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STRATEGIES, MEANINGS AND ACTOR-NETWORKS: COMMUNITY-BASED BIODIVERSITY CONSERVATION AND SUSTAINABLE DEVELOPMENT IN THE COMOROS

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ABSTRACT

This work examines how 'participation', one of the guiding concepts of contemporary 'discourses of development' with a manifold ideological genealogy, materialises in the ethnographic and intervention context of the Comoros and the NGO Community Centred Conservation active therein. In sustainable development and natural resource conservation and management, community-based approaches, requiring participation of people living in and around protected areas and linking conservation objectives with local development needs, now take the centre stage there as well as globally.

Policy shifts are critically conceptualised as a procession of 'narratives' – discursive formations which facilitate explaining environmental change, decision-making and the replication of adopted modes of action across space and time. Narratives can only be superseded by similarly parsimonious and convincing 'counter-narratives' of which 'community conservation' is an example. Aid-dependence, weak local administrative and research capacities and other factors promote especially quick and firm entrenchment of the narrative in the Comoros, similarly to other countries in sub-Saharan Africa.

Discourse analysis of policy argumentation framing in relevant documents on the Comoros shows that although participation features as a foundation of the solution, it tends to be pragmatically perceived as means (necessitated by the state's inefficiency) rather than an aim of conservation. Intrinsic rather than use-values of nature are often assumed as the primary rationale for conservation, as indicated e.g. by the focus on 'flagship species'. Malthusian narratives of 'overpopulation' and 'overexploitation' synthesise environmental threats. Poverty, while acknowledged, is framed in an economicist mode which largely overlooks resource conflicts and social and intra-community inequalities and suggests technical fixes. The state's weakness is taken as given and political processes as beyond the scope of conservation and development, yet more efficient law enforcement (rather than the delivery of other public services) is requested.

Attention is equally paid to implementation, which is showed by an actor-oriented anthropology of development to be a socially constructed and negotiated process rather than straightforward execution of a plan of action with expected outcomes. The paper looks at the interactions between official representations and everyday 'strategies' of various participants. It evades the assumption that conservation and development practitioners and local people and 'development agents' inhabit clearly separated institutional and knowledge worlds and questions 'how development projects – always unforeseeable – become real through the work of generating and translating interests, creating context by tying in

supporters and so sustaining interpretations' (Mosse & Lewis 2006: 13). Ethnographic interpretation of C-3's activities in Mohéli inspired by the Actor Network Theory has identified some strategies and 'translations' between various actors involved in 'hybrid' (human/natural) 'actor-network' constructions. C-3 attempts to control these constructions and largely succeeds in establishing its importance and defining community/ C-3 partnerships as 'obligatory passage points' in the 'problematisation' phase. However, the passage from the latter to an efficient 'interessement' and successful 'enrolment' and 'mobilisation' proves more problematic. The efficiency of interessement devices is debatable and local actors often resist (or attempt to capitalise on) their enrolment by pursuing their own strategies.

1. Introduction

The domains of development and anthropology have arguably left behind a period of mutual marginalisation. Mainstream development discourse, informed by the long-standing critique of its top-down practices from anthropological and other quarters, seems more enlightened than ever, if we were to judge only by the prevalence of buzzwords such as 'participation' or 'empowerment' (Mosse & Lewis 2006: 6). However, the history of 'participation' in development hints at inadequacy of unduly optimistic assumptions about its political underpinnings. In the 1980s, participation has often lent itself to the imposition of cost-sharing and co-production of services on 'communities' under grim conditions of neoliberal reforms and rolled-back state. Even today, it remains susceptible to the market logic of 'good governance' agenda which seeks to 'incentivise' and make more 'accountable' public service providers, but glosses over many foci of conflict and tension between the policy objectives and actual outcomes (Cornwall & Brock 2005; Mkandawire 2005). What is sure is that the association between poverty reduction and participation has become a central component of contemporary development consensus, instantiated in key policies such as Poverty Reduction Strategy Papers (PRSPs) and Millennium Development Goals (MDGs).

Similar and interrelated trends towards more participatory approaches are in evidence in biodiversity conservation which has further become more developmental. In this domain alike, then, anthropological questioning of the ideological context of these policy shifts and of localised practices they inform is highly relevant. Herein I focus on participatory conservation efforts in the setting of an African low-income state (the Union of the Comoros) in which conditions appear especially favourable for entrenchment of this policy discourse. I draw examples from activities of the NGO Community Centred Conservation (C-3) which ranks among prominent bodies working in the field of 'community-based' marine and coastal habitats conservation in the archipelago.

This research combines (1) actor-oriented anthropological perspective on policy implementation inspired by the Actor-Network Theory with (2) analysis of policy argumentation framing environmental problems and solutions to the latter, and (3) pays due attention to transnational discourses of participatory biodiversity conservation and sustainable development to grasp their role in shaping local social processes. After discussing the theoretical apparatuses in the second and third sections, I sketch the history and current concerns around the 'narratives' of community-based conservation and natural resource management. In the fifth chapter, I briefly describe the economic and political situation in the Comoros, and then move on to analyse local applications of relevant policy

discourses in the sixth section. I explore 'strategies' and 'actor-network constructions' in interventions of C-3 and its partners in the seventh chapter, followed by conclusions.

2. Strategies and networks: actor-oriented anthropology of development

Following Olivier de Sardan (2005), we can sketchily distinguish three main bodies of literature in the contemporary anthropology of development. Broadly postmodernist and poststructuralist *discursive* approaches, although providing some important critical insights, often tend to see development as an enterprise which is monolithic, controlled from the top and convinced of the superiority of its own knowledge.

> This diabolical image of the development world pays little attention to incoherencies, uncertainty and contradictions, which are nonetheless structurally inscribed in development institutions. Moreover, these works do not take continuous shifts in strategy and policy into account. [They] seem to adopt an ideological approach to development, perceived a priori as an entity in itself, and, to be precise, as a negative entity at that (*ibid*.: 5).

Definitions of the key analytic tools – narrative or discourse – are frequently vague and, in works driven by an ideology of political correctness, actors of the South may be depicted as mere agents or victims of hegemonic development. *Populist* approaches gravitate towards their ideological pole when they idealise knowledge and practices of the developees and take their greater value for granted (e.g., Chambers 1983). Methodological populism differs from this in that it simply 'considers that "grassroots" groups and social actors have knowledge and strategies that should be explored, without commenting on their value or validity' (*ibid.*: 9). To avoid these pitfalls of 'ideological populism' as well as those of 'ideological deconstructivism', I strive to examine the production and negotiation of different development meanings and goals in *practice* from an *actor-oriented* perspective and to examine interventions as 'ongoing, socially constructed and negotiated process[es], not simply the execution[s] of an already-specified plan of action with expected outcomes' (Long & Long 1992: 35, cit. in Mosse & Lewis 2006: 10).

In this work, then, I study the interactions between the official representations in the environment-and-development nexus – the 'development language' with its dialects of 'project languages' (Olivier de Sardan 2005: 178–182) – and the knowledge and everyday strategies and practices of various actors, including conservation practitioners and local population. Although the perspective of Comorians is ostensibly incorporated by the use of participatory techniques (surveys, focus groups etc.) and organisational practices (cooperation with local environmental associations, involvement of 'communities'), it is

‘experts’ and ‘practitioners’ who initiate the participatory action and attempt to define and control the contents, means and goals of the inclusion of other actors. Moreover, we need to examine established definitions of various groups of participants, e.g. the underlying presumption that 'communities' are homogeneous and unitary as far as their goals and access to resources are concerned (the relevant literature seems to limit itself to recognising the importance of gender inequalities).

It is also pertinent to evade ‘compartmentalising’ conservation and development practitioners and local people to clearly separated institutional realms and 'worlds of knowledge' – an assumption that can prove to linger even in non-ideologically oriented actor-oriented work (Rossi 2006). I suggest that this as well as a practice-oriented analysis of participatory policies can be accomplished (besides other possible means) by drawing on the Actor-Network Theory (ANT) and its key concepts of 'translation' and ‘actor-network’, which lead us to question 'how development projects – always unforeseeable – become real through the work of generating and translating interests, creating context by tying in supporters and so sustaining interpretations' (Mosse & Lewis 2006: 13). The result of translation between various, often contradictory goals, is conceptualised as an *actor-network*; a transient entity which is simultaneously a network and (for certain purposes) an actor, and which includes human and non-human 'actants'. In the anthropology of development, special attention must be therefore paid to '*development agents*' (e.g., local environmental associations, participating individuals) and their crucial role in translating between different knowledges and interests and thus sustaining the whole development actor-network (Olivier de Sardan 2005: 169–172).

Such a perspective is all the more insightful for the present case when we consider that it concerns drawing complex mental linkages between entities such as animals, habitats and human individuals and groups, and that within these emergent actor-networks, organisations such as C-3 explicitly present their role as one of mediators. Actor-networks of this kind can be analysed as ‘*hybrids*’ (Latour 1993) which make an appearance of objective, unproblematic and unified entities, but in fact reveal a diversity of historic perceptions and perspectives of different actors. Latour argues that the capacity to separate ‘society’ from ‘nature’ and construct rational explanations of their causal interrelations depends on a dichotomy of ‘purification’ which opposes human and non-human worlds as two distinct ontological spaces. Paradoxically, purification is in turn only enabled by drawing on hybrid (human/non-human) concepts, and its dualisms thus necessarily remain simplistic. Latour proposes to focus on translation – the process of establishment of networks of natural and social entities – instead of purification, in order to disclose the inductive and experiential construction of seemingly universal and factual representations of nature-society interactions.

An inspiring ANT-based approach coined ‘sociology of translation‘ by Callon in his

seminal paper (1986) is very relevant to an analysis of the problem on hand, not least because it has been formulated to analyse a similar research situation. Callon examined the development of social relationships around the issue of scallop over-exploitation by fishermen in a Normandy bay and ensuing depletion of stocks (the parallel with the over-exploitation of natural resources, especially marine, in the Comoros is striking). Initially, very little information was available on the reproduction of scallops, and therefore there existed no direct links between their larvae and fishermen. These were gradually established through actions of three marine biologists who set out to examine possibilities of controlling the reproduction and thus population of scallops. Some ten years later, a 'scientific knowledge' was constituted and social groups of the fishermen of the bay and specialists studying scallops and their potential domestication were formed. Callon traces the simultaneous production of knowledge and construction of a network of relationships between natural and social entities in a process of *translation* 'during which the identity of actors, the possibility of interaction and the margins of manoeuvre are negotiated and delimited' (*ibid.*: 203). He identifies four phases of translation whose descriptions I abstract from the original context to facilitate their transposition into our setting:

1. *problematisation* is a stage in which the researchers strove to 'become indispensable': not only had they formulated central questions about the scallop reproduction to which they afterward sought answers, they also 'determined a set of actors and defined their identities in such a way as to establish themselves as an obligatory passage point in the network' (*ibid*.: 204). This proces involves two aspects:
    a) mutual interdefinitions of the actors (and a self-definition of the researches themselves): a system of alliances or 'associations' between all these was described. In this respect, the problematisation 'touches on elements (...) which are parts of both the social and the natural worlds' (*ibid*.: 205);
    b) the definition of 'obligatory passage points' (OPPs): researchers have also argued that it is beneficial for all the actors to cooperate on the proposed research programme;
2. *interessement* is a stage in which researchers endeavored to 'lock the allies into place' and confirm (at least partially) the validity of the problematisation and its implied alliances. This was necessary because entities engaged by the problematisation can accept their integration into the original plan of action, or refuse this by defining their identities, interests and aims differently. The actions of interessement, then, are attempts to impose and stabilise the identities of other actors; from the researchers' point of view, to be in-between (*inter-esse*) means to be interposed: 'To interest other actors is to build devices which can be placed between them and all other entities who want to define their identities

otherwise' (*ibid.*: 208);

3. *enrolment* is a stage preoccupied with defining and coordinating the roles. Not even convincing arguments of a problematisation and efficient devices of an interessement guarantee actual alliances – that is, enrolment. Questions need to be transformed into a series of affirmative statements and devices need to be designated for defining and attributing a set of interrelated roles to actors who accept them in the course of multilateral negotiations;
4. the *mobilisation* of allies centres on questions about the representativeness of spokesmen. While in each group of actors a few individual representatives are designated in a series of intermediaries, the key question is whether the masses will follow them. To mobilise allies is to render previously immobile (e.g., dispersed and not easily accessible) entities mobile so that at the end, researchers were able to express what these were and wanted on their behalf: 'Through the designation of the successive spokesmen and the settlement of a series of equivalencies, all these actors are first displaced and then reassembled at a certain place at a particular time. This mobilization or concentration has a definite physical reality which is materialized through a series of displacements' (*ibid*.: 216–217) – scientific reports and project proposals are examples of such mobilisations.

Mobilisation brings us to the very essence of translation: to translate is to displace, but also to set up oneself as a spokesperson for other entities in the actor-network, to put oneself in a position of being able to articulate in one's own words what they say, what are the motives and aims of their actions and how they mutually link up. What this may or may not achieve (because translation is 'a process before it is a result') is that '[a]t the end of the process, if it is successful, only voices speaking in unison will be heard' (*ibid*.: 223).

Besides examining processes of translation, this work also enters into the domain of local organisational forms, and an interpretive, actor-oriented, post-structuralist framework to the study of these developed by Nujiten (among others) will be adopted as a guidance. For the related rural development literature, Nuijten has noted a lack of theoretical understanding of 'how people strategically organize themselves in their everyday lives' (1992: 189). She argued that both 'social systems' approach founded on Weberian notions of formal bureaucratic rationality and organisational models as well as another, strongly political strand of literature, which sees local organisations as key in the struggle for 'empowerment of the poor', are normative and oriented to utilitarian criteria (Nuijten 2001).

In her research on *ejidos* (agrarian cooperatives in Mexico), Nuijten demonstrates that for peasants, the *ejido* is not an abstract institution but 'a historical set of relations relating to certain resources, conflicts and settlements that took place in different arenas and evolved over time' (Nuijten 1992*:* 197). She focuses on '*strategies*', conceptualised as emanating from the habitus or 'everyday practical consciousness' and referring to a

coherence in the way people cope with often unpredictable livelihood problems and manage their resources by undertaking their own social projects and establishing their own organisational patterns. This means approaching organisations not as formalised and stable entities with a set of singularly understood collective goals, but as open-ended processes harnessing formal and informal elements and often fraught with conflict. It is necessary to direct attention to how organisational forms are created and continually reshaped and to study also organisational discourses (although the distinction between discourses and practices is merely analytic) because 'the way symbolic elements are used and manipulated by different actors forms part of the understanding of the organizing process' (*ibid*.: 204).

3. Meanings and frames: discourse analysis of conservation and development policies

Below, I provide a historic outline of the movement in conservation policy thought away from ‘fortress conservation’, justifying the preservation of habitats and species by an intrinsic value of nature, towards more participatory and developmentalist models, which became something of an orthodoxy by the late 1990s. In a critical perspective, these changes can be conceptualised as a procession of '*narratives*', particular discursive formations which shape environmental thought and action (Roe 1991, 1995). They enable policy makers and planners to formulate 'simple and optimistic (and sometimes naive) assumptions that seek to provide plausible explanations of how to avoid uncertainty' (Adams & Hulme 2001: 8) they are dealing with. They also facilitate decision-making about appropriate modes of action and the extension of adopted approaches to a broad range of spatial and temporal contexts.

Narratives are akin to '*environmental orthodoxies*', defined as institutionalised policy explanations of environmental change which persist even in the face of mounting evidence to reject or redefine them (Leach & Mearns 1996; Forsyth 2003). They display following characteristics: 1. they are frequently vague claims or 'received wisdom' rather than narrowly defined scientific theories; 2. their critical reviewing tends to be perceived as inimical to the bases of popular environmentalism as it raises questions about the role of human action in environmental degradation; 3. their discussion implies questioning scientific realism; and 4. they have potentially significant impacts on affected groups (Forsyth 2003: 37–43). 'Deforestation', 'soil erosion', 'desertification' or 'overpopulation' are all recurring examples of such environmental orthodoxies or narratives. They can be only superseded by similarly parsimonious and convincing 'counter-narratives' that tell 'a better story' (Roe 1991: 290); point-by-point rebuttals lack the structure of a story. ‘Participatory’ or ‘community-based conservation' can be seen precisely as such a counter-narrative, whose two key components are first, the imperative of participation of people living in and around protected areas in the management of resources in question, and second, the link between conservation objectives and local development needs (Adams & Hulme 2001: 13).

Linear constructions of the evolution of policy emphases such as the one offered below may seem excessively textualist and concerned with few big actors and oft-quoted documents. Moreover, surely even detailed analysis of successive discursive fashions can tell us little about much more unpredictable and ambiguous developments on the ground. It is nevertheless worthwhile to pay attention to global environmental narratives and orthodoxies because these are resources available to institutions and individuals involved in policy planning and implementation to be picked up and applied in the form of 'frames' on

problems that they deal with and solutions they promote.

Frames are generally implicit assumptions rather than explicit policy positions or choices they inform, and they influence the nature and purpose of empirical knowledge underpinning policies by 'problem closure' – 'the pre-definition of the purpose of inquiry [which] is consequently effectively the transcendental structures that establish the basis of empiricism' (Forsyth 2003: 78). Another process involved is the 'labelling' of 'target groups' of policies as their passive objects, which serves the legitimisation of top-down interventions (Wood 1985). The label of 'rural poor' has been frequently applied to represent local settlers as ignorant instruments of environmental degradation or, somewhat later, as unwilling instruments, forced to adopt unsustainable practices by poverty (Fischer *et al.* 2008: 21). Policy-speak also heavily draws on tropes to trigger powerful and yet often implicit meanings, and it tends to use currently fashionable 'keywords as banners [or] slogans to parade grand strategies' (Gasper & Apthorpe 1996: 8). Clearly, 'participation' may in some instances become subject to such usage.

In a manner similar to Forsyth, Gasper (1996: 47–53) narrows *argument framing* to matters of inclusion and exclusion and the perception of alternatives and constraints and usefully proposes to look at following seven interrelated aspects of framing, some of which will be taken up as an analytic tool kit for our purposes:

1. *time horizons* applied in identifying and assessing effects of policies;
2. *scope* used in project analyses – this influences which types of *causes* and *effects* and their connections get attention; although some selectivity is always necessary, it should be consistent and defensible;
3. the distribution of the *burden of proof* which concerns whether a policy or a threat has to be sufficiently proved or disproved, and why are certain things considered self-evident or 'natural';
4. the choice of *baseline* against which something is judged as an improvement or a deterioration: 'Conflicts often involve different views over how things would be in the absence of the feature that is in dispute, and these typically depend on conceptions of how things *could* and *should* be' (*ibid.*: 49);
5. the choice of *alternatives* which are compared with an actual situation, and how they determine its evaluation;
6. the range of *means* deemed appropriate and legitimate, and ideas about how they work – this also involves discussion of which variables can be changed and which must be accepted as given; in the present case, this point is linked to the aspects of scope and alternatives;
7. similar to this, underpinning most normative disputes is the issue of *constraints*, i.e. conditions to be taken as *given*.

4. The narratives of community-based conservation and natural resource management

In the same time as ‘participation’ was taking the centre stage in development discourses, the need for 'stakeholder analysis' and active involvement of 'communities' with their 'traditional knowledge' has become an important theme in the fields of sustainable development and natural resource and environment management and conservation (e.g., Baland & Platteau 1996, FAO/UNDP 1998). Policy thought has transformed from 'fortress conservation', which originated in the colonial era and proceeded by the establishment of protected areas and heavy-handed exclusion of locals from their use, to early Integrated Conservation and Development Projects (ICDPs) of the 1970s, to a present variety of community-based conservation and natural resource management (CBNRM) approaches.

These historic shifts have to be related to the criticisms of global conservation concerns as attempts to deprive inhabitants of developing countries of control over their livelihoods and natural resources. Emery Roe (1995: 1066) has interpreted narratives of overpopulation, over-utilisation of scarce resources and environmental crises in Africa as 'the primary means whereby development experts and the institutions for which they work claim rights to stewardship over land and resources they do not own'. In a perhaps less ideological key, Fairhead (2000) showed that administrative and developmentalist discourses of deforestation in Guinea construct a 'reality' which is decisively not shared by historical memories of inhabitants of villages in or near forest reserves, and other ethnographies offer similar insights. A common denominator of these environmental narratives of deforestation, soil erosion and over-exploitation is that they rest on neo-Malthusian assumptions about the relationships between society and environmental change, and especially about the adverse effects of population growth on environment (Leach & Mearns 1996: 5). This obviously overlooks potential efficiency of indigenous natural resource management and conservation techniques (although this cannot be taken for granted) as well as the fact that technological innovation and adaptation may allow perceived limits to be surpassed.

In the face of such criticisms, community conservation was able to provide hope of connecting the goals of environmental conservation and economic development and satisfying the interests of conservationists (who tend to originate from developed countries or local elites) and poor local people alike. An important role was played by the new focus on human rights, particularly indigenous rights, in the conservation and development communities alike, but also by a more pragmatic understanding that conservation might be difficult to achieve without bringing local people on board through revenue sharing or providing income-generating alternatives to natural resource exploitation (Fischer *et al.*

2008). Significant enabling changes have been also underway within ecological science, which has moved from earlier explanations of environmental change based on the notions of ecological stability, gradual evolution and 'balance of nature' towards an emphasis on the 'variable, and often chaotic, nature of change within ecological systems, at a series of spatial and temporal scales' (Forsyth 2003: 64). The emerging 'non-equilibrium' or non-linear ecology, also referred to as ecological pluralism, allows for an understanding of episodes of disturbances within ecosystems (which would have been considered a degradation or a linear departure from the ideal under equilibrium-based ecology) as a longer-term or spatially wider form of change within the inherently variable ecosystem, a phase in the historically specific and contingent series of states and transitions (Leach & Mearns 1996: 10–11).

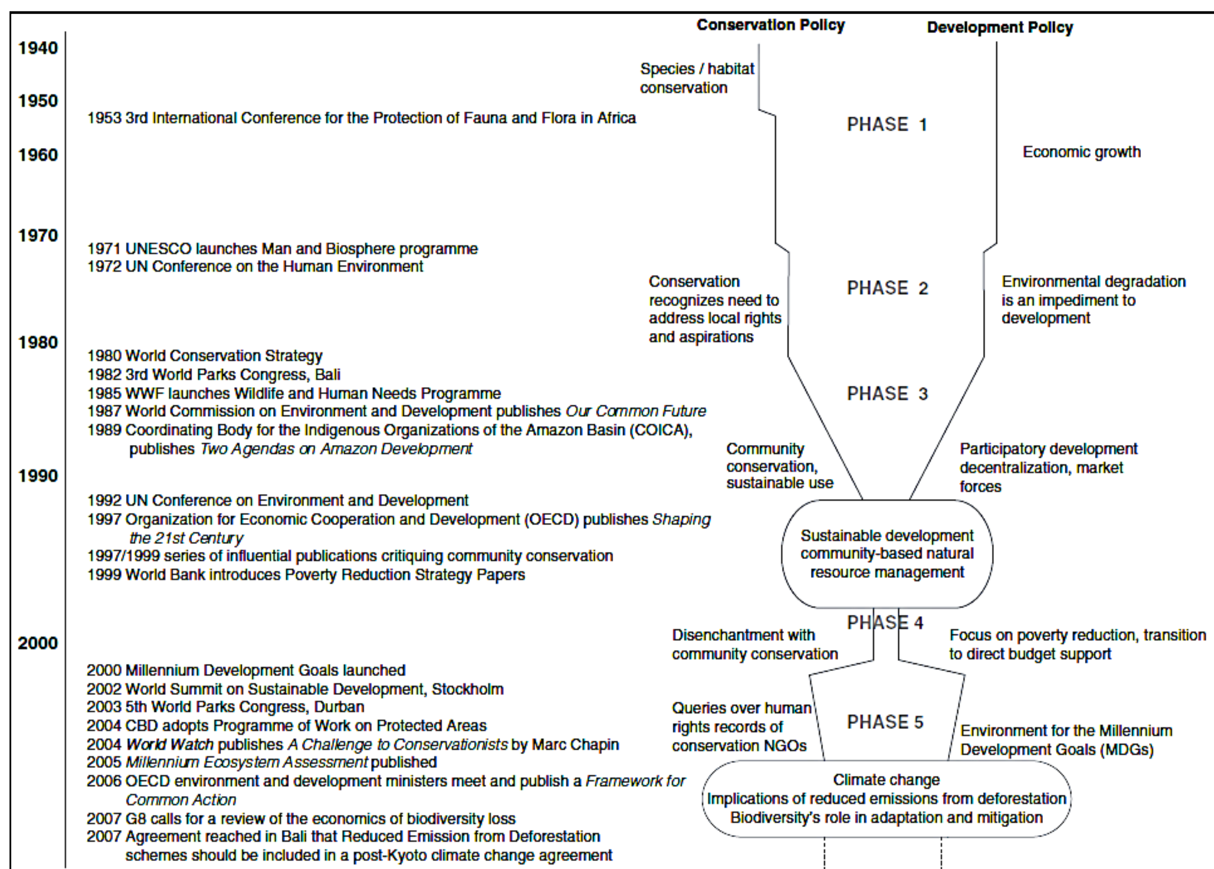

FIG. 1. The development of the conservation-poverty debate (Roe 2008: 492).

Although the 1970s brought first signs of the recognition of need for such reconciliation, the new alliance was fully formed only in the 1980s with the publication of key document*, World Conservation Strategy* (IUCN *et al.* 1980), the launch of WWF's Wildlife and Human Needs Programme in 1985 and other important initiatives (see fig. 1). In the 1990s, gradual merging of conservation and development policy narratives continued under the rubric of 'sustainable development', a normative and theoretical framework which had

been popularised by the Brundtland Commission and become the central notion of Agenda 21, the main outcome of the Rio Earth Summit in 1992, and a follow-up report to the *World Conservation Strategy*, entitled *Caring for the* Earth (IUCN *et al.* 1991).

However, the conservation-and-development romance seemed threatened in the late 1990s, when the 'people and parks' debate has shifted from the traditional arguments for and against protected areas to the targeted criticisms of community-based conservation and its actual outcomes (Roe 2008: 492). The critics stressed that these approaches diverted funding and attention away from conservation and their hitherto impacts on biodiversity conservation were minimal. There were indications at this time of a 'return to protectionism' in conservation world and a concurrent refocus of major development agencies onto poverty reduction through PRSPs and MDGs, which has left conservationists concerned that 'biodiversity had “fallen off” the development agenda and that, simultaneously, the conservation agenda had been burdened with poverty reduction' (*ibid*.: 497).

As I have already hinted, conservation policies had been increasingly criticised for justifying the preservation of 'wild nature' by its intrinsic and aesthetic values, rather than its use-value for local people likely to depend on natural resources; and again, CBNRM can potentially allow to move beyond such problem closure. However, insofar as it constitutes a counter-narrative, it may and clearly often is, intentionally connected to momentarily privileged global discourses and buzzwords to attract resources. Moreover, community conservation narrative has diffused especially quickly across sub-Saharan Africa and has become more strongly entrenched there than in other regions, arguably due to the level of aid-dependence, the influence of multilateral and bilateral agencies over domestic policies and the weakness of states and local bureaucracies and research capacities (Adams & Hulme 2001: 18–19). Most of these factors are strongly present in the Comoros. The importance of discourse analysis of policy argumentation therefore cannot be underestimated.

Attention needs to be equally paid to implementation, which is not simply an execution of policy, as contemporary approaches in anthropology of development cogently argue. Community conservation could be seen as promising a remedy against the charges levelled at earlier conservation policies, and indeed, much literature simplifies by distinguishing CBNRM from top-down approaches, but in practice the involvement of communities ranges from a protected area outreach, in which control rests firmly with a conservation authority, to a community management of resources, which may nevertheless significantly depart from the emphasis on conservation objectives. Beyond typological axes of the purpose of conservation (use/non-use values) and the level of community control (Adams & Hulme 2001: 15), actual project outcomes depend on complex configurations of actors, interests, resources, forms of knowledge, and ecological variables.

This reflects a broader ambiguity which goes beyond possibly questionable political motives underlying participatory approaches to development and environmental protection alike. When scrutinised ethnographically, they often turn out to be disciplinary technologies used to manufacture 'beneficiaries' or legitimising tools for largely predetermined development policies, and the articulation of 'local knowledge' is found to be shaped by unequal power relationships (intra-community as well as between developers and developees) rather than transforming them (Mosse 2005: 78–102).

From the conservation perspective, there is no guarantee that CBNRM will be cost-effective and capable of delivering conservation goals. This is because it cannot be seen in instrumental terms anymore and it can radically challenge conservation goals: 'Participation is a process not a project input: thus, it may not be effective in delivering pre-selected conservation outcomes' (Adams & Hulme 2001: 21). Lillette (2006) illustrates such possibility in the case of heritage-based conservation of marine turtles (one of the 'flagship species' in our case) in Madagascar which is failing because it is not aligned with local economic interests and power structures.

5. The context of the Comoros: economic stagnation and imaginary state

Standing at 1,047 current international dollars in 2003 (GDP per capita based on purchasing-power-parity), GDP of the Comoros has been slow to grow in 1990–2007, with the modest annual average increase of 1.8% (IMF 2009). An unreliable estimate of adult literacy rate at 56.8% in 2001 was even lower than the average for sub-Saharan Africa (UNESCO 2003). The value of the Human Development Index, the composite index of human development based on measures of long and healthy life (life expectancy), education (adult literacy and enrolment at the primary, secondary and tertiary level) and a standard of living (PPP income), was 0.561 in 2005, ranking it 134th out of 177 countries with data (UNDP 2007). Since 1950, the population has quadrupled and is expected to double within the next 30 years (Population Division 2007). Rapid population growth; low educational achievements; underdeveloped public services; and undiversified economy, characterised by an almost absolute dependency on aid transfers, remittances, custom duties, subsistence and export-oriented agriculture (which is incapable of achieving self-sufficiency in food production) and the exploitation of natural resources are perceived as some of the most serious problems. Agriculture, including hunting, fishing and forestry, contributes about 40% to GDP (tourism and other services contribute 56% and industry mere 4%), employs 80% of the labour force and constitutes most of the exports.[1] Economic vulnerability of the Comoros is further intensified by high reliance on a limited number of agricultural export crops subject to bad terms of trade, especially ylang-ylang and vanilla (Salmon 2002).

Looking beyond these economistic analyses, the developmental stagnation can be linked to the characteristics of the political process in the Comoros. Since its independence in 1975, the country has experienced more than 20 successful or attempted *coups d'état*[2] and has overcome serious political crises even in recent years. Following a brief mini-war in early 2008, the African Union and Comoros soldiers seized the secessionist rebel-held island of Anjouan.[3] This was preceded by declarations of independence and calls for French recolonisation in Anjouan and Mohéli in 1997 which necessitated a change of constitution towards a looser state union and autonomy of all three islands, approved by voters in 2001.[4]

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[1] *World Facts: Facts about Comoros*. http://worldfacts.us/Comoros.htm. Accessed 10.06.2009.

[2] *Encyclopedia of the Nations: Comoros – History.* http://www.nationsencyclopedia.com/Africa/Comoros-HISTORY.html*.* Accessed 14.06.2009.

[3] *Comoros: The legacy of a Big Man on a small island.* http://www.irinnews.org/Report.aspx?ReportId=81898. Accessed 14.06.2009.

[4] *Encyclopedia of the Nations: Comoros – History.*

Walker (2007) argues that the state is but virtual or imaginary in the Comoros; there is no 'true' state as long as we define it as one that must be functional. He starts from the question of why a country with such a high degree of cultural homogeneity (relative to other African states) has failed to build a nation and functional state. The gist of his explanation is that this socio-cultural, linguistic, and religious unity is seen to suffice, and hence there is no explicit construction of a political unity (i.e., nation). Actually, differences between islands are often overstated and commonalities downplayed (out of the fear of marginalisation by the politically most powerful island of Grande Comore) and some elements, such as adherence to the same school of Sunni Islam, are used to construct cosmopolitan rather than national identities. As for the formal state, its clout in the political process is limited by patrimonial and culturally conservative policies, devolving the responsibility for local government to customary authorities, of practically all post-independence governments except for the progressive but violent 'revolutionary regime' of Ali Soilihi (1975–1978). However, asserts Walker following on from his past work on the process of 'mimesis' in identity (re)constructions in the Comoros (Walker 2005), the ideal of the state which will provide for its citizens and bring development continues to be evoked[5]. '[B]ecause it is exotic, it belongs to the ideal, unapproachable other that is a mirror to the Comorian self, an

FIG. 2. Photography: author.

[5] Even the state's official motto *Unité – Solidarité – Développement* pledges to secure precisely what the country lacks.

ideal to which one aspires but which may never be achieved except through a mimetic transformation of the self' (Walker 2007: 599); and it is this transformation that renders the state imaginary.

Walker's central suggestion is difficult to renounce when we consider many recent symptoms of the state's dysfunction, painfully experienced by the citizens. For instance, by July 2009, most civil servants have not received their salaries for nine months or more; during several months in 2008, a failure of the state electricity company to renew a contract on fossil fuels imports caused that Grande Comore was almost constantly without these and hence electricity; and in Hoani in northern Mohéli, villagers were expected to pay for the slowly progressing extension of electricity infrastructure to their village. Rampant corruption and nepotism, which Comorians condemn and yet consider natural and understandable – 'the politics of the belly' plaguing most African postcolonial states (Bayart 1993) – severely compromises any impact of successes in the field of democratisation (Saïd 1997). The extent to which the state resembles a simulacrum is graphically expressed by a poster campaign of the incumbent president of the state union, Ahmed Abdallah Mohamed Sambi, seen in Fomboni, the run-down capital of the least developed island of Mohéli, and almost surreally declaring in French that 'Development is not a dream' (see fig. 2.).

6. Narratives and frames in conservation and development policies in the Comoros

The outlined conservation-and-development debate is closely reflected in recent policies in the Comoros aiming to link biodiversity conservation with sustainable development. Relevant documents on the country invariably stress that its 'wealth [of biodiversity] stands in stark contrast with the poverty of its people' (GEF/UNDP undated: 1). Its valuable habitats and species were listed as one of the world's 'biodiversity hotspots' (Myers *et al*. 2000) – a metaphor conveying a sense of conservation urgency. Put succinctly, biodiversity is considered endangered by rapid population growth combined with prevalent modes of resource exploitation (Ahamada 2005), and ensuing environmental degradation is in turn seen as diminishing the prospects of future economic development. I argued that such 'Malthusian views of the relationship between population and environment' (Fairhead & Leach 2005: 287) are certainly not limited to the Comoros context.

More than 70% of the population is said to 'use forest wood for cooking, mangroves for construction and boat building, coral for construction, fish as a staple food, and plants for medicinal use' (Payet *et al.* 2004: 38). This narrative presents the environmental crisis as resulting from 'traditional' subsistence practices, such as slash-and-burn cultivation or coastline fishing, failing to adapt to the demographic pressure and thus becoming 'unsustainable' (Union of the Comoros 2002: 8). They are deemed to cause biodiversity loss, 'rapid deforestation', 'over-exploitation of the coastline' resources, especially fish, corals and sea sand (for construction material), 'the drying up of water sources', and 'an insalubrious habitat' (Union of the Comoros 2005: 51). Destructive fishing practices, such as dynamite fishing, contribute to depletion of coastal fish stocks and degradation of coral reefs and other ecosystems (Payet *et al.* 2004). 'Deforestation' with resultant soil erosion on steep slopes is considered another crucial issue – only some 4% of the territory are said to remain covered by forests as practically all lowland forest has been cleared for agriculture and charcoal making (FAO 2001; WWF 2004).

Especially since the 1990s, these perceptions have led to the adoption of a range of regulatory frameworks and policies, the implementation of multiple conservation projects by the government and transnational organisations such as the World Conservation Union (IUCN), and the proliferation of local and international NGOs (for overview, see Project GloBAL undated). Many of these activities are conceived in participatory manner. Recommendations such as ‘greater cooperation between governments and the local fishing communities‘ or ‘community involvement in all aspects of forest management‘ feature as an important part of the solution (UNEP 2005: 59–60). Mutual links between conservation, ecotourism and poverty reduction, as well as the associated risks, also feature in a

governmental poverty reduction and growth strategy paper (Union of the Comoros 2005: 38–40, 52). Natural resources emerge as one of the few economically valuable assets of the country, and the fact that (the promise of) development comes to a significant degree in the guise of conservation and ecotourism is especially apparent in Mohéli. A mere visit at the Fédération des associations de développement economique et social de l'île de Mohéli in Fomboni suggests that the Mohéli Marine Park (MMP) is in all likelihood the focus or at least spatial context of most development interventions currently underway

One of the largest initiatives has been a 5-year project of the Comorian government and IUCN entitled Conservation of Biodiversity and Sustainable Development in the Federal Islamic Republic of the Comoros (Project Biodiversity; 1998–2003), under which the co-managed MMP, a first protected area in the Comoros, has been established. Managed by a committee formed of representatives of ten village associations, government, tourism operators and police (IUCN 2002), the project has attempted to include voices of subsistence fishers and farmers from MMP-affected villages, but also of women who 'have been excluded from local decision making' (Granek & Brown 2005: 1727).

One of the reasons for the success of the participatory conservation narrative is clearly the weakness of the Comorian state (bordering on absence) alluded to above, and ensuing lack of law enforcement. The dysfunctional state tends to be framed as a constraint which is to be taken as given, and this in turn informs the perception of alternatives framing community-based conservation as appropriate means. Granek and Brown's evaluation from the conservation perspective presents the MMP co-management process as a compensative solution, partly necessitated by the fact that 'the financial, technical, and personnel assets of the Comorian government were inadequate to address issues of conservation concern' (*ibid.*: 1727). This implies that under more favourable conditions, other choices would be preferable – co-management emerges as a matter of pragmatic strategy rather than idealistic preference. The authors state the volume of ecotourism remains too limited to fully fund the park maintenance and suggest that even in the future, the government or communities cannot be expected to provide or raise funds to the full required extent: 'Environmental trust funds or similar external financial assistance is pivotal to long-term conservation efforts (...) in the Comoros' (*ibid*.: 1731).

It is likely that from the perspective of key institutions, community-based conservation projects are insufficient without some form of (more top-down) 'control' of population growth and resource exploitation. For instance, UNEP (2005: 45) recommends to the African and Indian Ocean Small Island Developing States (AIO SIDS) in a revealingly oxymoronic formulation, to simultaneously 'develop and rationalize human resources use, control demographic pressures and ensure the participatory approach in environmental management'. Even from representatives of village environmental associations in Mohéli – central actors in the praised participatory process – one often hears demands for a greater law enforcement, e.g. against turtle poachers. This calls into question the depth and

genuineness of the declared commitment to participatory approaches to conservation. Interestingly, UNEP also draws a clear dichotomy between 'indigenous' or 'traditional' environmental knowledge, however valuable, and scientific research, and expresses concern over insufficient scientific capacities in AIO SIDS (*ibid*.: 66). This is a claim reiterated in C-3 documents to establish the importance of its contributions to local conservation efforts (see below).

FIG. 3. Photography: author.

Furthermore, conservation in the Comoros seems to be largely motivated by non-use values of nature, as most attention focuses on several ‘flagship species’, some of which are of minimal economic importance to the inhabitants (beyond a potential exploitation by the ecotourism industry), but are of interest to donors and the Western public. The need for participation of communities can be hence explained in utilitarian terms (cf. Granek & Brown 2005). What we find here is the frame or problem closure presupposing intrinsic (often aesthetic) values of nature as the primary justification for conservation, generating tensions with a declared commitment of some C-3 staff to conservation for human use. An evidence can be seen for instance in that C-3 invariably labels locals killing green sea turtles as ‘poachers’ (rather than ‘hunters’), and avoids any discussion of possible acceptable levels of exploitation (C-3 Comores 2008a; Poonian *et al.* 2008b) – despite the fact that with currently available data, marine turtle populations and hence their vulnerability can be only

roughly estimated. The focus on flagship species (such as marine turtles, dugongs, or whales) is evident in the documents and activities of C-3, but also in paintings on the outer walls of the Conservation Centre building close to Hoani, which was reconstructed by the village's environmental association (Hoani uni pour la protection de l'environnement – HUPPE) with C-3's aid (see fig. 3) (Issouf Bounou & Le Scao 2007: 42).

On a more general level, the scope of analyses in foregoing literature and other similar works is such that it privileges a narrow and depoliticised understanding of the social, economic, cultural and political contexts in which the discussed practices and environmental changes are taking place. Social causes are largely reduced to population growth, represented as a natural and under present conditions almost inevitable process, and to natural resource overexploitation caused by poverty, quite narrowly conceptualised as resulting from factors such as low educational attainments and economic underdevelopment. The characteristics of the political process are understood as givens lying outside of the domain of conservation. From this, it follows that 'technical' fixes to these problems can be suggested – e.g., in the form of improvement of the provision of public services like education, infrastructure, sanitation and healthcare in order to bring about demographic transition and economic diversification (UNEP 2005: 67) – ignoring the thorny issue of whether the state is capable or even interested in implementing such measures, and of the justness and practicality of expecting 'communities' to take on its responsibilities if it is not.

In policy discourses on poverty, two competing ways of framing can be differentiated – while 'economic rationalism' frames poverty as economics and mechanisms, 'holistic humanism' focuses on politics and institutions (Apthorpe 1996: 23–25). This is undeniably a very high-order proposition, but it enables an insight that the framing of poverty in the discourse in question is frequently rather economistic. This implies that instances of conservation-and-development discourse on the Comoros may be conformist with the kind of implicit neoliberal devolution of responsibilities (as compared to redistribution of resources) often found in the broader participatory development narrative. I develop this point further below, showing how this policy framing influences the construction of 'realistic' conservation partnerships.

The issue of poaching and marine resource overexploitation is framed in C-3 papers such that it can be stopped if alternative livelihoods linked to the success of conservation are identified, which presupposes a universal maximising rationality in Comorians. Even if this was empirically validated, it is unclear what the alternatives are. Ecotourism tends to be emphasised, yet in 2000–2005, Mohéli received an average of 390 tourists a year (C-3 Comores 2008b: 21) – a volume so low that it can hardly make for the importance of fishing as a key subsistence activity even after a significant increase in the future. This also calls into question how the 'equitable' and 'fair' distribution revenues (evoked but not detailed) is to be ensured when the number of villagers able to meaningfully economically participate in

ecotourism is limited; moreover, fishermen cannot be assumed to be those most likely to own or work in hospitality sector. Similarly, the 'inequitable' distribution of MMP benefits is only analysed on the inter-village level (C-3 Comores 2007: 18–19), neglecting the complicated question of distribution within 'communities'.

This is linked to a narrow scope and preconceived character of the analyses of social inequalities in managing and benefiting from conservation. For instance, Ahamada (2005: 38) calls for an inclusion of 'toutes les catégories sociales (jeunes, femmes, utilisateurs des ressources)' in the management committee of the MMP, but from an actor perspective, this might be an irrelevant or insufficient definition of actual interest groups. In fact, the very design of the MMP co-management reflects such a categorical and economistic understanding of social dynamics (see above). Regarding non-marine conservation, little attention is paid to the repercussions of historically and politically rooted high inequalities in land ownership on the modes of agricultural production and ensuing environmental pressures. A significant reform of the agrarian sector shaped by French colonial policies has been stalled by the state's weakness, and '[a]lthough tenure conflicts have become more frequent and acute since independence, the government has seen this as a largely demographic problem to be solved by limiting the population growth and increasing agricultural productivity through improved farming techniques' (Bruce 1998: 159). Inequalities are particularly pronounced on the most densely populated island of Anjouan, where about twenty families own 40% of the arable land (*ibid.*: 157).

Some indication of the seriousness of these problems is given by conflicts over land and tree tenure resulting from recent in-migration flows of squatters from Grande Comore and Anjouan to the least densely populated Mohéli. Saïd and Sibelet (2004) show how autochthonous inhabitants of the village of Bandarsalam drew on the discourse of deforestation (allegedly committed by Anjouan newcomers) in their appeals to an *ulanga* (village environmental association) and the island government to have the migrants expelled from their forestry zone, to which the *ulanga* responded positively. There seems to be a situational convergence of conservation NGOs and autochthonous Mohéliens around the cause for halting 'deforestation', although their motivations and understandings of the problem differ (Plançon 2001). As I show below, environmentally framed resource conflicts in the context of poverty and inequality-driven inter-island migrations are fought out also over marine resources.

7. Strategies in participation and actor-networks under construction

The outlined policy discourses, within their general function of mobilising political support for implementation by generating dominant interpretations and translating between different interests and goals (Mosse 2005), serve as elements of problematisations that can potentially lead to the construction of actor-networks. Although it is possible to identify actors (such as the researchers in Callon's case) initiating and aspiring to manage these processes, the latter are perspectival insofar as all groups of actors may strive to further different definitions of actors' identities and mutual associations. These acts of resistance can be conceptualised as strategies – relatively coherent, habitus-embedded ways in which people approach and try to transform policy practices and emerging organisational forms to better suit their interests.

Local constructions examined herein are triggered by C-3. In the problematisation phase, the organisation strives to 'become indispensable' by defining identities, systems of alliances and OPPs and formulating central questions to which it subsequently provides answers. C-3 asks: 'What are the causes of the depletion of natural resources in the Comoros (which is given) and what are the workable solutions to this conservation and development problem?' In its documents, C-3 presents scientific research on marine habitats and species and 'anthropogenic pressure' on these as one of the pillars of its work in the Comoros. It also defines its mission as one of providing 'technical assistance' to develop currently insufficient local research capacities: 'The Comoros lack a marine research institution and there is a fundamental need to strengthen organizational capacity' (Davis *et al.* 2006).

C-3's project co-ordinator called this part of its role 'basic data collection', identified it as a prerequisite for policy recommendations and justified the current focus on the north-west of Mohéli (outside of the MMP) by a lack of data on the region. The program officer for Mohéli talked about basic research and awareness-raising activities as preparatory works, 'building a baseline' for larger, high-budget and more developmental potential projects in the future. Considering the state's inefficiency (another given), community/C-3 conservation partnerships are presented as OPPs in the interests of all involved actors, ideally leading to a future full community responsibility for conservation, independently of the state and international organisations, as suggested by the program officer.

Linked to the state incapacity and further reinforcing the argument for these OPPs is the strong criticism of the MMP's current situation by the organisation. Following the end of the GEF/UNDP-funded Project Biodiversity in 2003 and its partial extension as The Project for Rehabilitation Activities for the Conservation of Biodiversity (2003–2005), the MMP has

been facing a chronic lack of funding necessary to maintain originally envisaged implementation levels. Ecoguards are believed to be unpaid or scarcely paid, the management committee to meet occasionally at best and facilities to fall in disrepair. C-3 had authored several critical evaluations of this situation from the perspective of 'stakeholders' (C-3 Comores 2007; Hauzer *et al.* 2008; Poonian *et al.* 2008a) and C-3 staff reiterated similar views in interviews. For instance, the director hinted that external funding is likely to be patrimonialised by the MMP management, and the Mohéli program officer suggested the past projects had been possibly counterproductive because they had led Comorians to expect big salaries in compensation for conservation work – expectations now frustrated and running contrary to the spirit of C-3's activities. 'Realistic' alternatives from this problematisation are, to the contrary, highly compatible with the suggested OPPs – 'stakeholder-inclusive conservation projects often operate more effectively at small decentralized scales with small infusions of money over longer project terms' (Poonian *et al.* 2008a: unnumbered). Below I argue that social and political relationships, besides a preoccupation with policy efficiency, may inform this strategy.

During interessement, C-3 interposes various devices between other actants to prevent them from establishing undesirable alternative associations. As the actor-network under construction is hybrid, in Latour's terminology, much of this effort aims to reconfigure interactions at the 'purifying' nature/society boundary. In marine turtle conservation in Mohéli, 'poaching' represents an illegitimate form of turtle–'community' linkage. Ecoguards and junior ecoguards, patrolling beaches with C-3 staff and interns and trained under the HUPPE–C-3 partnership, serve as the most direct interessement devices and development agents stabilising the identity of community members as conservationists or, at a minimum, non-poachers. Not only is their presence during the night-time nesting intended to deter poachers, but they also cover turtle tracks in the morning to prevent the pillage of nests, although the likely inefficiency of this is recognised. Adult ecoguards are motivated to 'stay put' in their designed positions by salaries from C-3, and while junior ecoguards work voluntarily, they are recompensed by receiving training. C-3's director confirmed that certificates validating qualifications are emphatically requested by local people, often as a condition of participating in projects.

Law enforcement and awareness-raising (*sensibilisation* in French) function, at least theoretically, as more indirect devices of interessement. C-3 staff and HUPPE members unanimously called for stronger law enforcement against poachers, which is believed to be thwarted by corruption, nepotism and an indifferent approach of the administration. The concern with insufficient penalties for poachers, rather than with the lack of other relevant public services, often spontaneously surfaced in interviews when I asked whether the state promotes conservation and sustainable development. C-3's project co-ordinator believed that environmental education and law enforcement should be ideally delivered

simultaneously, but admitted that enforcement alone was 'better than doing nothing'. Poonian *et al.* (2008b) assert their empirical research has identified law enforcement as the most effective way to stop poaching, followed by awareness-raising. An influential member of HUPPE and C-3's key collaborator even suggested that the army could create special units to assist conservationists. As for *sensibilisation*, this is an important component of C-3's work in Mohéli, employing theatre and verbal argumentation to persuade people to stop hunting turtles. People are being discouraged by arguments ranging from a possible turtle meat toxicity to the potential of species for exploitation by ecotourism.

It is nevertheless clear that while problematisation is relatively easily controlled by C-3 – whose staff, commanding educational capital and technical resources necessary to generate and circulate authoritative interpretations of reality, operates in an environment deprived of such resources – the transposition of this into an efficient interessement and successful enrolment is more precarious. Poaching in Mohéli is visibly still prevalent, and negotiations with villagers and development agents such as HUPPE are not devoid of conflicts. This is because vis-à-vis the emergent organisational practices and structures, these actors attempt to pursue strategies which suit their own interests but may diverge from those of C-3.

Ulangas and individual Comorians are being enrolled by C-3 as executive bodies (i.e., ecoguards) and project partners. Regarding the former, people not always respond enthusiastically to C-3's calls to do conservation work essentially with their own means and voluntarily. This is hardly unanticipated considering that C-3's own paper recorded similar reactions of the MMP ecoguards to managers' demands that they keep working hard for very little compensation when the funds had started to peter out (C-3 Comores 2008b: 14). The same report identified another complaint heard in discussions during 'awareness-raising days' in in 2009. Stressing that poachers are often armed, villagers demanded more palpable support for their real or potential work (e.g., equipment), but also stronger emphasis on law enforcement as a state-delivered service. However, C-3's director told me that though they recognised the problem, as a 'foreign organisation' they could only work 'within certain political limits': 'In terms of voicing concerns about government, I'd say it can be only in an environmental context.' In communities lacking ecotourist facilities, villagers requested construction of bungalows, which indicates that although they respond positively to the tourism exploitation argument for conservation, levels of the former have been so far insufficient to become more than a promise.

Linked to the reluctance of many villagers to accept a direct responsibility for conservation are debates about the identity of poachers which mirror the environmentally framed conflicts over land. While C-3's official position is that most poachers are Mohéliens, typically killing turtles for their own consumption (Poonian *et al.* 2008b), locals claim it is mostly migrant fishers from Anjouan who come to poach turtles to commercialise their meat

for high prices in Anjouan and Grand Comore. (Also frequent are related assertions that most damage in Mohéli waters is caused by large Japanese and Chinese vessels, sometimes fishing illegally.) Although it is not clear which interpretation is closer to the truth, it is noteworthy that neither the second version is unsupported by literature; Ali and Youssouf (1996: 31–32) quote works from the 1980s and 1990s identifying poachers as Anjouan fishers. In any case, enrolment by C-3 is evidently being resisted by a different problematisation which shifts the blame according to the general tenor of inter-island conflicts over resources and power and calls for more state responsibility and intervention.

The project co-ordinator said local conservation partnerships are currently 'the PC thing to do' and are therefore vital for project proposals to convince donors. Participation is channelled through *ulangas* which, in the co-ordinator's words, 'makes it a bit more structured' than working directly with individuals. Enrolment of association members is relatively successful – they are eager to benefit from the fundraising assistance that C-3 offers and accept the definition of their interests as being threatened by poaching. HUPPE's president called turtles nesting close to Hoani its 'wealth' and described poaching as an uneconomic waste of resources. This translation of interests may be facilitated by the fact that although ecotourism incomes are supposed to benefit whole communities, their use is typically controlled by associations. It is therefore not unexpected that C-3's director would describe negotiations over partnership agreements and project proposals as marked by hard bargaining for the construction of bungalows and purchase of boats (supposedly to take tourists on trips, but, according to the director, often used by villagers for fishing).

Much of these strategic negotiations is paralleled by past translations between the MMP and communities within its boundaries. David *et al.* (2003) indicate that in the conditions of poverty and institutional vacuum, villagers have perceived the park as the only local institution commanding some funds and capacities, and its staff has been asked for consultation and assistance in any matter pertaining to land and natural resource management. There was an equivalent local demand on the conservation authority to act as a development agency, and the fact that conservation goals have been achieved to a greater extent within rather than outside of the MPP (at least as of 2003) suggests that this aspect of participatory conservation is central to its success.

C-3 has achieved several successful mobilisations in Mohéli when its project proposals with local partners – i.e., attempts to speak on behalf of allies enrolled in an actor-network – have received external funding and gained a sufficient political backing for implementation. Mobilisation is typically executed by claiming that C-3 already knows and does what works and should be supported in doing it more extensively:

> Improving the capacity of Mohéli Marine Park and local village associations to enforce relevant laws is a priority to reduce poaching in the southern islets. Involving fishers through provisions of incentives for reporting poachers may be

> more sustainable than past conservation efforts which relied solely on the Marine Park (Poonian *et al*. 2008b: unnumbered).

Nevertheless, C-3's actor-networks enrolling associations in the MMP and the park itself – or what remained of it in practice by 2006 – are currently in question and inactive. The MMP ecoguard in Nioumachoua and member of the local *ulanga* expressed an interest in resuming cooperation, but criticised C-3 for a lack of transparency and top-down approach. It seems that C-3 is perceived as expecting the associations to work as compliant executive bodies without trying to decisively influence predefined project goals. As for the MMP, a project co-ordinator on its technical team has 'banned' C-3 from working in the park confines in early 2008, probably following the management's perception that C-3's director had prevented it from receiving an Indian Ocean Commission grant by voicing her concerns over financial mismanagement.

8. Conclusions

In this work, I combined the perspective of an actor-oriented and ANT-inspired anthropology of development with discourse analysis of narratives and frames in policy argumentation to critically interpret policies and implementation practices in participatory biodiversity conservation in the Comoros and examine their interrelationships. These practices unfold in a local context which is characterised by economic stagnation, low educational capital and research capacities and 'imaginary' state incapable of delivering public services. In the same time, they are shaped by global environmental and developmental discourses and funded or implemented by large transnational agencies as well as smaller NGOs.

The analysis of relevant conservation and development literature has shown that although participation features as a foundation of the broadly accepted solution, it tends to be pragmatically perceived as means (necessitated by the state's inefficiency) rather than an aim of conservation. This discourse often assumes intrinsic rather than use-values of nature as the primary rationale for conservation, as indicated by the focus on 'flagship species' or implied unacceptability of any level of marine turtle hunting. Malthusian narratives of 'overpopulation' and 'overexploitation' synthesise environmental threats. Poverty, while acknowledged, is framed in an economicist mode which largely overlooks resource conflicts and social and intra-community inequalities and suggests technical fixes. The state's weakness is taken as given and political processes as beyond the scope of conservation and development, yet more efficient law enforcement (rather than the delivery of other public services) is requested by conservation organisations and their local agents alike.

Ethnographic interpretation of C-3's activities in Mohéli has identified some strategies and translations between various actors involved in hybrid (human/natural) actor-network constructions. C-3 attempts to control these constructions and largely succeeds in establishing its importance (relative to the paralysed MMP) and defining community/C-3 partnerships as OPPs in the problematisation phase. However, the passage from the latter to an efficient interessement and successful enrolment and mobilisation proves more problematic. The efficiency of interessement devices is debatable and local actors often resist (or attempt to capitalise on) their enrolment by pursuing their own strategies. This is at least a part of the reason C-3's actor-networks in the MMP came to a standstill and are likely to undergo major reconfigurations in the future. C-3's current focus on northern Mohéli may be driven by an easier enrolment of local *ulangas* which lack the legal status and privileges granted to the MMP associations but are equally eager to benefit from conservation. Nevertheless, C-3 recognises the need to resume cooperation with the park to be able to work in its area that is likely to be more interesting for conservation donors and hence effective actor-network mobilisations. Yet that entails a possibility that C-3 will be forced to accept, to a greater extent, strategic definitions of roles, identities and linkages

formulated by the park and associations which are both legally empowered and poised to attract funding.

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