, as a necessity and cause, has

knowing-how-to do certain things is always at the basis of any knowing-that (cf. Fantl 2008).

developed. As I have tried to show in the Chapter 2, the concept of traditional knowledge and the need for its protection emerged especially in relation to developments and conflicts in the fields of nature conservation, and the wider biogenetic resource politics of the late 20th century. When I was asking Domingo about how to best protect one's traditional knowledge, I did leave the context within which I was posing the question as open as possible; in particular, I did not provide much indication of which threats to this knowledge I was envisioning. This of course means that the particular meaning of my question was in many ways up for grabs. Domingo interpreted it, as people usually do, according to what seemed to him the most likely way it was intended. Given that generally most of our conversations concerned shamanic practices, healing ceremonies, and ayahuasca visions, and considering that we were sitting by a fire and a five gallon cooking pot holding the ingredients that were to turn into one of the most psychoactive substances known to humankind, it is maybe not surprising that he thought of spiritual abilities and attacks, healing and illness, the responsibilities and dangers of being a yachak, and the intensity of the visual ('knowing') experience of an *ayahuasca* trance as the backdrop to my question, in relation to which the latter made the particular kind of sense that he took it to make.

In the company of members of ASHIN (Association of Indigenous Shamans of Napo), of which Domingo was president at the time, he could also speak very differently of the protection of traditional knowledge: "There are fewer and fewer good shamans. The old ones, many have died. Young people don't want to learn and they break their diets. There are too many that call themselves *yachak*, and they go to the cities and

they ask 500 dollars for a healing, and they don't know anything, they cannot heal and they give us a bad name. There is no control. That is why our organisation has made identification cards. See here [showing his laminated picture card]. We all carry them. They are recognised by the ministry. We are a legalised organisation, recognised by ministerial accord. We test all our members. Every member has to prove that they can heal. We go in a group, and we watch each raise [levantar] an ill person. If they get up at the end of the night, if they get better, then we can be sure. I have denied identity cards to some people, cousins of mine even, of whom I knew that they don't know anything, they just sing for the tourists. We have to work together, we have to unite and work collectively. We have to teach well, so that the young ones learn properly and do no harm [black magic], otherwise our medicine will die. Otherwise we will kill each other in envy and competition amongst ourselves. There is so much envy. And to make lots of money fast, we will break the diets, and forget the forest and what our grandparents told us."

Protection of knowledge figures in this little speech as the collective adherence to a particular ethical code of practice, the respect for traditional norms and ancestral advice, as well as the use of certain techniques that the modern world affords (photographs, seals, lamination, institutionalisation) in order to create a framework within which Kichwa shamanic knowledge and practice remain unimpeded by bad reputation, failure to transmit properly to the next generation, and mutual (intra-group) competition.

Through such organisations as ASHIN (the first legal association of shamans and traditional healers in Ecuador, founded in 1994, legalised in 1997), common concerns and the potential for collective solutions are being explored, articulated and worked towards. Like all social movement and civil society organisations, they provide platforms for voluntary association according to shared predicaments, and for the forming of opinion about and strategies for social change. Traditional knowledge, its threats and the means of its protection are framed in this context as collective concerns, affecting each practitioner in her or his work, impinging upon the reputation and viability of the 'profession' or 'tradition' as a whole. The value of knowledge is here closely linked to the responsibility, individual and collective, to acquire it properly (observing traditional diets), and to use it properly (for healing, not for black magic or harm, nor for inflated personal gain). The greatest threat that knowledge seems to face on this account is perversion through improper conduct. Abstention from sex, alcohol and certain foods is considered an important part of a yachak's socalled 'diet', especially when still in apprenticeship. Misconduct, mostly related to the breaking of one's diet, is said to lead to a loss of power/knowledge, perversion of character and the practising of black magic, usually culminating in (spiritually) injuring other people, and even madness. Protecting shamanic knowledge from perversion or distortion is thus about – collectively – ensuring right acquisition and right use. And for the leaders of ASHIN, most often represented by Domingo due to his articulateness, this was best done through a certain amount of institutionalisation and the development of a common discourse based on traditional precepts and ethics.

5.3.3 Relevant Acquaintances.

The theme of loss and survival of knowledge, tradition, and practices over generations ran through many conversations and encounters during my fieldwork, and not only in the context of shamanic healing. That the younger generation was not interested in the old customs, lore, and bushcraft, and that too many of them did not even speak Kichwa was a pervasive complaint. "Young people don't realise, they don't care much about the plants. They walk elsewhere, they don't see the plants, and so they don't ask about them. Maybe ten, twenty plants they know by name, nothing more. And what they are good for, I don't know, how could they know!?" Some of the younger people I met instinctively positioned themselves in relation to this complaint: "All my friends have moved to the city. They have employment. But they forget how to walk in the forest. I prefer to be here, I like to listen to my grandmother. She knows how to interpret dreams very well. I work with her on the *chagra* [horticultural plot] and she teaches me about the plants. The plants heal. I want to learn more, so that when she dies, I can teach my children and grandchildren." - "I liked very much living in Quito

¹⁵⁷ Such processes of collective identity formation of course also produce dynamics of inclusion/exclusion and involve the normative policing of boundaries – who is a 'real' *yachak*, who is an impostor, who knows and who does not, who is in and who is out – which have a lot to do with validation of knowledge. In this case: whose healing knowledge is valid, and who makes these decisions? ASHIN's accepted members tested new members, which runs both the risk of bias and has the advantage of grassroots agreement rather than compliance to some external standard.

[Ecuador's capital]. We had a lot of fun. It opened my mind. But when my son was two, his father left me, so I came back to be with my family here [...] I see our culture differently now, I am happy here, but I feel a lot of pain to see it disappear. All that my grandparents knew is getting lost. That's why I am learning Kichwa now and that's why I go to the dance group [group performing folkloric dance]." - "They say all that our grandparents knew is getting lost. It is true. But I cannot change that. To improve [my family's situation], I need to study and earn some dough. That's why I live in the city [...] It is sad, but in my community there is not much forest left. So what use is it to know the plants!?"

Traditional knowledge ('what our grandparents told us' was the often used idiom) in this context is understood as getting lost due to decreasing uptake by the next generation, slowly dying with the elders. The indigenous youth is seen, and sees itself, as largely uninterested in the 'life of the forest'. What was dubbed on several occasions as the 'wants and needs of the city', the (new) desires and requirements that life in or near the cities provoked, meant that for many, the everyday had to be so configured as to allow for time and energies to be directed towards the provision of money, and the creation and maintenance of those relationships which facilitated the acquisition of objects of desire, the use of the services on offer and general participation in the network of urban social relations. Since the more time one spends walking in the city, learning about its delights and treacheries, the less time one spends walking in the forest, learning about the same, it is unsurprising that one's knowledge of the forest does not only remain limited, but it also becomes increasingly irrelevant to acquire it in the first place.

This tension of new ways of life eclipsing older ones, and the ambivalent feelings that such changes arouse are probably ubiquitous to human history. The struggle to maintain a certain amount of permanence in the face of ever-present change, mortality and fading memory might be a contender for a universal attribute of human societies if ever there was one (cf. Weiner 1992). However, this does not make loss of traditional knowledge, customs, and practices something to be simply shrugged off as some 'natural' occurrence, or the sorrows it causes as stubborn nostalgia. The specific circumstances of loss and change will always be particular. They can be violent, disruptive and disorientating, or creeping, uniting and inspiring; they can be emancipatory or disempowering, sensitising or dulling down. They can be all or some of these things. Struggling to influence, and to participate in the shaping of these circumstances is a central aspect of collective self-determination.

The theme of loss and disappearance of traditional knowledge in the conversations during my fieldwork struck me as a kind of coat-hanger upon which people would hang their laments and grief about unwelcome changes to their collective lives – those perceived as too rapid, too asymmetric, and too destructive. The question of how to prevent this loss – or how to create a more positive kind of change? – left many feeling mystified and powerless, and some in tears. Of course, grandchildren could listen to their grandparents, teenagers could re-learn their mother tongue after having abandoned it in racism-suffused schools, and parents could take their children into the forest to gather ornamental seeds for use in handicrafts, and point out a few plants and tell their stories on the way. But in the face of oil spills, toxic rivers, disappearing

species, and the cash barrier to participation in much of contemporary life, even in the Amazon, and in the face of all other manifestations of "Euro-American developmentalism" (Whitten 2003: xi), the question of the *relevance* of 'the old knowledge' looms large.

On one occasion, I asked Maria, an elderly healer and midwife who played a key role in the establishment of AMUPAKIN (Association of traditional Kichwa midwives of Napo), what she thought about books and other ways of documenting herbal knowledge, so that her great-great-grandchildren would be able to learn about what she once knew. "My little girl" she said, "the knowledge is in the plants themselves. Write the books! Read the books! When the plants go, the knowledge goes as well. Do what you like." - "What about botanical gardens, then?" I wondered. After all, a medicinal plant garden was one of AMUPAKIN's long term aims. Maybe this would be a way to carry some knowledge into the future. "Yes, yes" Maria did not sound convinced. "The problem is, many plants cannot be cultivated. They grow weak, and they don't heal. It's the wild ones that have the power [...] And the knowledge of the forest does not grow in a garden. And the lakes, and the rivers, and the hills, and the waterfalls! This knowledge cannot be known in the books." Domingo confirmed this understanding: "Every powerful place gives us knowledge. I have got a lot of knowledge from the lakes [...] There are powerful places with much energy everywhere in the forest, special places. My grandfather took me to some of them. Every healer has knowledge from these places, from rivers, from waterfalls, from big rocks, from the hills. But now [...] The contamination finishes these places. You go to them and there is no energy. I have analysed a lot, and it seems to me that the energies

run downstream, down from the waterfalls and the hills and down the rivers, they pass by [Iquitos, Peru] and Brazil, and into the oceans. There where the contamination arrives, the energies disappear. In a short time, all that is left for us is to go to the oceans to find the energies in the sea. Otherwise, all that knowledge will be lost." ¹⁵⁸ (I did not have the heart to tell him that the oceans were themselves by now so contaminated and over-exploited that ninety percent of the world's biggest fish had already vanished ¹⁵⁹.)

The knowledge valuable to these speakers is not replicable in books or other documentation. It rather speaks of an unmediated connection to certain places and plants. It is a knowledge by *acquaintance* rather than a knowledge by *description* (Russell's distinction, 1911, following Grote 1865, Helmholtz 1868, and James 1890 ¹⁶⁰); it is through acquaintance with things that their particular powers – or energies – get imparted, a process that creates knowledge. Because such knowledge only comes

¹⁵⁸ See also Kimerling 2006: 466-467 for an account of Huaorani beliefs in the weakening of healing powers due to environmental contamination.

According to a 2003 study of *Nature*. Worse things have happened to the oceans, but this was one of the numbers I had available in my memory as I was scribbling in my notebook.

William James explained the distinction between what he saw two fundamentally different kinds of knowledge as follows: "I am acquainted with many people and things, which I know very little about, except their presence in the places where I have met them. I know the color blue when I see it, and the flavor of a pear when I taste it; I know an inch when I move my finger through it; a second of time, when I feel it pass; an effort of attention when I make it; a difference between two things when I notice it; but about the inner nature of these facts or what makes them what they are, I can say nothing at all. I cannot impart acquaintance with them to any one who has not already made it himself I cannot describe them, make a blind man guess what blue is like, define to a child a syllogism, or tell a philosopher in just what respect distance is just what it is, and differs from other forms of relation. At most, I can say to my friends, Go to certain places and act in certain ways, and these objects will probably come" (1890: 221).

into being through *experiencing* a particular place or object, through interaction and contact, a book could never transmit it. Acquaintance with a book about the Amazon, its paper, ink, and glue, is on this account *knowing the book*, and not *knowing the Amazon*. (This distinction, although hidden by the equivocal character of the English word *to know*, is made in many languages, such as in Latin *noscere* and *scire*, German *kennen* and *wissen*, Spanish *conocer* and *saber*, and French *connaître* and *savoir*.)

The only way to 'protect' this particular knowledge, in the sense of ensuring its continued existence throughout the change of generations, is to enable people's acquaintance with these places and plants and other objects of value. The primary threat to such knowledge is the disappearance of those objects through the interaction with which it is created. The deterioration of the value of these objects (through their contamination and domestication, for example) will also diminish the value of the knowledge they can impart, and thereby constitute a kind of threat to be prevented. Another threat is irrelevance. Even if valuable places and plants continue existing, if the role which they play in people's lives is eroded, acquaintance with them becomes meaningless. It is hence not just the continued existence of the places and plants, but the meaningful relationships which peoples maintain with them that is of importance in this context. As such, ways of life that integrate relationships to such objects of value ensure the relevance of this kind of knowledge, a prerequisite for any form of protection to make sense at all. This raises the question, however, whether payments through bioprospecting contracts might be a way to overcome the increasing irrelevance of 'traditional knowledge' to most people's lives. After all, if the 'life of the city' takes people away from the forest and older forms of livelihood, then maybe

it is as part of the 'life of the city' that the relevance of traditional knowledge must now be revived. The ProBenefit initiative was based on a version of this view: economic benefits will provide the best, and indeed the only kind of incentive for people to value and preserve their traditional knowledge in a changing world. The problem with this perspective is that the 'value' and 'relevance' which knowledge of and acquaintance with plants and other things then carries, would be determined by its economic content. The 'power' or 'energy' which things are understood to impart is likely to get lost when the main point for getting to know them is the fact that money can be made from such acquaintance.

5.3.4 Patently Recognised.

In April 2007, ASHIN was approached by the director of the teaching module and research cluster on 'Genetic Resources and Ancestral Knowledge' of the *Pontificia Universidad Católica*, and enrolled in a project on the protection of ancestral knowledge that was meant to provide legal recognition to ASHIN for its members' knowledge about medicinal plants in return for a set of arrangements regarding student research opportunities and a botanical garden maintained by ASHIN as an *in situ* herbal collection for the university. Through the process of engagement with this project, and with the students and staff members of the university, Domingo's understanding and use of the idea of protecting traditional knowledge developed new facets: "The foreign pharmaceutical companies come here and they steal our knowledge. We need to get our own patent, so that they know that it is we who are the owner, so that they cannot just take it away from us as they have always done with everything that is ours."

So, theft as threat and patents as protection? I asked who exactly would be the patent holder, and when "ASHIN" was the answer, raised the problem of authoritative representation of a whole people. Why ASHIN? On whose mandate could they claim ownership of traditional Kichwa plant medicines? What would those healers think who were by choice not affiliated to ASHIN? What would other associations of shamans do when they heard ASHIN had such a patent? Domingo stated in a defensive tone that they would of course hold the patent "on behalf of the whole of the Kichwa people", but that it might indeed create tensions, and that they would have to think about how best to go about this. He would call for a meeting with all the leaders of the various Kichwa federations of the lowlands. He had already thought about that, in fact. I also explained that patents were only granted for 20 years, and that the costs of filing, monitoring and enforcing a patent application could be enormous. While applying for a patent costs usually just a few hundred dollars, lawyer's fees easily extend into tens of thousands of US dollars. Moreover, in order to prevent others from copying one's invention, it is necessary to file applications in several countries: "A rule of thumb is that it will cost approximately US\$100,000 to adequately protect an invention internationally" (Carolan 2009: 6). And this would not be the end of one's expenses. Monitoring patent infringements is time-consuming and expensive. The biotechnology giant Monsanto is said to have an annual budget of US\$10 million to police infringement (Kimbrell and Mendelson 2004: 4). Lastly, for patents to be useful 'protection' in cases of conflict, they would also have to be enforced in court. The American Intellectual Property Law Association has estimated that in 2000 alone, USbased companies spent \$4 billion on patent litigation (AIPLA 2001).

Even though I did not flood him with exact numbers and references at the time, Domingo remained quiet. He leafed pensively through his leather-bound diary with the gold imprint '2002'. To be in possession of a diary, no matter from which year, seemed to be a way to signal worldly importance and know-how, I had noted in my dealings with male leaders of the indigenous movement, and I was hoping at that moment that I had not unsettled his feelings, or upset his self-esteem. It was not always easy for many of the male leaders of indigenous organisations to consider the advice or opinions of a relatively young, childless woman like me. (That was one of the ways in which the Amazon and its people resembled most other places and their inhabitants that I have come to know in my life time.) The point was that the director of the University programme had suggested to Domingo they make a list of the main plants known and used by members of ASHIN, and have this list attested by the public notary as a way to certify ownership until effective legislation with regard to the protection of traditional knowledge was passed nationally. The idea struck me as dubious – after all, what a notary attests is the authenticity of a document, and not of intellectual property claims – but Domingo had put a lot of hope in this 'patent'. "With the notarised list, we can show the proof that this is our knowledge. Nobody can come and say we don't know anything. With the help of the University we can build the clinic of natural medicine, finally. Then we can practice our medicine, and defend our knowledge. Step by step they realise what we know."

Domingo expanded on "the proof that this is our knowledge" by adding that "nobody can say we don't know anything." The racist stereotype still pervading most of

Ecuador is of course that indigenous people are generally backward and ignorant, a perspective which most of the indigenous people whom I got to know would position themselves against at one point or another. Recognition for their knowledge, for the fact that they knew something, and for the fact that they knew things that were particular, special, and indeed characteristic of their particular existence, history and culture, was a desire expressed many times. The term 'our knowledge' was often used, it seemed to me, to express relations of identity rather than a claim to the right to dispose of such knowledge at one's will (which is the dominant interpretation of the rights that private property relations entail).

What is important to note here is the sense in which the possessive pronoun ('our') can imply a notion of property as *characteristic* as well as *ownership* (the difference is made clearer in German, in the difference between the words *Eigenschaft* – property, characteristics – and *Eigentum* – property, ownership). To find ways to 'prove' that 'this knowledge is ours' was, I believe, a way to insist on the value of (in this case) Kichwa identity, at least as much as it might have also been a way to lay claim to some of the rights that ownership confers. The struggle for *recognition* of one's value, including the value of one's ideas, one's understanding and one's creativity – one's knowledge, that is – especially in the face of discrimination, marginalisation, and exclusion, easily takes on a significance that is more fundamental than the struggle for *protection*.

Highlighting the value of traditional knowledge is a major part of making the case for its protection. To call for the protection of something always entails an (implicit)

claim about its value. Similarly, it cannot be ignored that the struggle for recognition might be the main driver behind calls for protection, that establishing protective strategies and putting them in place might be perceived as ways of signalling recognition, as ways of manifesting recognition in the world, and that hence recognition is what protection is mainly about. After all, recognition is something largely intangible, and (inter-)subjective. It is hardly enough to *state* one's recognition of something ('I think you are clever' or 'I value your intellect'), unless it also reveals itself in the world, in one's behaviour (such as in my asking you for advice, or consulting you about certain subjects, promoting you if I am your boss, or maybe applauding at the end of a speech you hold). Of course such manifestations (especially applause) can also feign a recognition, which really does not exist (I might ask for your advice just to make you feel valued, and maybe lend me some money somewhere down the line, and in fact, I might never act on your advice). However, for recognition to become *real* for someone, it needs to show itself in the world, it needs to leave signs and make marks that can be perceived. Passing legislation that protects traditional knowledge (in whichever particular sense of protection) can be, or seem like, a sign of recognition of its value. Yet this recognition could also manifest in alternative ways, and so we have to ask whether the legal protection of traditional knowledge constitutes the desired recognition and also what kind of value it actually recognises.

5.4 The Focus on Theft.

Inherent in Domingo's ideas about patents, however, was also the understanding that certain injustices ('stealing our knowledge') were being perpetrated by, for example, pharmaceutical companies, which a patent might prevent. This view that traditional knowledge is threatened by, and hence needs to be protected from unapproved appropriation and subsequent commercial exploitation animates and dominates the debates in international policy making for aconcerned with traditional knowledge. As I have argued, in most of the literature and activity concerned with 'the protection of traditional knowledge', protection is understood as referring to strategies and measures that prevent the unapproved appropriation and subsequent commercial exploitation of traditional knowledge. Where the threat of its erosion and loss is recognized, it is rarely treated on its own terms, but rather in conjunction with the threat of misappropriation and economic injustice, leading thus to recommendations for protection that construe and institute traditional knowledge as intellectual property of the respective indigenous community. This is an interesting phenomenon given that intellectual property rights - despite their unprecedented economical and political significance in the current so-called 'knowledge-based economy' – have never been more controversial (Dutfield 2003).

However, as already argued in Chapter 2, the vast majority of critical commentary is directed at the causes and effects of the current and globalising form of intellectual property protection, and only very few voices, if any, question such principles as are, for example, encoded in Article 15.1.3. of the United Nation's International Covenant on Economic, Social and Cultural Rights. This states that "The States Parties to the

present Covenant recognize the right of everyone to benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author." Authorship in this broad sense has to do with genesis and creation, and the labour necessary to bring things to fruition, all of which are usually understood as creating special moral relations between the subject and object of authorship or other productive labour, more precisely, special property relations. This view of property as the right of authors and creators harks back to John Locke's ruminations on property. In his *Second Treatise on Government*, John Locke maintained that even though God gave the world to all humanity in common, persons own themselves and therefore their own labour. "Whatsoever ... [a man] removes out of the State that Nature hath provided, and left it in, he hath mixed his Labour with" (1690: Chapter V, Sec. 27¹⁶¹), and hence it becomes his property. Locke's are some of the better known early thoughts on property as a natural right of persons, but it is of course in particular through the string of modern declarations of rights that property came to be instituted as a *natural*, *inherent* and *inalienable* right of human beings¹⁶².

¹⁶¹ Locke's *Second Treatise of Government* is available online at http://www.constitution.org/jl/2ndtreat.htm; and the Section in question is available at http://www.constitution.org/jl/2ndtr05.htm. Last Accessed 12 March 2010.

As a reminder, let me cite here the following: *The Virginia Declaration of Rights (1776)*, *Article I*: "That all men are by nature equally free and independent, and have certain inherent rights, of which, when they enter into a state of society, they cannot, by any compact, deprive or divest their posterity; namely, the enjoyment of life and liberty, with the means of acquiring and possessing property, and pursuing and obtaining happiness and safety"; *The French Declaration of Rights of Man and the Citizen (1789)*, *Article II*: "The goal of any political association is the conservation of the natural and imprescriptible rights of man. These rights are liberty, property, safety and resistance against oppression"; *The U.S. Bill of Rights' Fifth Amendment*: "No person shall be ... deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation".

In the context of *intellectual* property, this aspect, the special moral relation between creation and creator, is rarely called into question. This must be due to its deep rootedness in modern conceptions of 'tangible' property that have become nigh impossible to criticize. Even James Boyle, famous for his attack on the myth of the 'romantic author or lone inventor' that underlies most justifications for intellectual property protection, questions intellectual property relations not because he does not accept the moral force of authorship or creation, but because he sees contemporary intellectual property rights protecting creations that are very rarely those of a 'romantic author or lone inventor' (Boyle 1996). Whatever the reasons for this unquestioned link may be, in the case of traditional knowledge, authorship and property are crucial vehicles in contesting the current distribution of the power to control the dominant flow of economic and extra-economic benefits resulting from its use. Without the concept of authorship and its concurrent property relations, the critique of the dominant treatment of the issue of protecting traditional knowledge, as it stands at the moment in theory and action, would be very thin indeed. For the time being, then, calling for the protection of traditional knowledge is almost always calling for a more coherent application of intellectual property rights norms. It is insisting on the enjoyment of intellectual property as a universal human right, and implying the potential of diversity in its realisation.

It is in this way that I understand the discourse of the protection of traditional knowledge to be a colonising discourse. It is colonising in the sense that it installs a particular meaning of its key terms, thereby invading, taking over, and settling the

understanding of these terms. This discourse is colonising in the sense that it only articulates one particular way of understanding the protection of traditional knowledge, even though we have seen that talk of protection of traditional knowledge provokes a variety of concerns for people and in turn is used to frame and formulate these. Some of these alternate understandings of what the protection of traditional knowledge means and what is at stake in its realisation are not simply different to, but in fact conflict with the colonising discourse of intellectual property and 'theft', in that they challenge some of its fundamental assumptions. When 'taken seriously' – that is, when we start to sincerely explore their implications – these challenges might force us to revise deeply ingrained ways of understanding such fundamental notions as property and knowledge, with radical consequences for contemporary social organisation in so-called knowledge-based capitalism.

Joan Martinez-Alier (2002) has argued that ecological distribution conflicts are often fought in idioms other than market valuation, making use of notions of "the ecological value of ecosystems, the respect for sacredness, the urgency of livelihood, the dignity of human life, the demand for environmental security, the need for food security, the defence of cultural identity, of old languages and of indigenous territorial rights, the aesthetic value of landscapes, the injustice of exceeding one's own environmental space, the challenge to the caste system, and the value of human rights" (Martinez-Alier 2002: 150). In this way, the struggle surrounding the protection of traditional

Arturo Escobar (1995) describes the expansion of the discourse of sustainable development as the semiotic conquest of nature by capital relations. Through bioprospecting this semiotic conquest is extended into the realm of indigenous and peasant peoples' knowledge, practices and seeds (Brush 1999).

knowledge is not only a struggle regarding access over resources, but also a struggle over meanings and values: "in field or factory, ghetto or grazing ground, struggles over resources, even when they have tangible material origins, have always been struggles over meanings" (Guha & Martinez-Alier 1997: 13). However, the problem is that often the voices that are most clearly heard and whose concerns are taken most seriously are those who couch their demands in a language of valuation that resonates with the ultimate decision-makers. While it can be strategically wise to encode one's message in terms of the dominant economic discourse in order to be heard, this also runs the risk of diluting one's original grievances and visions for alternatives and social change.

Domingo's sudden conviction that a 'patent' would be the solution to the wide variety of issues that he had himself previously framed in and expressed through the idea of the protection of traditional knowledge leads me to the following two interrelated points in conclusion to this chapter. First, the attraction of 'private property' is not to be underestimated. I have indicated in Chapter 2 how private configurations of ownership lie at the heart of the capitalist mode of production. Their appeal to individuals and defined groups is possibly the most powerful engine of the circuit of capital. Second, Domingo's conviction involved him and other members of his association losing sight of the ways in which some of their concerns would not be addressed at all by the spurious promise of a notarised list as proof of knowledge ownership. Once the promise of private property appears on the horizon, alternative concerns and values seem to fade in its light. For these reasons, this thesis is also an appeal to the indigenous movements of Ecuadorian Amazonia and beyond to not

overplay the 'discourse of theft', which drowns other ways of explaining what is at stake and other ways of demanding change. The larger and more varied vocabularies of protest become, the more discursive possibilities there will also be to illustrate the fact that values are largely irreducible to, and sometimes even incommensurable with one another, hence illuminating what John O'Neill (1993) calls the "weak comparability of values". That is to say that the more ways we find to express the plurality of values which exist in the human world, the easier it will be to dispute that a singular (monetary) value can make commensurable the many goods and bads which affect people's lives as well as the more-than-human world.

This point also addresses Bernard William's call: "There is great pressure for research into techniques to make larger ranges of social value commensurable. Some of the effort should rather be devoted to learning—or learning again, perhaps— how to think intelligently about conflicts of value which are incommensurable" (Williams 1972: 103).

As contributors to the scholarship of ecological economics have repeatedly pointed out, while incommensurability, or the absence of a common unit of measurement across plural values, entails the rejection of monetary (or any other) reductionism, it does not imply incomparability (O'Neill 1993; Martinez-Alier 1995; Martinez-Alier, Munda & O'Neill 1998). It allows for the comparison of different options, however such comparison has to take place without recourse to *a single* type of value. This means that irreducible value conflict is unavoidable, but that even under such conditions of value conflict, choices can be made by employing practical judgement

and intelligent discussion. This is what O'Neill has called the weak comparability of values (O'Neill 1993).

Pointing out the irreducible incommensurability of values has long been part of the tradition of ecological economics. As far back as 1919, Otto Neurath wrote:

"The question might arise, should one protect coal mines or put greater strain on people? The answer depends for example on whether one thinks that hydro-electric power may be sufficiently developed or that solar heat might come to be better used, etc. If one believes the latter, one may 'spend' coal more freely and will hardly waste human effort where coal can be used. If however one is afraid that if one generation uses too much coal thousands will freeze to death in the future, one might use more human power and save coal. Such and many other non-technical matters determine the choice of a technically calculable plan . . . we can see no possibility of reducing the production plan to some kind of unit and then comparing the various plans in terms of such units" (Neurath 1973: 263).

The institutional economist Karl William Kapp concurred:

"To place a monetary value on and apply a discount rate (which?) to future utilities or disutilities in order to express their present capitalised value may give us a precise monetary calculation, but it does not get us out of the dilemma of a choice and the fact that we take a risk with human health and survival. For this reason, I am inclined to consider the attempt at measuring social costs and social benefits simply in terms of monetary or market values as doomed to failure. Social costs and social benefits have to be considered as extra-market phenomena; they are borne and accrue to society as a whole; they are heterogeneous and cannot be

compared quantitatively among themselves and with each other, not even in principle" (Kapp 1983: 49).

Because it is impossible to know how to give present values to future, uncertain and irreversible contingencies, and because such values depend on the allocation of property rights and the distribution of income even now, the economy lacks a common standard of measurement (Martinez-Alier 1995). It is for this reason that ecological economists such as Joan Martinez-Alier champion the importance of diverse environmental and social movements, which give voice to the diversity of values that need to be taken into account as human beings are making decisions of increasingly global effect.

As this chapter has illustrated, the value of traditional knowledge, and its concomitant understanding of threat and need for protection, can take a variety of forms all of which express real concerns of people. The discourse and practice of such initiatives as ProBenefit has the effect of silencing the diversity of values and making the protection of traditional knowledge commensurable with the global market economy. Yet without the legal, political, economic, cultural and philosophical recognition of the values of indigenous people, and without the value conflicts arising from such recognition, the protection of traditional knowledge rings hollow at best.

6 Conclusion.

In this thesis we have seen that the war against subsistence which capital wages destroys the conditions in which traditional knowledge is created, used, and reworked, and thereby the context in which it is directly meaningful and relevant to people's lives. Bioprospecting endeavours and the Access and Benefit Sharing agreements which they require constitute, no matter how fair and equitable, one of the ways in which the expansion of capital manifests today. Paradoxically, Access and Benefit Sharing agreements are also promoted and implemented as one of the key mechanisms for the protection of traditional knowledge. It is in this way that I have argued that this hegemonic construction of the protection of traditional knowledge contributes to the destruction of the very foundations of traditional knowledge. For it is in the domain of autonomous subsistence that traditional knowledge is developed, made meaningful, used, and changed. The domain of subsistence consists of the practices of selfprovisioning through which the everyday needs of people are fulfilled, and through which their desires are shaped and addressed. It consists of the everyday lives of people and their interactions with each other and the environments they inhabit which are not characterised by market exchange nor market rationalities and values. As the dominant form of traditional knowledge protection contributes to the expansion of capital, it also contributes to the destruction of the conditions of the very existence of traditional knowledge.

To make this argument has been one of the key ways in which I have aimed to contribute to a destabilisation of the hegemonic construction of the protection of traditional knowledge as a form of intellectual property protection. In order to make

my case, I have provided some theoretical tools in Chapter 1. I have discussed the war against subsistence as an integral aspect of capital and its expansion. I have discussed the autonomist Marxist notion of capital as value practice, and the concomitant understanding that alternative value practices constitute an 'outside' of capitalism; subsistence practices of indigenous and peasant peoples thus create and re-create this outside, constituting a domain into which capital seeks to expand. I have also discussed Polanyi's notion of the double movement of capitalism, and the way in which movements for market expansion are constrained by countermovements aimed at protecting social and environmental interests against the ravages of unfettered accumulation.

Chapter 2 has fulfilled two functions. Firstly, it served to illustrate the way in which the double movement dynamic manifests in different contexts. This has shown how the 'countermovements' to market expansion are not always bottom-up movements of resistance, but rather constitute a confluence of reactions from different social strata to the socially (and environmentally) detrimental effects of capital and colonial expansion, which simultaneously challenges and contests as well as reproduces and legitimises the latter. What is more, it has illustrated the way in which the double movement dynamic can come to collapse into a singular movement of market expansion which has already incorporated — and thereby disarmed — its countermovements; I have argued that this is the case in the context of sustainable as well as participatory development. Secondly, Chapter 2 also served to illustrate the histories of political struggle which constitute the five fields without which the protection of traditional knowledge would not be an international imperative with the

particular shape which it has today. I have argued that the fields of (i) International Law and the Politics of Indigeneity, (ii) Conservation of Biological Resources, (iii) Intellectual Property, (iv) Safeguarding of Cultural Heritage, and (v) Public Participation in Development and Governance together constitute the genealogical origins of traditional knowledge protection as a form of property protection. Such a historical view serves to further destabilise the hegemonic understanding of the protection of traditional knowledge by placing it in a context of political struggle, making visible the way in which the protection of traditional knowledge is itself a field of struggle characterised by the double movement.

Approaching the protection of traditional knowledge from a critical perspective, which aims to take into account the views of the so-called knowledge-holders themselves, requires a historical perspective which identifies bioprospecting as one of a wider set of activities impinging on indigenous peoples' lives. In Chapter 3 I have provided the background for such a historical perspective by outlining a political economy of extraction and colonisation in the Ecuadorian Amazon. From the time of the Conquest via the rubber boom to mass colonisation and oil exploitation, the indigenous inhabitants of the Napo region have experienced a variety of ways in which their labour, skills and knowledge have been used in order to serve other people's ends and to further those people's profit at the Napo Runa's expense. It was this historical context which the ProBenefit project entered in 2004. Yet the project's design and execution did not seem to take this context into account.

In Chapter 4, I have illustrated how I understand the failure to take into account historical power asymmetries to have hampered the ProBenefit project's smooth completion. As we have seen, indigenous participation stalled and made timely negotiation of an ABS proposal impossible; in the end, neither consent to nor a clear rejection of bioprospecting in Napo was obtained. I have argued that some of the problems ProBenefit had to face were moreover rooted in ProBenefit's structural inability to question some of its own fundamental assumptions regarding the value of traditional knowledge, the threats which it faces, and the most adequate strategies of protection. This inability – to do with project time frame, obligations to funders, and deep-seated cultural assumptions – also led to the (inadvertent) eclipsing of other understandings of what was at stake, even those that were clearly voiced during ProBenefit's capacity building course. Chapter 4 thus detailed a situation in which the hegemonic understanding of traditional knowledge protection manifested in practice.

Finally, in Chapter 5, I have presented and discussed a series of conversations and events at which traditional knowledge protection figured in ways very different to its hegemonic construal as intellectual property protection. By showing how the notion of traditional knowledge is interpreted in a variety of ways by its Napo Runa 'holders' – e.g. sometimes meaning spiritual power and ethical conduct, sometimes referring to the increasingly irrelevant lifeways of the older generation and its intimate acquaintance with the landscape, sometimes acting as a proxy for the value of Napo Runa culture as a whole – we have been able to see how the question of what traditional knowledge is threatened by and how it is best protected gains a fresh importance when the views of indigenous people are taken seriously. I have argued

that, by contrast, the dominant discourse of protection – the one which animates projects such as ProBenefit – colonises our understanding of what is at stake in the protection of traditional knowledge, and perpetuates background assumptions ultimately instrumental to the continued expansion of capital.

This thesis has exemplified a methodological approach which combines political economy analyses with ethnographic research in a synergetic way so as to make sense of the relationship between global processes on the one hand, and situated events, embodied practices, and lived subjectivities on the other. Choosing this approach of 'critical ethnography' has meant being able to eschew conceptualising capital as a quasi-autonomous global force, the dynamic action of which unilaterally affects passive localities and impotent people. Instead, I was able to proceed from an understanding of the relationship between capital as force and its concrete manifestations in material actualities as one of co-constitution and co-production. In this way, it was possible to understand the ProBenefit experience (as well as the historical material of Chapter 2) not just as shaped by processes of capital expansion (and its countermovements), but as simultaneously shap*ing* what capital expansion (and its countermovements) actually means in the context of traditional knowledge protection through Access and Benefit Sharing agreements.

Where do these chapters and their discussions leave us? In order to conclude, let me clarify three related points, which I believe this thesis yields and which also indicate future research areas to be explored in more depth than this thesis' scope has allowed.

First, the protection of traditional knowledge (in its hegemonic construction as intellectual property protection through ABS agreements) has to be understood as a form of capital expansion in at least four interrelated ways.

One, it facilitates the commodification of the hitherto non-commodified domain of traditional knowledge. It does so by allocating capitalist property rights over traditional knowledge (that is it offers control over access to traditional knowledge and rights to the economic benefits that accrue from its use). While it does so in an apparently just way – namely by nominally granting such rights to historically disadvantaged indigenous and peasant peoples – such allocation nonetheless serves capital accumulation as a whole. For without clear property rights – which are protected by the force of law and the state, and which can be transferred through contracts – there would be no market exchange, nor any way to accumulate profit (Berle & Means 1932; De Soto 2000). Moreover, in this way traditional knowledge holders are included into the global economy as market actors, also an aspect of capital expansion.

Two, through the practices which constitute the protection of traditional knowledge (such as the negotiations of ProBenefit) economic measurements and valuations extend into hitherto non-commercial areas of decision-making. As the voices of Chapter 5 have illustrated, traditional knowledge is, for its 'holders', much less a matter of profitability and rather one of ethical conduct and cultural values. Projects such as ProBenefit introduce capital valuations (e.g. cost-benefit, profit-loss

calculations) into an area of life which had theretofore been oriented by different values.

Three, in practice, the protection of traditional knowledge as intellectual property protection through Access and Benefit Sharing agreements is resistant to the influence of alternative views and values. We saw this in Chapters 4 and 5 when discussing the insidious ways in which ProBenefit did not respond to expressions of alternative cosmovisions, expectations or understandings. In this way, ProBenefit protected its core values from erosion.

Four, being hegemonic, the hegemonic form of traditional knowledge protection imposes its own assumptions and value system onto alternative understandings. Core (capitalist) conceptions regarding knowledge as property and property in general are thereby perpetuated, strengthened and introduced into areas hitherto free from or less oriented by these conceptions. This is the way in which the dominant discourse of protection colonises our understanding of what is at stake, eclipsing the alternative visions which exist.

These four ways in which the protection of traditional knowledge has to be understood as a form of capital expansion parallel the four ways – which have been identified by Jessop (2001; 2008) and which I introduced in Chapter 1 – in which capital can come to dominate society: (i) through commodification of hitherto non-commodified areas of life; (ii) through the extension of economic measurements to hitherto non-commercial areas of decision-making; (iii) through its systemic capacity to protect

itself from the influence of other systems with which it interacts and co-evolves, therefore reducing the possibility of its distinctive operational codes to be eroded; (iv) through its systemic capacity to induce, provoke or force other institutional orders to operate according to its logic, thus consolidating the market mechanism through time and space.

The second point which I would like to make in conclusion to this thesis flows from the observation that the double movement of market expansion countermovements is a key mechanism undergirding the continuous survival of capital. To observe, study and try to understand the double movement is hence of pivotal importance for those countermovements which aim to undermine capital rather than tie back into its homeostatic self-preservation loops of incorporating dissent by means of a less unfettered and more constrained expansion. This is especially important as 'sustainable development' and 'public participation in development and governance' have become hegemonic in most contexts. Once a countermovement's discourse has become coopted and reworked to capital's ends, such as is the case with sustainable and participatory development, its contestation becomes difficult. I have argued that in these cases we might say that the double movement has collapsed into a singular movement of restrained expansion, which is more resistant to counterhegemonic attack.

This leads us to my third and final point in this conclusion. In light of the double movement, and in particular its 'collapse' or unification, it is reasonable to argue that non-participation (e.g. as practised by participants at the capacity-building course of

ProBenefit) embodies the potential for resistance, whereas participation, however critical, easily turns into a form of surrender. As hope for the potential of radical, 'non-reformist reform' in countermovements dwindles, the autonomous Marxist idea of the outside of capital becomes crucial. For non-participation, of course, does not mean doing nothing. On the contrary, in the context of the Napo Runa of the Ecuadorian Amazon, it means to protect, support and hence sustain practices of subsistence, it means continuing to live with the forest and its plant spirits and other inhabitants in ways that are reproductive of the values and beliefs that underpin Napo Runa knowledge systems. In brief, non-participation refers to living a life and engaging in value practices which create and re-create the 'outside' of capital.

Alternative valuations are an important, indeed maybe *the main* resistance to capital. From the point of view of resistance, it is hence crucial to foster such valuations, the conditions in which they develop and through which they become meaningful. It is also crucial to promote them and carry out struggles and frame demands in idioms that transcend the language of market valuation ('capital's measure'). Joan Martinez-Alier (2002) has shown how many social movements already use such alternative valuations to frame their grievances. It is increasingly important, however, to practice them. The alterglobalisation insistence that 'other worlds are possible' (e.g. Juris 2005) bears a promise that we may actually come to realise – but solely through such alternative value practices.

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