



Research, part of a Special Feature on [Transforming Conflicts over Natural Resources in the South for Social-Ecological Resilience](#)

Structures, actors, and interactions in the analysis of natural resource conflicts

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ABSTRACT. We propose a research approach to natural resource conflicts that includes different tempos of the developments that lead to a conflict becoming manifest. This approach can help to distinguish dimensions of the conflict and to understand the logic behind and reasons for different vocabularies currently in vogue to address these dimensions. It thus clarifies the different assertions and potentials of existing theoretical and conceptual approaches. After presenting our model, we analyze three conflict cases, in Sri Lanka/India, Suriname, and Colombia. The cases show the history and self-identification that explain indignation and distrust, as well as attitudes of taking for granted relations with other actors, namely the state and other contenders for the resources, including large-scale companies, illegal armed groups, and drug traffickers. In our text, we use “tempos” to refer to three processes that bring about three dimensions we believe to constitute conflicts over natural resources. The distinction can help to more accurately unpack the why’s and how’s of conflict development.

Key Words: *Colombia; conflict analysis; multitemporal model; small-scale fishery; small-scale gold mining; Sri Lanka; Suriname*

INTRODUCTION

Recent literature in the development studies field suggests the need to reconceptualize and rethink conflict over natural resources, in particular to place an emphasis on the nuances of conflict dynamics in specific contexts (Kemp et al. 2011, Temper and Martinez-Alier 2013, Warnars 2013, Pierk and Tysiachniouk 2016, Litmanen et al. 2016) and the role of collective action (Ratner et al. 2013). Overarching approaches and research strategies cannot do justice to the specifics of the regional and geographic histories and features, to the peculiarities of the extraction operations, or to the ways the different parties are constituted, situated, informed, and capable of promoting their interests. Conflict dynamics around multinational companies entering a rural area with a governmental concession to mine for tin or gold, differ in many respects from such dynamics when small-scale gold miners enter a remote region where indigenous people live. Things are also different when parties like environmentalists, road construction companies, or tourist operators become involved, or when local dwellers have mobilization and framing skills or, to the contrary, lack them, or when conflicts become a public dispute reported on in the national or international press. In all instances, efforts to understand conflicts over natural resources will have to do justice to the particularities and intricacies of their subject area and case. These specifics should address the underlying features of societal makeup, poverty and inequality rates, national and regional politics, the dynamics of the actual confrontations between multiple actors, and the dimension of the actors’ backgrounds, skills, memories, and ambitions.

The value of a contextualized approach is that it enables specificity to be understood and the emergence of action that is appropriate to this specificity. The variety of conflict processes needs to resonate in research approaches and suggestions for conflict management or transformation. However, the very strength of this focus on contextualized understanding can also be a weakness, in the sense of generating knowledge and action that remains at a case study level, omitting overarching insights.

To address this potential limitation, we propose a frame of reference to analyze and synthesize research on natural resource conflicts, in line with the proposal of Fisher, Bavinck, and Amsula (*unpublished manuscript*) for the development of middle-range theory. This article draws on empirical research produced by three out of the total number of six projects within the CoCooN (Conflict and Cooperation over Natural Resources) research program.^[1] Our approach is both inductive and deductive: On the one hand, we followed an inductive approach to analyze cases addressed by the CoCooN program, and we formulated a set of categories to highlight the most important features of the conflicts in these cases. On the other hand, we suggest that this structure, as an analytical device, can be used to understand connections between conflicts over natural resources in a deductive way, revealing the capacity to create articulations and general tendencies in different cases of conflict over natural resources.

Rather than suggesting substance in terms of key concepts and investigative approaches, the proposed approach is a format for including the different cadences or tempo of the developments that lead to a conflict becoming manifest. By “tempo” we mean the different speeds or the pace with which changes transpire, for example, in a case in which a shift in government can take place rapidly, a change in the team (a ministry or governmental body) to execute new policies takes longer, and the effects of the new policies becoming visible takes even more time. For each dimension we distinguish several specific theoretical and methodological options, based on applying the logics of the three tempos highlighted in Table 1. In that sense, we might call our proposal a “pro-theory” (Bader 1991:35-38), a format to structure levels of the analysis of conflict, rather than an elaborate, full-fledged theory. The aim is to reduce confusion about the lexicons and assertions of different theoretical and conceptual approaches, and about the interspersing of problem phrasing. It is a frame of reference (see Table 1) that has the capacity to facilitate comparison and connectivity between conflicts that occur in different time periods and geographies.

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Table 1. Scheme of dimensions and strategies for research design (adapted from Salman and de Theije 2017).

Strategy of research effort	Tempos resulting in dimensions		
	Structures	Actors' formation	Interactions
Goal of conflict analysis	Explain root causes, inequalities in opportunities and conditions, the characteristics of the political, economic, social, and cultural dimensions of the setting.	Comprehend why actors do what they do, the life trajectories that brought them to the here and now, and how memories influence self-positioning.	Unpack how the conflict takes shape, how agents perceive, frame, and act, analyze the forms and methods of action.
Mapping the conflict	Stratifications, inequality, poverty, lack of opportunities, the engrained imageries about "natural" power relations, the social positions of the parties, plus changes herein.	The "preparation," "equipment," and skills of the actors, their histories, experiences, aspirations, points of departure	The encounters, interactions, clashes, actions, and reactions; processes of framing of identities, "the complaint" and the enemy. The forms of action, the tactics, and the processes of "what actually happens."
Focus of conflict analysis	Historical, focus on the things that "hardened" and became solid, and the different structured conditions under which the conflict evolves. Focus on the macro-political, socioeconomic, and social stratification features.	The trajectories that led to the attitudes, aspirations, and skills of the actors; looking at past learning processes and their impacts on social cohesion, risk-taking, solidarity, trust, and expertise.	Focus on the events, the manifestations of the conflict, actual actions, and decisions. Very actor-focused; look at the actor in actu.
Method for conflict analysis	Historic reconstruction, bring in data on GINI coefficients, poverty rates, migration histories, legal arrangements, analyses of historical state presence and capacity; consult secondary literature, key informants.	Life histories, participant observation, informal talks, about memories, dreams, ambitions, illusions, past experiences with the state, NGOs, fellow citizens	Participant observation and on-the-spot interviews, presence at the meetings, manifestations, decision-making moments of individuals and the collective, talk about how people perceive, and assess chances and risks.

In our proposed model, as highlighted in Table 1, we distinguish three dimensions that point at processes with different tempos. Combined, these dimensions constitute the components that merge in concrete conflict situations (Salman and de Theije 2017). We suggest that conflict configurations combine the following: (i) a structural dimension that entails the underlying causes of the contested issue. This dimension is about unequal societal stratifications, large or recently increased inequalities, and institutionalized exclusions; (ii) the actual interaction and confrontation initiatives, events, and incidents, often involving a complex, multisited, and multiscaled constellation of actors; and also involving the strategies, tactics, and framing discourses triggering and accompanying them. Both (i) and (ii) allow us to stress that conflicts should be seen not only as historical phenomena, but also as essentially spatial phenomena. Finally, (iii) we distinguish a dimension that is often left out of the equation, namely the dimension in which collective and individual experience and learning processes become tangible, as the preparation, equipment, background, and dispositions of the actors. Here, questions about the history of the different actors are addressed, and aspects such as people's and communities' aspirations, memories, and expectations come to the fore. We call this the "actor characteristics." The domains in which different aspects appear, the focus and strategy of the research effort, the aim of such research endeavors, and the methods one would in all likelihood primarily apply are summarized in Table 1 (dimensions ii and iii are in a different order from what is presented in the text).

We do not suggest that these dimensions deal with separate developments due to their different tempos; obviously, transformations with different tempos are intertwined and feed

back on one another. Also, in concrete cases scholars might prioritize the analysis of some dimensions over others, which might lead to different emphases in the highlighting of research questions, theoretical orientations, and methodological strategy (Bader 1991).

A focus on the structural features of a conflict would result in an analysis of things that are relatively inflexible and difficult to change. These underlying and conditioning dimensions will often not even be explicit elements in the claims that stakeholders phrase. Stakeholders will have their specific perception of the conflict issue and their adversaries will have another, conditioned by their access to information and their (active and imposed) framing of the contested issues. This analysis will often concentrate on the imposed conditions of the conflict framing: on the access to resources actors have, on the features of the social fabric of the contesting parties, and on opportunities and constraints offered by the broader setting. Unpacking these conditioning elements will result in a focus on the things that go slow. And the research strategy will often be on disclosing things people themselves may not see or prioritize.

A research strategy emphasizing an account of the actions, events, and the disputed framing of the conflict will often coincide with "the breaking news," the stories about what happened when, between whom, and what was done by which party. The emphasis is on the tactics contenders opt for, on the dynamics of the conflict, and on "who does what, and who says what?" Organization and mobilization strategies, as well as leadership, will often be part of the analysis. This is all about agency. And it is about the things that go fast. Presence at the site of conflicts, talking to and interviewing the protagonists, reading the manifestos, the lists of demands, and news articles as they appear, in other words, keeping

up with the speed of developments is the key methodological strategy and challenge here.

Finally, the dimension focusing on the makeup of the actors covers, in a way, what lies “in between” in terms of the pace of conflict development. In that sense, it is the mediating dimension. It addresses people’s skills and aspirations as well as their doubts, including the way in which these might change in the course of the conflict’s cycle. It is about things that change, but not very rapidly. There is a need to delve into life histories, and to pay attention to the trajectories people have behind them because these will influence the ways people organize and mobilize, and react to different styles of leadership. Attention is paid to agency, as well as to the components and rigidity of that agency: the slow evolution of the acquired attitudes, skills, aspirations, dreams, the previous learning processes, the identities, and the social fabric among the different groups. This is about things that are neither slow nor fast, but that link people’s actions and decisions to the structures and cultural features of the worlds in which they have lived.

We selected our cases, all of which were part of the overarching CoCooN program, on the basis of their capacity to demonstrate the contribution of our proposed model to the analysis of conflicts that are different in terms of their nature, the region in which they evolved, and their duration. We discuss the case of a fishing conflict between Sri Lanka and India, followed by cases of conflict over gold mining, first in Suriname and then in the Cauca region in Colombia.

THE CASE OF A FISHING CONFLICT BETWEEN SRI LANKA AND INDIA

The REINCORPFISH (“Re-incorporating the Excluded: Providing space for small-scale fishers in the sustainable development of fisheries of South Africa and South Asia”) project was dedicated to conflicts over access to fishing grounds, and highlighted features of competing access to natural resources between small and large scale, official and informal, and traditional versus modern fishing techniques. Its case study of events on the fishing grounds of Palk Bay, a small, shallow body of water separating India and Sri Lanka, stressed the various dimensions of such a conflict. The results indicated that much more than a one-dimensional struggle between diametrically opposed stakeholders to obtain access to a specific fishing areas was at stake (Menon et al. 2016), even if, at first sight, the issue was simply that trawlers from India invade Sri Lankan waters and threaten the livelihoods of Sri Lankan fishers (Bavinck 2015).

The analysis of the underlying causes of the conflict reveals a complex and significant series of structural factors. Of these, three stand out. First, longstanding elements—such as the state’s influence on the economic pattern and accumulation model underlying fishing operations, as well as the geo-political “root strategies” of states that are concerned about their jurisdictional boundaries—constituted the conditions under which the frictions evolved. Second, ethnic divides and self-identification pointing at distinctions that preceded the conflict, and the predicaments with which the Sri Lankan authorities saw themselves confronted because of the internal war, conditioned the ways different actors were predisposed to design their strategies as well as their actual options (Menon et al. 2016). Third, the fishers, in turn, were also limited in their room for maneuvering because of cultural

traditions, for instance the “strong regime of community control, particularly over the fishing technologies employed” (Bavinck 2015:5).

The pace of the actual conflict development reflects these changing circumstances. Initial fisher-to-fisher dialogues, backed by the recognition on the part of the Sri Lankan fishers of the Indian trawler owners fishing in “their” seas as Tamil brothers, indicated that ethnic familiarity was the more powerful impulse as long as the impact that the Indian trawlers had on their own postwar fishing livelihoods was not yet fully acknowledged. Once this was the case, and the pain and damages were really felt, the Sri Lankan fishers shifted to a discourse in which not ethnicity, but nationality became the core idiom and frictions sharpened (Menon et al. 2016). The Indian government became the target, and therefore the Sri Lankan authorities had to assume their responsibility to protect and care for their nationals (even though, because of ethnic sensibilities, it was not the national [Sinhala] but the regional [Tamil] government that had to play the most prominent role). Because of the shifts in conditions for fishing produced by the end of the war, new elements came into play, for example, the very identities of the stakeholders were transforming, and therefore a new dynamic of conflict definition, management, and protagonism. That an increasing presence of the Sri Lankan navy in the Palk Bay waters was not always welcomed by the fishers, however, suggests that internal ethnic tensions in Sri Lanka continued to inform both national and regional strategies. For the response of the Indian government, this was a largely irrelevant aspect of the problem: they acknowledged their own Indian trawlers as the perpetrators and tried to regulate their behavior.

These developments, in turn, suggest that the main players do indeed come from specific histories, from which they inherited specific skills and limitations in terms of their diagnosis of the problem, their expectations, ambitions, and search for allies. The research revealed that the owners of large Indian trawlers have more possibilities than the owners of smaller ones, and therefore pick and design their strategies out of more options to foster their interests (Menon et al. 2016). Furthermore, what is remarkable is that the Indian government began to seriously tackle the problem only after the Sri Lankan national authorities had filed official complaints; they felt called upon only when the other national state entered the arena, which is why today “[t]rawler fishers in India are increasingly jumping scale and appealing to their respective national governments” (Menon et al. 2016:404). The Sri Lankan fishers are in a more difficult situation: Their relationship with their government is far more problematic, and they expect less straightforwardness and less unconditional support, and so they design their strategies accordingly. In 2012, for instance, they too “delivered a petition to the (Indian!) High Commission asking the Indian government to check trawling activity” (Menon et al. 2016:404). In the village of Kadalur, on the other hand, the local *Sangam*, the organization in which the navy, the Fisheries Department, and the local fisheries cooperative participate, managed to remain strong and trusted, despite downturns in fishing activities because of the war, and still plays a major role today. “[F]ishers recognise the Sangam not only as the most relevant body for fisheries development and management, but one in which they have a major say” (Bavinck 2015:12). These histories and conditions guided the local

stakeholders in defining their interests, finding their allies, and mobilizing for their goals. The conflict development turned out, as also the project publications suggest, to be more circuitous than merely the outcome of plain clashes of opposing (and clear) interests.

THE CASE OF A MINING CONFLICT IN SURINAME

The GOMIAM (“Small-scale gold mining and social conflict in the Amazon: Comparing states, environments, local populations and miners in Bolivia, Brazil, Colombia, Peru, and Suriname”) project studied small-scale gold mining conflicts in the Amazon region. One of the case studies was the confrontation between large-scale mining and small-scale mining in the traditional territory of the Ndyuka maroon community *Nieuw Koffiekamp*.

In 2011, gold mining accounted for 60% of total export value in Suriname, a small country with a population of around half a million people, and this figure is still increasing as a second industrial mine started commercial production in October 2016 (Central Bank of Suriname 2014). Until then, an estimated 20,000 small-scale gold miners produced about two-thirds of this gold (Cremers et al. 2013), but this ratio changed with the growth of large-scale mining. The transformation to large-scale mining was accompanied by an intensification of conflict in the countryside. In Suriname, the industrial mines owned by global companies Iamgold (Canada) and Newmont (USA) are in territory that is inhabited by tribal peoples, the afro-descendant maroons Ndyuka and Saamaka, and Paamaka, respectively. The large-scale mining projects have substantial territorial and environmental impacts on the local communities (Hogenboom 2015). The national government cannot protect the population, however, because it is negotiating with the companies, which bring “development” to the country. The result is a confusing situation that can only start to be understood if we contextualize the different levels of the conflict. Here we focus on the case of the Iamgold mine, whose concession includes the Ndyuka village of Nieuw Koffiekamp. Since the industrial mine started producing in 2004, 10 years after the first concession rights for prospection were granted to outsiders, the company and local miners have been in a cat-and-mouse game in what seems a never ending conflict situation.^[2]

On the structural side of the conflict, three issues are important. First, the fact that the concession, known as the Gros Rosebel concession, encompasses a maroon, i.e., people descended from runaway slaves, village exemplifies a fundamental inequality in terms of ownership and access. Although the land was allocated to the Ndyuka maroons in the 1960s when their hometown (Koffiekamp) became submerged by the construction of a dam to generate energy for bauxite processing in the coastal zone of the country, a decade later the first external companies arrived to search for gold.^[3] In 1994, the government granted Grassalco and Golden Star a five-year concession in the Rosebel area to carry out exploration activities. Shortly after, the maroon communities petitioned protection from the state because they considered the agreement a violation of their rights and a threat to the village of Nieuw Koffiekamp. Their recent removal and their history of escaping from slavery in the 18th century did not guarantee the recognition of land rights and a place at the negotiation table. They were just an obstacle to be dealt with in the agreement between the mining companies and the state. The historical inequality between the maroons and the coastal people, who hold

the political power in the country, can be said to have hardened and to be reflected in the contemporary tensions around the mining projects in the interior of the country.

Second, the maroons are also miners. The large-scale mining activities not only threaten their village, but also exclude them from the mining grounds they used for their livelihood. The biggest point of conflict is not that their village is increasingly encroached upon by the mining activities of the big company, but that the Ndyuka miners no longer have access to the richest mining grounds. They do not accept this, and occasionally literally break the barriers and continue with their traditional gold mining in the vicinity of the Iamgold mining operation. Some also enter the large pits of Iamgold at night, to remove material and take it to their own processing locations. Such activities are, of course, dangerous for the miners in question, as well as for the mining processes (and reputation) of the multinational company. The differentiated rules of access to the gold underscore the hardened inequality in Suriname society.

In the prolonged cat-and-mouse game between the mining corporations and the local miners, the role of the state as the owner of means of violence is important. In the course of events, several outbreaks of armed violence have occurred, and the threat is always there. The company’s private security services employ soldiers or police officers who have retired from service, or who take the job even without leaving active duty. There have been several confrontations, in which the common element was the fuzziness of roles and acts. State intimidation in Suriname can be overwhelming: Heemskerk and Duijves (2013:96-97) describe how the “voluntary” removal of local and migrant miners from the Newmont concession was experienced by the Maroon miners from the area as a confrontation with “about a thousand heavily armed militaries,” and “other gold miners reported that the armed forces had taken funeral cars along, just in case...” (Heemskerk and Duijves 2013:96-97).

To get insight into the motivations and attitudes of the actors in the conflict around the Iamgold mine, and the persistence of it, we have to look to the actors’ backgrounds and past learning processes. Three issues stand out: the collective identity of the Ndyuka maroons, the mutual distrust between the parties (maroons, state, company), and the repetition of acts.

The Ndyuka have strong historical linkages with the territory they inhabit, and the connection to the land is fundamental to the political and social organization of their society. In Ndyuka society, matrilineal clans are the organizing units for villages and the communal rights to the lands and resources, including gold, surrounding the villages. The clans continued to feel connected to the territory following their “transmigration” to make way for the hydropower lake. The dispossession without proper consultation caused tremendous anguish and sorrow that is still felt decades after the event (Landveld 2009). People feel torn from their roots and betrayed by the leaders of the country. Now that the territory they received in compensation has also been taken away, they emphasize the cultural bonds within the clan and larger maroon society. Family ties and traditional leadership in the group have become the frame of reference to rely on and to share with. The common identity defines the position vis-à-vis the state and the company.

Their experiences in the distant and recent past have fueled a lot of distrust of the government and the *fotoman* (people from town) in general. The villagers of Nieuw Koffiekamp and the local miners show a large degree of “institutional distrust vis-à-vis the government institutions responsible for managing the gold sector” (Heemskerk et al. 2015:139). In Ndyuka culture, discord is usually settled in *kuutus*, palavers that sometimes involve representatives of the entire tribe and may take several days before some kind of a consensus is reached. The chiefs communicate important issues at the village level during *kuutus*, and local problems are also discussed by the community following the tradition of hear and listen.

The national law of Suriname does not recognize tribal land rights, but in customary law the maroon miners claim mining rights to their community lands. In practice, miners respect maroon land claims, especially if these are migrants from other maroon groups or from Brazil. The claims to customary grounds are also tolerated by the national authorities, as long as there are no conflicting interests such as more powerful groups that want access to particular locations (de Theije et al. 2014). This is the case with the large-scale mining projects of Iamgold and Newmont. Nevertheless, the miners from Nieuw Koffiekamp cannot accept the occupation of their community territory, and again and again they protest about and challenge the solutions proposed by the mining company and the government representatives. They also continue to break through the fences around the concession and set up their own small mining operations on the territory that the government granted to the Canadian mining company. In recent years, they have staunchly defended their right to mine at a location known as the Roma pit.

What do the structural and actor dimensions convey for the third dimension, that of interaction? Do they help us to understand how the conflict is staged? The protests since the first prospection in the area in the early 1990s have not brought the local population compensation for the loss of livelihood opportunities. The Koffiekamp community continues to believe they have the right to work in the area, and local miners are still working on the concession under the constant threat of removal. The interactions are often casual, for example when the community relations employees of Iamgold (many of whom are maroons themselves, and thus morally accountable to both parties) go and talk with the members of the community. Sometimes they are more urgent and threatening, however, and involve the intervention of the local traditional authorities or police.

The actors-in-action are often the people on the ground, namely the miners, community leaders, and representatives of the company at the mine location. They largely deal with the situation and find ways to live with the larger conflict in the daily situation. The central government does not want to be involved in these conflicts and allows the mining companies and local authorities to find solutions and perform interventions by themselves. When violence or protest does break out, the government typically asks for a pause in the action and promises to come up with a resolution. Over the years, several commissions have been installed, experts have been hired, plans have been made, and agreements have been signed, but to date none was implemented in its full form or resolved the fundamental dispute over the access to land and gold. The “solutions” became part of the culture

formed around the process, the slow culture that fits surprisingly well with the maroon culture of resolving problems through talking, in *kuutus*. The palaver culture mutes the sharp edges of the conflict.

The basic opposition between the parties becomes visible when we look at the framing of the conflict at the national level. The government and the Suriname urban population consider the Koffiekamp community, and especially the maroon miners, troublesome and obtrusive, selfishly looking only to their own profits instead of the development of the country. However, it is also accepted that they cannot be kicked out of their village just like that. This helps explain why the conflict has dragged on.

After yet another confrontation, President Bouterse visited Nieuw Koffiekamp in February 2014, “because according to the president through consultation and mutual respect, problems can be solved” (Kabinet van de President 2014). The message was illustrated with pictures of the *kuutu* and enthusiastic people surrounding the president. It seemed that finally the years of cat-and-mouse games around the gold at the Rosebel concession had come to an end. But it hadn't. The parties did not respect the agreement that was reached on that occasion. The miners did not want to go to the alternative locations offered to them and continued working close to the Iamgold mine. The company was slow in providing the infrastructure (roads and bridges) to the area they had allotted to the maroons. The removal from the Rosebel concession that was discussed in 2014 had still not taken place a year later. At the end of 2015, the issue reached the newspapers again, but it took yet another year before a new opening in the negotiations was found. After several protest actions, including barricading the access road to the Rosebel mine, it was decided that the miners would be allowed to work in the Roma pit for another three months, reprocessing the tailings of their previous mining activity. In an interview, the *kapitein* (village leader) immediately declared that he hoped that the three months would be extended to five years, after all “Nieuw Koffiekamp lies in the middle of the Rosebel concession” (Starnieus 2016). In the meantime, in April 2016 the government had sent a letter to United Nations Development Programme (UNDP) “formally requesting assistance from UNDP in finding an amicable solution to the long-standing dispute in the Gros Rosebel gold mine concession” (UNDP 2017). In April 2017, UNDP Suriname hosted a meeting to present the results of a consultation. One of the main conclusions was that the government should review legislation on mining and train the people working in small-scale mining.

THE CASE OF A MINING CONFLICT IN COLOMBIA

The LAR (“Lands and Rights in Troubled Waters. Land-use change, environmental harm and human rights violations in Colombia and Brazil: the case of the Cauca and Tapajós basins”) project studied conflicts over access to and control of natural resources in waterscapes and landscapes of southwestern Colombia and northern Brazil, particularly the conflict over gold mining in the Cauca River valley in Colombia linked up with the social mobilization agendas of local afro-descendant communities. Here, the conflict includes longitudinal efforts to gain access to land, including disputes over access to, ownership of, and control over water and gold-mining locations. The conflict also involves local afro-descendant communities' defense of their

artisanal small-scale gold mining that no longer uses contaminating substances, such as mercury or cyanide.

Artisanal gold mining has a long history in Colombia, which in colonial times was known as El Dorado (“The Golden”) because of the gold reserves discovered by the Spanish. In 2012, small-scale gold mining accounted for 72% of the 14,357 mines reported by the ombudsman’s office (Güiza 2013). Cauca is one of the country’s departments with the largest percentage (90%) of illegal small-scale mines. In addition, formal mining entitlement has increased exponentially in Cauca from 44 titles in 2005 to 225 in 2010, a result of the government’s promotion of foreign mining investment. In this region, local afro-descendants, who constitute up to 21.5% of the population (Urrea Giraldo 2010), have defended their right to carry out artisanal small-scale mining against legal and illegal gold mining by people who are foreign to the territory. In order to understand the complexities of the mining situation in Cauca, it is useful to acknowledge the different dimensions of the conflict suggested above.

On the structural dimension, there are important considerations to take into account. First, the governmental management of small-scale mining in the country has been framed by the Mining Code since 2001, when equal requirements were imposed on all types of mining initiatives, abolishing the small-, medium-, and large-scale division that typified the mining activity in previous legislation. By standardizing the formal requirements, parameters related to financial capital, technical capacity, and efficiency in the production made it difficult, if not impossible, for small-scale miners to achieve formalization. As a consequence, a great number of small-scale mines became illegal. According to the 2011 mining census, 6813 mines (66% of the total number of mines in Colombia) are considered illegal.

Although the Mining Code set out different formalization routes for ethnic communities (articles 124 and 133 for indigenous and afro-descendant communities, respectively), a necessary condition for formalization was to demonstrate legal collective ownership of land. But afro-descendant communities in Cauca have not been able to formalize ancestral land ownership (Vélez-Torres 2016). As a result, the requirement of collective land ownership prevented the communities from formalizing their mining activity.

In addition, the late acknowledgment of the right of afro-descendant communities to free prior and informed consent (FPIC) has created a gap in their access to ethnic rights. In the case of La Toma, for instance, the right to FPIC was denied by the government for more than a decade, while several mining titles were simultaneously granted by the national government to private actors, including the multinational mining corporation AngloGold Ashanti. In this case, the government argued that FPIC was not needed because, according to the government, there are no ethnic communities with a formal ownership of land inhabiting the region. As a result, the unequal access to land resulted in the unequal access to ethnic recognition and, therefore, the denial of the right to FPIC.

A final consideration related to the structural dimension is how mining informality is intertwined with illegal activities, in particular with the actions of illegal armed groups and drug-traffickers. Illegal armed groups have guarded and regulated the

access to, production of, and trade in gold, establishing local regimes of territorial control that are independent, though not disconnected, from governmental management. Additionally, drug-traffickers use gold to launder their money, by buying the gold extracted from illegal mines and making it appear as though it is from a legal mine (Defensoría del Pueblo 2010).

Regarding the actors dimension of the conflict, it is important to stress that actors are not only the ones in situ, but also those whose actions have an important impact on the territory despite not residing there. We can identify actors directly connected to the extraction of gold, such as illegal miners controlled by people who are foreign to the region, legal mining companies holding a concession granted by the national government, and artisanal small-scale miners who inhabit the territory and defend traditional extractive practices. Another category of actors who take part in the management of natural resources and territorial control are government employees, as well as illegal armed groups, for example guerrilla groups, paramilitaries, and criminal gangs. A third category of actors are drug-traffickers, whose localized actions entangle both with miners and with the legal and illegal authorities of territorial control. Power relations between these actors vary in time and space. Drivers of such power shifts can be the price of gold in the international market or the fluctuations of territorial control exercised by the government or illegal armed groups.

Local afro-descendant miners in the region have a long history of gold extraction and the activity has acquired an important cultural role. Mining is both the basis of their household economy and a crucial feature of their ethnic identity, one that connects them to the process of enslavement as well as to the freedom that most slaves bought with gold (Escobar 2001, Oslender 2004). Such cultural grounding makes it important to undertake a differentiated ethnic analysis of the mining conflict in Cauca, not only because these communities have been constitutionally protected since 1991 (Eslava 2009), but also because their gold mining embodies a strong material and symbolic rooting in the territory. In this context, dispossession of land and other land-based resources becomes cultural extermination.

In terms of the communities’ equipment to face the threats to artisanal small-scale mining, their qualified understanding of the national legislation, and their proficient legal performance stand out as practices of social organization and resistance. Legal mobilization has been coupled with an interethnic dialogue between afro-descendants and indigenous people, which has strengthened the local capacities to interact with the state and has allowed new opportunities for international visibility through human rights organizations, activist scholars, and artists. Diverse mobilization strategies demonstrate how conflicts over natural resources articulate local and global scales, from the perspective not only of the economic chains but also of the social processes of resistance.

In terms of the interaction between the structural and the actor dimensions, two relevant dynamics arise with the suggested analysis. First, the most important mobilization strategies of the local afro-descendant communities have taken the form of legal action. Legal actions have resulted from the systematic denial of rights to local communities: denial of the right to ethnic recognition, denial of the right to land, denial of the right to

formalized mining activities, denial of the right to FPIC, etc. Such legal mobilization shows that conflicts over water and mining sites are, at their core, conflicts between local communities and the state. In these conflicts, the state power is recognized as much as it is confronted.

Second, when analyzing the trajectory of legal mobilization by afro-descendants in Cauca, in particular the bureaucratic barriers faced by the communities to get their rights granted, a legal interdependence can be identified between the formalized access to land, the ethnic recognition, and the mining legalization. Because one of the most important factors of historical inequality in Cauca is precisely the limited access to land (Rodríguez and Cepeda 2011), the interdependence between land access and other rights can be analyzed as a process of progressive discrimination against afro-descendant communities.

Finally, by studying the mobilization agenda of local miners to defend their artisanal and traditional extraction of gold, it is possible to discover in their discourse a strong link to the *Proyecto de vida propio* (Autonomous Life Project). Here, the identity of local communities is rooted in mining, and mining is rooted in territory; such articulation makes visible a novel dimension of the communities' resistance to extractivism, one that entwines the defense of cultural traditions with the aspiration for sustainable livelihoods.

TEMPOS AND DIMENSIONS IN THREE CASES OF RESOURCE CONFLICT

The three cases discussed above involve very different situations, places, and actors. But the dimensions and research strategies laid out in Table 1 can help to draw attention to key elements of the evolution of conflict in each case. In what follows, we reflect on each of the three dimensions (structure, the aforementioned actors' formation, and interaction) with the purpose of evaluating the merits of using the dimensions to reveal comparable components in all three conflicts.

In terms of the structure, in all three cases the importance of including the structured setting of the conflict became obvious. In the cases we addressed, for instance, a common feature is the crucial role of mining or fishing concessions as a formal mechanism used by the state to regulate access to natural resources. This government instrument often deprives small communities of their traditional ownership and access. This raises the issue of the mechanisms applied in the access to and privatization of resources, and reveals the important role of the state in structuring the conflicts over natural resources. Traditional ownership is usually cast in notions of ethnicity and identity, which is also a connection between the three cases. Difficulties faced by local, traditional, or ethnic communities in accessing the natural resources in their traditional territories cannot be seen in isolation from the difficulties faced by the state in guaranteeing equal access to natural resources by different parties, especially when the livelihoods of the communities depend on such access.

These common characteristics identified by analyzing the structure of the conflicts, echo specific aspects of Escobar's (2006a,b) discussion on environmental conflicts, for instance, on when the unequal distribution of natural resources is connected to these being the source of local communities' livelihoods. In

such cases, struggles to defend access to territory, as a long-term feature of the region, easily become struggles to defend local cultures. In addition, the opportunities of newcomers, such as small-scale miners, who are potentially in conflict with local communities, the state, large companies, and/or environmental activists, are also part of the setting in which the conflict evolves. A thorough understanding of how these different parties are positioned in the conflict area therefore needs to be included in our analyses.

In the second dimension of the suggested analytical approach, we found how important it is to reflect on the histories of the different actors. Thus, not only the ways in which different parties are positioned in the conflict area, but also their histories, skills, and memories should be in the equation. These histories solidify taken-for-granted expectations about rights, in confidence in one's power to impose things (or lack of that confidence), in searches for natural alliances, and in mobilization capacities (or lack thereof). In our cases, for instance, we frequently encountered tradition and ethnicity as common features of the local actors' motivations and attitudes. Although there are clear differences in how the actors positioned themselves in relation to national and ethnic identity, also in different moments of each conflict, what stands out is how ethnicity and cultural traditions are crucial pillars of the visions, actions, and emotions that embody the actors' responses to the resource conflicts. This articulation calls for understanding ethnic difference not only as vulnerability, but also as a set of symbols, products, and practices that may give local groups an advantage in relation to otherwise more powerful actors. A focus on the actors' histories, skills, and limitations also reveals the interdependence of the state-building and the ethnic identity-building process, in the genesis of the conflicts over natural resources.

With respect to the third dimension, namely the actual interactions that give shape to the conflict, the time dimension is at its most visible. What actually happens? First, the conflicts over the natural resources go on for years or decades, without leading to satisfactory conclusions for the parties involved, but also without many direct confrontations and fights. The fishing and the mining cases all produced relatively few head-on clashes. However, they all went through different phases, each with its own pace and tempo. Periods of much activity, negotiation, discussion, gossip, and propaganda, alternate with long periods of getting on with life as though things were normal. These different attitudes, at different moments, are better understood when one has deeper insights into people's histories.

CONCLUSION: INTERSECTING STRUCTURES, ACTORS, AND INTERACTIONS

In this article we proposed a research approach to conflicts over natural resources that includes different tempos of the developments that lead to the emergence of conflict. For each of the three dimensions we distinguished, several theoretical and methodological options are open. We therefore call our proposal a "pro-theory" (Bader 1991:35-38); it is a format to structure levels of the analysis of conflict, rather than an elaborate theory. The aim is to clarify points of departure and reasons for different vocabularies and assertions of different theoretical and conceptual approaches, and the interspersing of problem phrasing. It is, as stated, a frame of reference rather than a comprehensive theoretical framework.

This is reflected in what we were able to unpack in our case explorations. We managed to structure and distinguish different dimensions of the emergence of the conflicts, by focusing on the different speeds at which the constituting components of the conflict came into being. This, we believe, is a useful distinguisher for scholars studying such conflicts, a reminder of the multilayeredness of a conflict configuration, and an aid to deciding on one's focus in a specific case analysis. Additionally, we believe that the emphasis on the often understudied dimension of the actors' history and current expectations and ambitions can help to account for people's decisions, strategies, and shifts in their moves. It should be added to this that the dimensions primarily refer not to the chronology of a conflict's course, but to the pace of changes within these dimensions. Transformations in institutionalized socioeconomic inequalities take more time than transformations in peoples' skills to promote their interests, and these, in turn, take more time than changes in the tactics of a specific player to win the tug of war.

Although our succinct presentation of the cases did not result in a prescription of research strategies or reveal new, deeper insights into the dynamics of these situations, the model does help to explain specific turns in how conflicts evolve. It can also assist in comparing and contrasting across cases. Why, for instance, are conflicts that go on for years, often of low intensity, whereas, they might easily result in vehement hostilities, or vice versa? Too often, conflict developments are still portrayed as erratic or, to the contrary, as inexorable, given the incompatibility of the various actor's interests. We believe that our approach provides for a more cautious and differentiated inclusion of the peculiar logic of various processes evolving simultaneously, and may therefore yield insights into the particularities of coinciding developments driven by dynamics of different natures. Only then can we explain the simultaneous occurrence of irreconcilable clashes between interests and activities, with the observation of a *modus vivendi* having been obtained between the conflicting parties. Awareness of the distinctive features contributed by each of the tempos involved may enable the explanation of the surprising combination and *mélange* of occurrences. It can help to understand from what history and with which aspirations, memories, and expectations people and communities come, to look at the dimension of collectively and individually experienced and internalized vicissitudes, that "hardened" in the preparation, "equipment," background, and dispositions of the actors. In addition, it is useful to inquire what identity, collectively and individually, that background produced to respond to the current situation. This, obviously, cannot take the form of linking a specific change of, for instance, political opportunities, to a specific change of tactics by one or another party in the conflict. But it can help to understand why open conflict does not erupt, even if circumstances suggest it should at any moment.

[1] CoCooN was a six-year research and development program (2010–2016) that was financed by NWO-WOTRO. Seven projects were part of it, and some of the results of three of these are used in this article. The GOMIAM project (of which two subprojects are addressed here) was hosted by the Center for Latin American and Caribbean Studies (CEDLA) in Amsterdam, REINCORPFISH by the University of Amsterdam, and LAR by the University of Utrecht.

[2] The other mine is owned by Newmont Mining Corporation and located in the eastern part of the country.

[3] Exploration rights were assigned to Placer Development (Canada) in the period 1974–1977, Grassalco (Suriname state) in 1979–1985, and Golden Star Resources Ltd. (Canada) from 1992 onward.

Responses to this article can be read online at:

<http://www.ecologyandsociety.org/issues/responses.php/10221>

Acknowledgments:

This article is an outcome of the GOMIAM (Gold Mining in the Amazon) research project, financed by the Dutch National Research Funding Organization NWO, under number W07.68.301.00, in the framework of the CoCooN (Conflict and Cooperation over Natural Resources in Developing Countries) programme.

LITERATURE CITED

- Bader, V.-M., 1991. *Collectief Handelen*. Wolters Noordhoff, Groningen, The Netherlands.
- Bavinck, M. 2015. Fishing rights in post-war Sri Lanka: results of a longitudinal village enquiry in the Jaffna region. *Maritime Studies* 14(1):1-15. <http://dx.doi.org/10.1186/s40152-014-0019-0>
- Central Bank of Suriname. 2014. *Leading sectors of Suriname: the impact of mining, agriculture and tourism activities on the economy 1970-2012*. CBvS, Paramaribo, Suriname.
- Cremers, L., J. Kolen, and M. de Theije. 2013. *Small-scale gold mining in the Amazon: the cases of Bolivia, Brazil, Colombia, Peru, and Suriname*. Centre for Latin American Studies and Documentation, Amsterdam, The Netherlands. [online] URL: http://www.cedla.uva.nl/50_publications/pdf/cuadernos/cuad26.pdf
- de Theije, M., J. Kolen, M. Heemskerk, C. Duijves, M. Sarmiento, A. Urán, I. Lozada, H. Ayala, J. Perea, and A. Mathis. 2014. Engaging legal systems in small scale gold mining conflicts in three South American countries. Pages 129-146 in M. Bavinck, L. Pellegrini, and E. Mostert, editors. *Conflict over natural resources in the global south: conceptual approaches*. CRC, Boca Raton, Florida, USA.
- Defensoría del Pueblo. 2010. *Minería de hecho en Colombia*. Defensoría del Pueblo, Bogotá, Colombia.
- Escobar, A. 2001. Culture sits in places: reflections on globalism and subaltern strategies of localization. *Political Geography* 20(2):139-174. [http://dx.doi.org/10.1016/S0962-6298\(00\)00064-0](http://dx.doi.org/10.1016/S0962-6298(00)00064-0)
- Escobar, A. 2006a. Difference and conflict in the struggle over natural resources: a political ecology framework. *Development* 49(3):6-13. <http://dx.doi.org/10.1057/palgrave.development.1100267>
- Escobar, A. 2006b. Political ecology of globality and difference. *Gestión y Ambiente* 9(3):29-44.
- Eslava, L. 2009. Constitutionalization of rights in Colombia: establishing a ground for meaningful comparisons. *Revista de Derecho del Estado* 22:183-229.

- Güiza, L. 2013. La pequeña minería en Colombia: una actividad no tan pequeña. *Dyna* 80(181):109-117.
- Heemskerk, M., and C. Duijves. 2013. Small-scale gold mining and conflict in Suriname. Pages 85-101 in L. Cremers, J. Kolen, and M. de Theije. *Small-scale gold mining in the Amazon: the cases of Bolivia, Brazil, Colombia, Peru, and Suriname*. Centre for Latin American Studies and Documentation, Amsterdam, The Netherlands. [online] URL: http://www.cedla.uva.nl/50_publications/pdf/cuadernos/cuad26.pdf
- Heemskerk, M., C. Duijves, and M. Pinas. 2015. Interpersonal and institutional distrust as disabling factors in natural resources management: small-scale gold miners and the government in Suriname. *Society & Natural Resources* 28:133-48. <http://dx.doi.org/10.1080/08941920.2014.929769>
- Hogenboom, B. 2015. Latin America's transformative new extraction and local conflicts. *European Review of Latin American and Caribbean Studies* 99:143-151. <http://dx.doi.org/10.18352/erlacs.10110>
- Kabinet van de President. 2014. *President onderhandelt: vruchtbare overeenkomst tussen Koffiekamp en Iamgold*. Republiek Suriname, Paramaribo, Suriname. [online] URL: <http://www.gov.sr/kabinet-van-de-president/actueel/archief-2010-2014/nieuwsberichten-2014/president-onderhandelt-vruchtbare-overeenkomst-tussen-koffiekamp-en-iamgold.aspx>
- Kemp, D., J. R. Owen, N. Gotzmann, and C. J. Bond. 2011. Just relations and company-community conflict in mining. *Journal of Business Ethics* 101(1):93-109. <http://dx.doi.org/10.1007/s10551-010-0711-y>
- Landveld, E. R. A. O. 2009. *Alles is voor eeuwig weg. De transmigratie van marrons in historisch perspectief*. Bureau CONOS, Paramaribo, Suriname.
- Litmanen, T., T. Jartti, and E. Rantala. 2016. Refining the preconditions of a social licence to operate (SLO): reflections on citizens' attitudes towards mining in two Finnish regions. *Extractive Industries and Society* 3(3):782-792. <http://dx.doi.org/10.1016/j.exis.2016.04.003>
- Menon, A., M. Bavinck, J. Stephen, and R. Manimohan. 2016. The political ecology of Palk Bay fisheries: geographies of capital, fisher conflict, ethnicity and nation-state. *Antipode* 48(2):393-411. <http://dx.doi.org/10.1111/anti.12181>
- Oslender, U. 2004. Fleshing out the geographies of social movements: Colombia's Pacific coast black communities and the 'aquatic space.' *Political Geography* 23:957-985. <http://dx.doi.org/10.1016/j.polgeo.2004.05.025>
- Pierck, S., and M. Tysiachniouk. 2016. Structures of mobilization and resistance: confronting the oil and gas industries in Russia. *Extractive Industries and Society* 3(4):997-1009. <http://dx.doi.org/10.1016/j.exis.2016.07.004>
- Ratner, B., R. Meinzen-Dick, C. May, and E. Haglund. 2013. Resource conflict, collective action, and resilience: an analytical framework. *International Journal of the Commons* 7(1):183-208. <http://dx.doi.org/10.18352/ijc.276>
- Rodríguez, D., and E. Cepeda. 2011. Concentración de la tierra en Colombia. *Comunicaciones en Estadística* 4(1):29-42. <http://dx.doi.org/10.15332/s2027-3355.2011.0001.02>
- Salman, T., and M. de Theije. 2017. Analysing conflicts around small-scale gold mining in the Amazon: the contribution of a multi-temporal model. *Extractive Industries and Society* 4(3):586-594. <http://dx.doi.org/10.1016/j.exis.2017.03.007>
- Starnieuws. 2016. Overeenkomst Nw Koffiekamp bezegeld door partijen. *Starnieuws*, 1 December. [online] URL: <http://www.starnieuws.com/index.php/welcome/index/nieuwsitem/38632>
- Temper, L., and J. Martinez-Alier. 2013. The god of the mountain and Godavarman: net present value, indigenous territorial rights and sacredness in a bauxite mining conflict in India. *Ecological Economics* 96:79-87. <http://dx.doi.org/10.1016/j.ecolecon.2013.09.011>
- United Nations Development Programme (UNDP). 2017. *Gros Rosebel Concession Dispute in Suriname: United Nations Development Programme (UNDP) preliminary assessment report released*. UNDP Suriname, Paramaribo, Suriname. [online] URL: <http://www.sr.undp.org/content/suriname/en/home/presscenter/articles/2017/04/19/gros-rosebel-concession-dispute-in-suriname-united-nations-development-programme-undp-preliminary-assessment-report-released/>
- Urrea Giraldo, F. 2010. Patrones sociodemográficos de la región del sur del Valle y norte del Cauca a través de la dimensión étnico-racial. Pages 25-124 in L. C. Castillo, editor. *Etnicidad, acción colectiva y resistencia: el norte del Cauca y el sur del Valle a comienzos del siglo XXI*. Universidad del Valle, Cali, Colombia.
- Vélez-Torres, I. 2016. Disputes over gold mining and dispossession of local afrodescendant communities from the Alto Cauca, Colombia. *Third World Thematics* 1(2):235-248. <http://dx.doi.org/10.1080/23802014.2016.1229131>
- Warnaars, X. 2013. Territorial transformations in El Pangui, Ecuador: understanding how mining conflict affects territorial dynamics, social mobilization, and daily life. Pages 149-172 in A. Bebbington and J. Bury, editors. *Subterranean struggles: new dynamics of mining, oil, and gas in Latin America*. University of Texas Press, Austin, Texas, USA.