

Open Research Online

The Open University's repository of research publications and other research outputs

The role of social memory in natural resource management: insights from participatory video

Journal Item

How to cite:

Mistry, Jayalaxshmi; Berardi, Andrea; Haynes, Lakeram; Davis, Delano; Xavier, Rebecca and Andries, Johnny (2014). The role of social memory in natural resource management: insights from participatory video. *Transactions of the Institute of British Geographers*, 39(1) pp. 115–127.

For guidance on citations see [FAQs](#).

© 2013 The Authors

Version: Accepted Manuscript

Link(s) to article on publisher's website:
<http://dx.doi.org/doi:10.1111/tran.12010>

Copyright and Moral Rights for the articles on this site are retained by the individual authors and/or other copyright owners. For more information on Open Research Online's data [policy](#) on reuse of materials please consult the policies page.

oro.open.ac.uk

The role of social memory in natural resource management: insights from the North Rupununi, Guyana

Jayalaxshmi Mistry^{a*}, Andrea Berardi^b, Lakeram Haynes^c, Delano Davis^d, Rebecca Xavier^e and Johnny Andries^d

^aDepartment of Geography, Royal Holloway, University of London, Egham, Surrey TW20 0EX, UK Email: j.mistry@rhul.ac.uk

^b Communication and Systems Department, The Open University, Walton Hall, Milton Keynes MK6 7AA, UK Email: a.berardi@open.ac.uk

^cRewa Village, North Rupununi, Region 9, Guyana Email: lakehays@gmail.com

^dToka Village, North Rupununi, Region 9, Guyana

^eWowetta Village, North Rupununi, Region 9, Guyana

* corresponding author

Abstract

This research looked at the role of social memory for adaptive natural resource management within indigenous communities of the North Rupununi social-ecological system (SES) in Guyana. Secondary data from historic texts and archives were first used to build a social and ecological history of the North Rupununi SES. Current social memory 'in use' was then surfaced through a Participatory Video (PV) process led by the indigenous community. From this, a compendium of key narratives of the communities' social memory was identified and modes of social memory creation, transmittance and modification were revealed. These highlighted the role of the social memory in identity formation and self representation, how the social memory maintains and reinforces community connectedness and collectiveness, and how PV supports indigenous ways of communication, especially the visual. The study provides some valuable insights into the dynamic nature of the North Rupununi SES social memory, how it is used to make sense of the world and how PV could potentially play a role.

Keywords: Guyana, social memory, participatory video, natural resource management, narratives, adaptive

Introduction

Recently, the focus within natural resource management has been on social-ecological systems (SESs) - human-in-nature models, where human and ecological components are depicted as being tightly integrated, functioning through feedback interactions over a range of scales and leading to emergent behaviours which sustain the coupled domains over space and time (Berkes *et al.*, 2003 and Berkes and Folke, 1998). The long-term viability of these SESs is seen as being dependent upon their adaptive capacity (Folke *et al.*, 2003, Gunderson and Holling, 2002 and Walker *et al.*, 2002), where learning, flexibility to experiment and adoption of novel solutions are central (Brand and Jax, 2007 and Folke, 2006). This adaptive capacity and the processes for learning from experience and remembering is captured by the 'collective' or 'social memory' (Miszta, 2003) of the SES, which represents the long-term communal understanding of the dynamics of environmental and social change, and the transmission of pertinent experience (McIntosh, 2000).

Social memory describes how an individual thought, emerging out of a specific experience, can become part of the collective knowledge of a group, which in turn, frames individual practice and creativity, in an ongoing spiral of adaptive reinforcement (Miszta, 2003). It refers to a representation of the past that is commonly shared and jointly remembered, but also shapes a group's present identity, conditions and realities by providing understandings and frameworks to make sense of the world. Within SESs, and for natural resource management, social memory could play an important role in building the adaptive fitness and resilience of these systems as they evolve over time in response to both internal biophysical and social changes (Stephan *et al.*, 2010, Folke *et al.*, 2003), but also in dealing with emerging external social-ecological challenges.

Within predominantly oral cultures, oral transmission binds the past to the present for its survival, a dynamic and transformative spiral of unconsciously and continually readjusting the past to fit the present (Ong, 1983). In addition, memory is the only frame of reference by which to judge the past (through, for example, creation myths), and thus, social memory plays a vital role in maintaining a group's cohesion and order. As such, in many oral cultures, the spiritual, mythical and physical are all involved in everyday life and form part of the social memory. This social memory can be transferred, reinforced and reworked in a number of ways: through habits or rituals (e.g. learning through doing, imitation of practice, social gatherings) (Ong, 1983; Le Goff, 1992); through oral communication (e.g. storytelling, dialogue, teaching) (Schneider, 2002); through 'institutions of knowledge' (e.g. rules-in-use, values, metaphors) (Davidson-Hunt and Berkes, 2003); and, through physical/spiritual forms and artefacts (e.g. places, objects, tools). Habits, rituals and oral communication are processes of 'participation', allowing people to take part, share and make relations with others. This participation is organised around 'reification', processes whereby an abstraction, relation or object is considered as if they had human or living existence and abilities i.e. objectification (Wenger, 1998) – for example, institutions of knowledge and physical/spiritual forms and artefacts. Processes of participation and reification therefore work together to allow social memory to be established and/or evolve.

Many indigenous peoples are still heavily reliant on oral modes of communication (Mistry, 2009). Many also maintain an intimate relationship with place (Castree, 2004), constructing their worlds around vibrant social/spiritual/physical relationships with particular landscapes and locations. They depend on natural resources present in these landscapes for their survival, and have

developed social and cultural processes that reflect and adapt to the very real dynamics of natural systems i.e. they are active SESs. However, even for the most remote communities, regional, national and global driving forces, whether they are locally led economic development or foreign extractive activities, as well as global phenomena such as climate change, are bringing different challenges into the frame. It could be argued that the ongoing survival of indigenous SESs in response to historical impacts (colonisation, introduction of Western culture, enforced resource regulations and governance, and external exploitation such as mining and logging) is the result of a resilient and adaptive social memory, as appropriate knowledge and skills have been acquired and retained over time in response to changing circumstances (Berkes et al., 2003). However, in more recent times, even greater rates of social learning on how to adapt to rapidly changing conditions is becoming essential for the continued survival of these communities, and indigenous modes of communication may need to be complemented and fortified with other ways of social remembering.

Participatory video (PV) could be a tool for enhancing and reinvigorating indigenous social memory. PV is a process involving a group or community in shaping and creating their own films according to their own sense of what is important, and how they want to be represented (Johansson *et al.*, 1999). In Latin America, it arose from Freirian ideologies focusing on values of participation, learning and empowerment for steering the processes of social change, while at the same time promoting the involvement and response of the audience (Burton, 1990; Gumucio-Dagron, 2009). Indigenous media – “media conceptualised, produced and/or created by indigenous peoples” (Wilson and Stewart, 2008, p2) is not a new concept and has been central to indigenous peoples movements across the world. However, with its focus on *process*, PV could potentially help establish community-

owned solutions to new social and environmental challenges by strengthening as well as transforming social memory.

In this paper, we report on an exploratory study of social memory and the use of PV with indigenous communities of the North Rupununi, Guyana. This small project was linked to a larger project on adaptive natural resource management (see Wetlands Partnership, 2006, 2008) and was viewed as a stepping stone to an in-depth study. Our aims were to explore the potential role of social memory for adaptive natural resource management in the North Rupununi SES and to investigate the extent to which participatory video could promote the rapid evolution of social memory that is now required to enable successful adaptation to future challenges.

To address these aims, we first researched the social and ecological history of the North Rupununi SES, to identify an aspect of social memory prevalent in historic texts and archives. We then facilitated a PV process led by the indigenous community for surfacing the current social memory 'in use' by the people. From this we identified key narratives of the communities' social memory, and by also drawing on other sources of information, we identified the means through which social memory was being created and transmitted. This then enabled us to reflect on the potential uses and limitations of PV for social memory transformation, and in strengthening the adaptive capacity of the North Rupununi SES in an increasingly unpredictable and dynamic environment.

The research context and methodological processes

The North Rupununi is located in the south-west of Guyana, and is a subset of a larger historical SES, in which the traditionally semi-nomadic indigenous Makushi and Wapishana peoples, moved freely over the Rupununi savannas which extend into

Brazil and Guyana, and straddle the watershed divide between the Amazonian basin and the Essequibo River catchment, the largest drainage basin of the Guiana Shield. This watershed boundary was used in 1926 to form the international boundary between Brazil and Guyana, thereby effectively splitting the established SES into two distinct socio-political units: the Brazilian side (currently comprising a population of approximately 15000) and the Guyanese site (comprising a population of around 5000 individuals). However, even today, the international border remains a fluid entity and the passage of people from one side to the other occurs without official sanction.

The North Rupununi is characterised by a unique wetland/savanna/forest ecology determined by the inland floodplain of the Rupununi, Essequibo and Takatu Rivers. Since colonial times, the region has also experienced a distinct socio-economic trajectory which has created a unique and self-reinforcing ecological, social and political entity. The social memory and PV project was initiated while implementing a natural resource management project in the region, linking local indigenous livelihoods with biodiversity conservation (Wetlands Partnership, 2006, 2008). A number of discussions with community leaders highlighted how the historical context of the region was an important influence on current natural resource management practices and focused our enquiries towards exploring the communities' social memory. The idea of using PV came from dialogue with other PV practitioners and academics, and from a desire to enable local communities to take greater ownership of the research process and present their views authentically.

In carrying out the research, we first built a detailed timeline (approach adapted from Walker et al., 2002) in order to identify the North Rupununi SES social memory as captured and portrayed by outsiders e.g. colonists, academics. This was done by consultation of secondary data and literature available on the history of the North

Rupununi mostly comprising of explorer/colonial accounts of the region (e.g. Im Thurn, 1883; Schomburgk, 1840), and a limited number of anthropological/cultural studies (e.g. Forte, 1996a, b, c).

We then initiated the PV process to surface the current social memory as represented by the North Rupununi inhabitants themselves. This began with a training workshop open to all the communities from the region. The aim of this workshop, attended by eighteen people, was to introduce the project (each individual attending the workshop would then go back and present their experience to their community), give some basic PV training to all participants, and then be able to select individuals to carry out the main research. The workshop took place over nine days and involved training in participatory methods, ethics, basic filming techniques, editing and a final screening of films. At the end, four young adults, three men and one woman (co-authors on this paper) were selected as community researchers based on their video camera and computing skills, their ability to speak local languages of Makushi and Wapishana and their enthusiasm for undertaking the main research project. All community researchers were engaged through a paid part-time position over an eighteen month period.

Through iterative cycles of discussion and practical PV work, the community researchers set about selecting, meeting and interviewing individuals (using semi-structured interviews) within the communities and the local NGO, the North Rupununi District Development Board (NRDDB), using PV to facilitate the process. Initial meetings took place with older members of the communities to elicit and record the types of memories they had of social and ecological events (and resulting social actions) which may have affected the adaptability and resilience of the North Rupununi SES. Further interviews took place with individuals from different age

groups, again focusing on eliciting major events and allowing individuals to express their feelings about these. As filming continued, the community researchers began to translate interviews into English and edit the clips into themed films, and these were screened to communities at all opportunities, allowing group reflection on the findings.

We used a grounded theory approach (Charmaz, 2006) to analyse the data from the literature and PV. This method allowed us to take a constructivist approach to the research where we acknowledged multiple perspectives and issues of positionality in the creation of knowledge, with the aim of generating concepts which were not predetermined, while exploring the variety of relationships amongst these. In the following section we present the findings based on the historical archival research and the PV process. It is also supplemented by informal discussions and conversations with local community members, our participation and observations in local events and festivals, and by research diary entries over ten years working in the region. We do not comment on the issues arising from the PV research process itself which is documented elsewhere (see Mistry and Berardi, 2011) – the aim of this paper is to analyse the North Rupununi SES social memory and investigate how social memory is being shaped and could be shaped through PV.

Social memory narratives

Comparing the historical material with the PV gave us the opportunity to identify dominant narratives within the oral and written social memories. We found that there were three key linked narratives – that of traditional ways of life, that of non-indigenous interventions, and that of oppression and repression. There are similarities and differences in how these are represented in the written and oral social memories.

Traditional practices

From the PV, traditional practices were mostly customs that were common in the past, but no longer regularly performed and included the Parishara events, endurance races and the use of binas. Many written texts also recounted these practices.

The Parishara or 'Humming-Bird' festivals involved night long singing, music making and dancing (many songs had sexual and naturalistic imagery) where performers were fortified with plenty of cassava-based alcoholic drinks such as 'paiwari', 'cassiri' and 'cari'. In many cases, neighbouring villages were invited to these festivals, accompanied by the shaman or 'piyasan'. As well as reinforcing traditional knowledge, skills and practices, the parishara festivals were very important for community cohesion and support. As a male elder describes it "...in the end you enjoy. If the group that came, everybody got drunk, it means the host village won that competition. So the village, the invited team who lost will have to go back and invite this team for a repeat, and this normally came after the harvest season, going on to December and it was nice when you understand it. Of course during that time a lot people get final wife or a husband because it was open to anybody". This is supported by some early explorer accounts of these dances. The German, Theodor Koch-Grunberg who travelled in the area between 1911 and 1913 observed "...the festivals served the purpose of fostering neighbourly relations with tribal relatives or with members of other tribes, for renewing old friendships and cementing new ones. ...They offer likewise an opportunity for the exchange of news, of all kinds of gossip, for flirtations and earnest love affairs, and finally for a brisk trade before scattering" (1923: 154-155).

Endurance races were competitions between villages where people from one village would set out from a set point and race each other to another village. At the 'host' or receiving village there would be barrels of 'cari' waiting to be consumed. However, to reach the 'cari' the racers had to get past men waiting from the host village who would attempt to stop them. As described by a male elder "Long ago people use to have competition with the other people from the other communities and they always invite people who they know and who always want to have competition with them. They invite people from Yakarinta and they use to run from Yakarinta to Simony and from Yakarinta to Simony is about 15 to 20 miles. First had to make cari to prepare for those person who they invited and they have to make a lot of cari. The people know who will be coming, they call 'kaka', those are the people they invite and the people from the community who were to go and meet them in the way now they call them 'won pan'. In the morning people got ready and people from Yakarinta start to run to Simony and them they ran, ran, ran, they had to jump over water or run through water and certain people just looking on where the people was coming and those people got ready. The old man said you best get ready, kaka them coming he told his son-in-law and his son-in-law told his other people who is with them and he told them that they must get ready....those people came....coming with speed with force and the old man race him down and brace him to the ground and another one came and he hold him again.....when they come now if the person only pass this man, if he only knock down this man he would go straight to the canoe, duck his head inside and they would put this man on a bench to sit down and they would give him cari for him to drink and that is his personal one and the other rest would share their cari. They people normally drink whole night, in the day, the next day and after that they would have party, this is not like the Parishara, and it have a man who know to

sing the kaka song and they would dance and enjoy their selves. That is how competition of this endurance race goes”. As with the Parishara events, the endurance races reinforced tradition, displayed strength and hierarchy important for social processes and at the same time underlined bonds between individuals and communities.

The ‘bina’ stories had an emphasis on traditional knowledge and biding by rules. Binas are charms that are made from plants or animals and are used in various ways on people and animals (Forte, 1996a) – PV interviewees recounted their use for hunting, fishing and in familial and intimate relationships. ‘How to bina a lazy dog’, for instance, involved cutting a dog’s tail and burying it on a deer track, according to the teller. Most bina stories stressed the importance of knowing how to use binas properly, its effectiveness and the loss of this knowledge in recent times. As noted by one PV interviewee “today we don’t use Bina because the old people died and nobody can’t use Bina”.

Stories of animism and folklore mostly involved tales of collaboration, trickery and/or coercion and featured animals, plants, rocks/stones, people and spirits (Roth, 1915). Some were also about the interaction between the earth and the sky where people, other living beings and spirits moved seamlessly between the two worlds. Stories in the PV of Makunaima, the culture hero and creator god of the Makushi, and his younger brother Insikiran (also known as Pia), were usually in the form of Makunaima as a creator, a transformer and a trickster. In contrast the few tales of Kanaima - an evil spirit that possesses people and causes them to turn into deadly animals and/or go into a murderous rage- warned against revenge and being careful/wary of doing ‘bad’ things.

Non-indigenous interventions

The adoption of non-indigenous livelihood activities by the indigenous North Rupununians features highly in the social memory of the region. The first small herd of cattle was introduced into the North Rupununi in the 1860s, but it was not until the 1890s that the ranching industry began in earnest when H.P.C. Melville, a Scottish rancher and his associate John Ogilvie, settled and married in the region. Some communities also began ranching activities themselves and cattle herds grew considerably in the early part of the 20th century. The 1860s also saw the start of the balata industry. Balata, the latex of the bulletwood tree (*Mimusops globosa*), was one of the main raw materials for the manufacture of rubber products during the late 19th and early 20th centuries. Balata exports peaked in 1917 at 1.6 million pounds, and most of this was produced by indigenous labour in the North Rupununi (Forte 1989, 1996a). Balata bleeding was a wet season activity and this left communities free to concentrate on farming and fishing in the dry season.

Within the written historical accounts, the focus is predominantly on the indigenous population being subjugated and coerced to work under Europeans. For example, Perberdy notes “The Macusi people have been brought into persistent contact and mental conflict over a considerable period of years with an originally impoverished rancher-industrialist-settler population struggling for establishment in Macusi country with more or less marked success. The limited benefits derived by the Macusi, mostly of an impermanent nature, from rancher occupation, have not sufficed to replace tribal customs of self-sufficiency based on tribal laws which constituted the very backbone to racial dignity and independence. These customs have been greatly disrupted by alien infiltration and occupation” (1948, p.9). Other texts describe ranching in the region as a stratified, manorial system of mutual obligations, where

indigenous work often straddled the line between kin- and wage-based labour and where the mixed descendants of whites formed the local socio-economic and political elites (e.g. Myers, 1993).

The PV, on the other hand, elicited a rather different memory where balata bleeding and ranching were fondly remembered as the ‘good old times’, evoking a time of opportunities and good fortune. As a male elder reminisces “Long ago we use to work on balata where we use to earn our income, and where we use to travel to Georgetown with the balata. We use to buy a lot of food for our selves. Those days things use to be cheaper, this days things are very expensive and hard we never be like this before, every thing just get expensive. Now days you cannot buy enough food stuff for your family and G\$1,000 is nothing these days, and in those day we normally live on our farm products such as yam, pumpkin and other things”. The focus of ranching was on the ownership of cattle and many reiterated this quote: “[we] had plenty cows here before, not like now. It really had cows, we had plenty cows here” (male elder).

Oppression and repression

The written history recounts numerous interlinked influences and processes which appropriated rights from the indigenous population (particularly over land and resources) (Mistry et al., 2009), and attempted to assimilate indigenous people into ‘civilised’ culture. Mission schools, for example, taught English, religion and certain trades, as well as ‘manners and etiquette’. Indigenous people were discouraged from eating certain species which were traditionally important to them, such as tapir and peccary, and consuming traditional alcoholic drinks, such as cari. Beef, a food item almost never eaten prior to the 1880s (Schomburgk, 1840; Im Thurn, 1883) now

became an indispensable part of the North Rupununi diet (Myers, 1944, 1946). Above all, missionaries opposed the practice of Alleluia (an indigenous-led regional religion that emerged in the late 18th century) (Forte, 1996c; Staats, 1996), the Alleluia dances and the practices of the piamen or shamens, all of which they took to be devil inspired (Carrico, 2007).

Nevertheless, very few of the oral memories focused on these issues. In almost all the PV recordings, the event that dominated peoples' memories was the 1969 Rupununi (the following is an account constructed from the various first hand recountings - see Farage, 2003 and da Silva, 2005 for a detailed description based on testimonies from exiles). The Rupununi Uprising began on the 2nd January, 1969, just three weeks after the 1968 elections in Guyana (which were thought to be rigged by the out-going government). A group of white ranch owners in the Rupununi, mainly from the Hart and Melville families, supported by a few Amerindians with connections (waged or kin) to them, attempted to secede from the country through armed struggle. The police station at Lethem (the administrative centre of the Rupununi District) was attacked by the armed ranchers, and other stations in Annai and Good Hope were also seized and personnel held captive. Five policemen and one civilian were killed, the government dispenser was shot and wounded, and a number of people, including the District Commissioner and his wife, were herded into the regional abattoir and held hostage. The leaders expected that Venezuela, who had competing claims on the area, would deliver arms and support to them, but no such support materialized. Without any time for dialogue or negotiation, the Guyana Defence Force (army) flew in a well-armed unit and the rebellion was crushed. A number of ranchers and indigenous locals were killed, but most of the rebel leaders escaped to Brazil and Venezuela.

People vividly recalled the event, describing in detail what happened. Emerging themes from these PV interviews focused on the unexpectedness and surprise of the event, how external forces had manipulated and betrayed the communities, and how the resulting brutal repression is still used as a way of instilling fear in order to maintain external control. All the interviewees, old and young, claimed that the communities had been manipulated and led into the rebellion and that the majority of the population did not even know what was happening at the time. As one male elder says “The 1969 Uprising was a surprise to us because we knew nothing about it. The Melville then, Teddy who was really the man, like the senator, he became frustrated and disappointed at the move of the PNC government. So with the Harts which the Uprising plans as the brain child of Valery Hart. They engineered the whole situation. Get a lot of indigenous people involved and a lot of innocent suffered because of this, but it not the people of north savanna or anybody. I went to jail for interrogation. But after the interrogation they found nothing and we were released after three days. Then they started to do the mop up, still had a lot of people and lots of people suffered. But it wasn’t the indigenous people, it was Teddy Melville and the Harts who really caused the Uprising that is all we know about”. Another female elder recounts “they point gun to us and he [soldier] ask me if I know this is happening or it going to happen before, and I told him no, I don’t know, they didn’t tell us. They [soldiers] ask Thaman [one of the indigenous ring-leaders] never tell you any thing? We say no”. This quote highlights the communal understanding that the whole event was out of their control. However, a couple of community members, primarily Thaman Davis, had joined forces with the ranchers and had rounded up individuals to fight. But in the most part, the event is not something that most people in the North Rupununi predicted or expected, and almost all saw it as a surprise.

Many of the stories were imbued with emotions of fear and highlighted suffering. As various individuals recount: “I could remember when me and my mother went to the farm. All we hear is bullets flying over our heads and we had to hide behind a big tree for a good while they were firing up. I don’t know what they was shooting at but the bullets been in our direction, and we get scared and we hide for a good while”. “I know that my parents and all was frighten and they hide all over the place and my mother said that how they [soldiers] was coming when they was in the farm and they hide in between the rocks and they see when these people was passing looking for them they didn’t find them. Any way that is how my parents survive and other people”. “...then they [soldiers] tie up and put him out side and they kick him up and they do what they feel like. Each one of them kick him on his face. He said he don’t know nothing. After that right there they soak his face in blood... You know these things here hurt my heart, even to last night I think about it”. “Uncle [X] says they kick him up and they punish him bad and all those people died because they kick them up. They must be damage their lungs, liver or kidney, when they come out [of prison] they never use to be healthy”.

People also felt that not only did they suffer at the time, but they were also the long-term victims of the whole event, pointing out that the actual indigenous supporters of the Uprising had escaped into Brazil or Venezuela. They viewed the longer-term impacts on them as ‘closure’; the area, their livelihoods, their development had been closed down. However, in terms of written material, there are limited accounts of the event. The press and other non-military citizens were prohibited to enter the region, and reporting of the event was heavily censored by the state.

Participation and reification

Table 1 lists current aspects of the ways in which the North Rupununi social-ecological memory is acquired, transmitted and modified. One of the key mechanisms is through the life experiences of fishing, hunting, farming and collecting natural materials, activities that almost all of the North Rupununi communities continue to undertake for their subsistence needs. It is through repetition, learning, experimentation, and adoption of novel solutions while performing these activities, individually and in groups that social memory evolves over time.

Most PV interviewees commented that forms of dialogue, particularly storytelling within family and wider social gathering contexts, were the main modes of communicating traditional knowledge, stories of traditional ways of doing things, and folklore stories. These may take place in the village setting, but more often than not, also while partaking in livelihood activities in the farm, savanna, forest, by the river. Certain locations in the landscape, may, for example, bring up certain stories.

INSERT TABLE 1

Through the conversion of abstract ideas into something concrete, objects, concepts or rules are able to carry social-ecological practices and knowledge. For example, both within and between villages, there are rules for regulating resource use, norms for cooperation, negotiation, conflict management and decision-making. The Wildlife Festival is an annual event showcasing local traditional practices and competitions between young people and children from different villages. These activities are used to underscore the importance of traditional skills and knowledge. The first author has on many occasions watched skits or plays performed by children and teenagers during

formal and informal social gatherings and meetings. A large proportion of these skits involve binas, where one or two characters require a bina (quite often for romantic reasons) and seek help/advice from an elder or shamen. Reification processes, therefore, work hand in hand with participation processes to sustain social memory.

Discussion

Our interest in social memory stems from wanting to understand the ways people 'see' the world and thereby to improve our ways of 'thinking' and 'doing', the ways in which we conceptualise, contextualise and engage with the people we work with. Fundamentally, social memory provides the link between present, past and future – in that whatever something is becoming (whether we know what that will be or not) – is in some respects part of what it is, along with what it was (Howitt, 2001). Therefore, in terms of dealing with future environmental and social challenges, we believe that understanding social memory and the processes which maintain, support and help its evolution will be essential for effective adaptive management of the North Rupununi SES.

Drawing together the findings, we have identified three key themes that emerge from the research and highlight the significance of social memory. They are identity, connectedness and collectiveness, and visualisation.

Identity

Traditional stories, living a 'traditional' life as exemplified by daily livelihood activities rooted in the land and the reification of what it is to be from the North Rupununi, all contribute towards the construction of a North Rupununi identity. Riley (2003) makes a strong case for ascribing the purpose of these traditional narratives as

establishing and reinforcing a distinctive Makushi identity, intricately linked to place, which can then be used to justify increasingly successful claims for land rights to traditional territories and associated natural resources. Without these distinctive indigenous identity narratives (Bolaños, 2010), indigenous people would instantly revert to an equal status with regards to fellow Guyanese citizens who have no claim to the state-controlled interior.

One could therefore argue that it would be absolutely crucial that these narratives are maintained and reinforced in order for the Makushi to gain greater control over their territory and for self determination over the management of their natural resources. However, there should also be awareness that these traditional narratives may justify a lack of development investment from the nation-state in the region, so as to maintain the social-ecological system not only within its pristine ecological state, but also within the pre-modern cultural state. A focus on cultural 'heritage', mainly construed from reification processes (e.g. indigenous heritage events, heritage shows for tourists) rather than participatory processes, could be used by some to limit the indigenous voice in other crucial aspects of their development, including political economy (Jackson, 2006).

For example, there have already been calls from some activists that current 'low carbon' initiatives being promoted by the Guyanese government, where communities will be paid for maintaining their forest resources in a pristine state, have failed to fully consult with indigenous groups and could increase inequalities (Colchester and La Rose, 2010; Okereke and Dooley, 2010). Yet, as Hill (2008), working with the Wakuénai in Venezuela points out, traditional narratives are not a "folkloristic representation of a pristine indigenous past", but a way to reinterpret their historical

struggle and change as rooted in the history of expansion of colonial and current globalising forces.

It has been argued that most memories are not necessarily factual representations of past events, but narrative interpretations grounded in emotion and feelings, whereas traumatic memories, also called 'light bulb' memories such as crises events, are more likely to preserve detail (Misztal, 2003). In the North Rupununi SES, by far the strongest and most vivid social memory was that of the Rupununi Uprising, especially since many older members of the communities interviewed had had first-hand experience of the event and its impacts. The key messages that came across from these various Uprising stories was that of victimhood - the indigenous people had been the victims of something many knew nothing about – and that what had really happened was never disclosed publicly. During community screenings, in particular, there was open and candid discussion on the role of the indigenous ringleaders, the brutality of the army and the censorship of the media by the government during and after the event.

Interestingly, even younger members of the community, those in their teens for example, depicted these key messages, although they lacked the precise details of the event: "... the soldiers reached in and they thought that this uprising was planned by the Makushi but it was the people from Pirara planned it and all of them got away. They cross over and our partner gets away with them also. They went to the Spanish place [Venezuela], up to now they didn't come back. We told them that it was not planned by the Makushi, we sent a message to tell them that it was planned by the Americans not the Makushi". Misztal (2003) points out that memory plays an important role as a source of truth where political power heavily censors national history and where oppressed groups have a profound deficit of truth. For the North

Rupununi SES, the Uprising is a memory representing an authentic story about their past.

For future adaptive natural resource management, there are some interesting issues emerging out of the Uprising stories. Firstly, the victimisation narrative may suggest that a discourse of powerlessness may be created when faced with future changes, rather than encouraging proactive adaptation. Scheffer and Westley (2007), for example, discuss mal-adaptive social memory where communities have ‘locked-in’ to a specific interpretation of reality that has increased community rigidity by hanging on to mal-adaptive behaviours and structures as a response to crises, rather than exploring innovation and change. This could lead to an overriding feeling of helplessness and loss of control. Yet, the only restrictions imposed by community leaders on the use and distribution of the PV footage were that the Uprising – material was not to be taken outside of the North Rupununi. Reasons given for this included the protection of key elders who had taken part in the project and were implicated in the Uprising, but also a resistance to revisiting the injustices of the past at a time when the region was receiving assistance from the government and external donors.

This illustrates how social memory may play different roles for different audiences – in the case of the Uprising, the importance of social memory for truth-making is clear, but at present it is only for internal truth-making (as judged by community leaders). High (2009) working in Amazonian Ecuador highlights how the multiple forms of social memory of the indigenous Waorani people, rather than contradictory or competing, are in fact used by different facets of the community to portray different but relevant identity representations to internal members and outsiders.

The image of ‘victim’ was not to be advocated to the outside world, perhaps out of fear for the repercussions for development in the region (as had happened in a prolonged period after the Uprising – limited land titling, reduced socio-economic investment, greater military presence), but at the same time out of an implicit tactic of promoting the North Rupununi SES as a place of prospect and opportunity. For example, when discussing current challenges during the PV, the upgrading of the road which crosses the North Rupununi was seen by many as a way of bringing greater economic prosperity and development to the region, including opening new markets for produce from the region. One popular community leader characterised this new attitude by championing the slogan: "don't think of what we can do for the road, but what the road can do for us". This saying captures the current concealment of the ‘victim’ narrative - the local population does not want to be seen as powerless pawns in development initiatives imposed on them, but as people directly engaged in managing the development process.

Connectedness and collectiveness

Howitt (2001) talks about taking a relational approach to dealing with complexity in natural resource management systems – what these systems *are* is not just about how they appear or function, but also what they do, how they develop and how they are linked to other elements of the socio-ecological environment. Indigenous worldviews are inherently and implicitly relational, where the multifaceted aspects of the human and non-human worlds exchange material, energy and spirits, and the past and future characterise the present (e.g. Berkes, 1999; Rose, 2005). In the North Rupununi SES, the holistic perspective is especially evident in the traditional stories that form part of the social memory. But participation in activities such as fishing and hunting and their

links to specific reified sites and places also cement this view of the world. Yet, although there has long been an appreciation of the human-nature linkages in indigenous cosmologies, it is only recently that there has been serious consideration of the potential ways in which indigenous knowledge, for example, could be incorporated into the management of complex resource situations (Mistry, 2009). However, our study of the North Rupununi SES shows that going beyond 'indigenous knowledge' and by connecting the 'seeing' with the 'doing', social memory can provide a cosmological framework which can be a powerful tool for creating local, contextualised interventions that embrace complexity and support transdisciplinarity (Apgar et al., 2009).

This characteristically connected feature of the indigenous view is also tightly woven into the traditional narratives described above in terms of the approaches to conserving and managing resources. Hames (2007) provides an interesting debate on the 'ecologically noble savage', the notion that indigenous peoples live in harmony with their environment. In the North Rupununi SES, there is ample evidence to substantiate this idea; for example customary resource use rights, the projection of the indigenous as steward of the environment within heritage festivals and the prohibition of resource extraction from sacred sites. Ecological nobility is a concept used by the indigenous leaders in terms of identity, but is also deployed more widely by indigenous supporters and civil society organisations as a political tool in debates around resource right and governance (Brosius, 1999). On the other hand, historical evidence shows that in the 1970s, as a result of outside demand and reduction in livelihood opportunities post Uprising, two particular species, the black caiman and arapaima, were overharvested almost to extinction in the North Rupununi. Misztal (2003) highlights that social memory is about what is not remembered, just as much

as about what is remembered. From our study, albeit exploratory, there was no recollection about these resource crises times, although much was said about current conflicts with the black caiman as a result of their increased numbers. People acknowledged they were hunted in the past, but there is no mention of overharvesting. Indigenous peoples may undoubtedly be ecologists, but they may not always be conservationists - we clearly need to have a better understanding of why overharvesting may be permitted in these communities.

The social memory of the North Rupununi SES reveals that there is still an innate sense of 'unity' within and between the communities. Many of the narratives from the PV, those of the parishara, endurance races and Uprising, as well as participation and reification aspects of social memory, indicate the enduring nature of kinship and village level cooperation. There is much to be learnt here – what maintains the cooperative spirit in these communities, what are the processes of dialogue and negotiation that give rise to collective agreements?

Gombay (2010), for example, recounts how although the Inuit of the Eastern Canadian Arctic have serious social-ecological problems, their moral geography of obligation, specifically around food sharing, is the basis of community construction and maintenance. In the North Rupununi, a durable 'community' is tied up with identity but it also has important implications for approaches to managing natural resources. Social memory narratives, such as those of ranching and balata bleeding, show evidence of adaptability to changing circumstances and opportunities, where whole communities were engaged in new enterprises. But there was reliance on outsiders and external forces. Today, there is still dependency on outside funding and support for 'community' activities – although this support is varied amongst the communities. Some villages show strong collectiveness plus entrepreneurship, for

instance in ecotourism ventures, and have turned the dependency relationship into one of collaboration. Understanding the community processes that allow truly collaborative arrangements between communities and external organisations/individuals will be vital as future conservation policies, such as REDD+, heed the growing calls to decentralise resource management to the local level.

Visualisation

Oral communication is foremost the most important form of transmitting, maintaining and recasting the social memory in the North Rupununi SES. Johnson (2004) suggests that accessing the past is undertaken through the media in which the past has become anchored. As in many other indigenous societies, storytelling above all (Schneider, 2002), plays a pivotal role in the exchange of knowledge and skills. PV is particularly attuned to these oral communication processes – PV processes support the elicitation of social memory through the promotion and reinforcement of storytelling/narration modes of ‘speaking’. However, we would also suggest that the ‘visual’ is just as important in these processes.

Ramella and Olmos (2005) point out how PV offers a way to include what they call an ‘extended language’ i.e. people’s emotions, expressions and gestures, thereby allowing much greater depth of communication. In our study, we found that the visual element came through during the sharing and discussion of footage at community screenings. For example, during a community screening of the Uprising footage in which an elder who had been persecuted vividly recounts his experiences, some people in the audience became tearful (not all who had lived through it), obviously feeling the pain themselves. During another screening of the same footage, people

complained that significant parts of an interview with a key individual who had taken part in the Uprising had been omitted from the film and they wanted it to be put in again. The particular parts mentioned by the audience involved the individual crying on screen; the community researchers had thought this material to be too sensitive to include in the final film, but many of audience related very directly to this emotional outpouring in the form of their own suffering.

As indigenous communities are facing rapidly evolving social-ecological futures, PV could provide a useful platform upon which social memory can be elicited and shaped for internal and external representation (Harris, 2009; Wheeler, 2009). The latter is becoming increasingly significant as indigenous resources become ever more nationally and transnationally 'valuable' (in terms of global biodiversity, climate change mitigation etc. – see various statements by the Guyanese Office of the President at <http://op.gov.gy>), and indigenism is being pursued through translocal initiatives that involve both indigenous and non-indigenous peoples and institutions (Escobar, 2001; Castree, 2004).

In our study, the community directed processes of PV meant that we attained a greater understanding of the indigenous (Makushi/Wapishana) social memory, which emphasised and focused on the dynamic circularity between the spiritual and physical worlds, was context based and situated in specific places and time (Louis, 2007). In addition, research led by community researchers meant that they could navigate the cultural norms and rules so as to create relatively safe spaces for community members to participate and reflect on their experiences (Wheeler, 2009). This issue of self representation is made explicit in Riley "... when a group of white, educated, moneyed scientists and consultants comes to Guyana and provides support to Amerindian groups, this appears to have a direct effect on how Amerindians talk

about themselves in the present and what kinds of indigenous knowledge, objects, and ideas are expressed, represented, and reinterpreted within Amerindian narratives and, ultimately, historicities" (2003, p. 157). The community screenings particularly allowed an iterative process to occur, emphasising dynamism rather than linearity and providing an additional space, as well as a place, for dialogue.

However, we should not forget that PV is a technological intervention, not just in terms of machines and equipment, but also involving and imbued with non-indigenous patterns of organisation and values. We are critically aware of "specifically, the extent to which ICTs (and their attendant praxes and idioms) are assimilable into local values and lifeways; or conversely the extent to which dominant modes of thinking and doing are embedded in their very matrix, luring users into an inescapable ICT hegemony" (Landzelius, 2006, p294). In addition, there is no 'original' memory – it is created by repeated re-enactments or re-visitations of events, tales and histories, a process which also entails the subtle art of forgetting (Miształ, 2003). Social memory is dialectic, fluid and responds to changes in the social and biophysical environment; it can only be made sense of in the current social-ecological context (Nazarea, 2006). In light of these views, we would argue that compared to knowledge/memory 'banking' technologies, including video, PV is more about the *process* than the product. However, recordings will be made and stored in the PV process, which brings to the fore related questions of PV as reification and whether PV will prevent communities from forgetting and the subsequent implications.

Conclusion

Our exploratory study of social memory, and the potential role of PV, in the North Rupununi SES brought about many questions on identity, community cohesion and

worldviews, and appropriateness of PV for future research. Furthermore, we need to have a greater understanding of the generational and gendered differences in social memory, and how multiple and contrasting forms of social memory can be expressed and re-created by particular kinds of people (High, 2009). Older people (both men and women) formed the dominant group of participants in our PV study, so we need to investigate in more detail the current social memory of younger members of the communities, especially youth and children as they will be the ones who will grow to lead the communities through impending social-ecological challenges. Linked to this is the internal political dynamics of representation within communities. The Uprising stories, for example, were barred to outside viewing by village leaders, but in all instances other members of the communities, such as women and the elderly, were not consulted. How different groups within the same community represent themselves and the authority (or lack of) to do this, is another area in which we may delve.

The issue of intergenerational social memories also raises interesting questions regarding whether lost memories can be revived when needed again - can relearning occur? Moore (2009) provides a case of the Khwe people social memory and human-elephant conflict in Namibia. She suggests that although it would seem that stories and mythical tales used by the Khwe to manage the conflict were in danger of being lost (as it is confined to older members of the communities), children's observance of their environment assists them in preventing existing and more traditional forms of knowledge being lost. This presents a perspective of adaptation as circumstances change.

Our study has provided some valuable insights into the dynamic nature of the North Rupununi SES social memory, how it is used to make sense of the world and

how PV could potentially play a role. We hope to draw on these findings for future work.

Acknowledgements

We would like to thank all the community members from the North Rupununi, Guyana who participated in this research. Thanks also to Floyd Buckley and Alicki Haynes for their work on the project. This project was funded by the British Academy and supported by the Darwin Initiative, DEFRA, UK government.

References

Apgar J M, Argumedo A and Allen W 2009 Building transdisciplinary for managing complexity: lessons from indigenous practice *International Journal of Interdisciplinary Social Sciences* 4(5) 255-270

Berkes F 1999 *Sacred ecology: traditional ecological knowledge and resource management* Taylor & Francis, Philadelphia, PA

Berkes F and Folke C eds 1998 *Linking social and ecological systems: management practices and social mechanisms for building resilience* Cambridge University Press, Cambridge

Berkes F, Colding J and Folke C eds 2003 *Navigating social-ecological systems: building resilience for complexity and change* Cambridge University Press, Cambridge

Bolaños O 2010 Reconstructing indigenous ethnicities: the Arapium and Jaraqui peoples of the lower Amazon, Brazil *Latin American Review* 45(3) 63-86

Brand F S and Jax K 2007 Focusing the meaning(s) of resilience: resilience as a descriptive concept and a boundary object *Ecology and Society* 12(1) 23
<http://www.ecologyandsociety.org/vol12/iss1/art23/>

Brosius P 1999 Analyses and interventions *Current Anthropology* 40 277-309

Burton J 1990 Towards a history of social documentary in Latin America in Burton J ed *The social documentary in Latin America* University of Pittsburg Press, Pittsburg 3-30

Carrico C R 2007 'Changing forms of identity and political leadership among the Akawaio Kapon' Unpublished Ph.D. Thesis Temple University, Philadelphia, USA

Colchester M and La Rose J 2010 *Our land, Our future: promoting indigenous participation and rights in mining, climate change and other natural resource decision-making in Guyana* Final report of the APA/FPP/NSI project Amerindian Peoples Association, Guyana

Castree N 2004 Differential geographies: place, indigenous rights and 'local' resources *Political Geography* 23 133-167

Charmaz K 2006 *Constructing grounded theory: a practical guide through qualitative analysis* Sage, London

da Silva C A B 2005 '*A revolta do Rupununi: uma etnografia possível*' Unpublished Ph.D. Thesis University of Campinas, São Paulo, Brazil

Davidson-Hunt I J and Berkes F 2003 Nature and society through the lens of resilience: toward a human-in-ecosystem perspective in Berkes F, Colding J and Folke C eds *Navigating social-ecological systems: building resilience for complexity and change* Cambridge University Press, Cambridge 53-82

Escobar A 2001 Culture sits in places *Political Geography* 20(2) 139-174

Farage N 2003 Rebellious memories: the Wapishana in the Rupununi Uprising, Guyana, 1969 in Whitehead N L ed *Histories and Historicities in Amazonia* University of Nebraska Press, Lincoln 107-120

Folke C, Colding J and Berkes F 2003 Synthesis: building resilience and adaptive capacity in social-ecological systems in Berkes F, Colding J and Folke C eds *Navigating social-ecological systems: building resilience for complexity and change* Cambridge University Press, Cambridge 352-387

Folke C 2006 Resilience: the emergence of a perspective for social-ecological systems analyses *Global Environmental Change* 16 253-267

- Forte J 1989 *The road from Brazil* University of Guyana, Georgetown, Guyana
- Forte J ed 1996a *Makusipe komanto iseru Sustaining Makushi way of life* North Rupununi District Development Board, Guyana
- Forte J 1996b *About Guyanese Amerindians* Janette Forte, Guyana
- Forte J 1996c Religion as colonial resistance: the areruya church of the circum-Roraima region in Forte J ed *Thinking about Amerindians* Georgetown, Guyana 41-61
- Gombay N 2010 Community, obligation and food: lessons from the moral geography of Inuit *Geografiska Annaler: Series B, Human Geography* 92(3) 237-250
- Gumucio-Dagron A 2009 Playing with fire: power, participation and communication for development *Development in Practice* 4 453-465
- Gunderson L and Holling C S 2002 *Panarchy: understanding transformations in human and natural systems* Island Press, Washington, D.C.
- Hames R 2007 The ecologically noble savage debate *Annual Review of Anthropology* 36 177-190
- Harris US 2009 Transforming images: reimagining women's work through participatory video *Development in Practice* 19 (4-5) 538-549

High C 2009 Remembering the auca: violence and generational memory in Amazonian Ecuador *Journal of the Royal Anthropological Institute (N.S.)* 15 719-736

Hill D J 2008 *Made-from-bone: trickster myths, music and history from the Amazon* University of Illinois Press, Chicago

Howitt R 2001 *Rethinking resource management: justice, sustainability and indigenous peoples* Routledge, London

Im Thurn E F 1883 *Among the Indians of Guiana: being sketches chiefly anthropologic from the interior of British Guiana* Kegan, Paul, Trench and Co., London

Jackson S 2006 Compartmentalising culture: the articulation and consideration of indigenous values in water resource management *Australian Geographer* 37(1) 19-31

Johansson L, Knippel V, de Waal D and Nyamachumbe F 1999 Questions and answers about participatory video *Forests, Trees and People Newsletter* 40.41 35-40

Johnson N 2004 Public memory in Duncan J S, Johnson N C and Schein R H eds *A companion to cultural geography* Blackwell, Oxford 316-328

Koch-Grunberg T 1923 *From Roraima to the Orinoco: results of a journey in North Brazil and Venezuela in the years 1911-1913* Caribbean Research Library, Georgetown, Guyana

Landzelius K ed 2006 *Native on the Net: virtual diaspora in the digital age*
Routledge, London

Le Goff J 1992 *History and memory* Columbia University Press, New York

Louis R P 2007 Can you hear us now? Voices from the margin: using indigenous methodologies in geographic research *Geographical Research* 45(2) 130-139

McIntosh R J 2000 Social memory in Mande in McIntosh R J, Tainter J A and McIntosh S K eds *The way the wind blows: climate, history, and human action* Columbia University Press, New York 141-180

Mistry J 2009 Indigenous knowledges in Kitchin R and Thrift N eds *International Encyclopedia of Human Geography Volume 5* Elsevier, Oxford 371–376

Mistry J and Berardi A 2011 The challenges and opportunities of using participatory video in geographical research: a case study exploring collaboration with indigenous communities of the North Rupununi, Guyana *Area* (*accepted*)

Mistry J, Berardi A and McGregor D 2009 Natural resource management and development discourses in the Caribbean: reflections on the Guyanese and Jamaican experience *Third World Quarterly* 30 969-989

Misztal A B 2003 *Theories of social remembering* Open University Press, Milton Keynes, UK.

Moore L 2009 Beware the elephant in the bush: myths, memory and indigenous traditional knowledge in north-eastern Namibia *Cultural Geographies* 16 329-349

Myers I 1944 The Makushi of British Guiana: a study in culture contact. Part I *Timehri* 26 66-77

Myers I 1946 The Makushi of British Guiana: a study in culture contact. Part II *Timehri* 27 16-38

Myers I 1993 The Makushi of Guiana-Brazilian frontier in 1944: a study of culture contact *Antropológica* 80 3-99

Nazarea D V 2006 Local knowledge and memory in biodiversity conservation *Annual Review of Anthropology* 35 317-335

Okereke C and Dooley K 2010 Principles of justice in proposals and policy approaches to avoided deforestation: towards a post-Kyoto climate agreement *Global Environmental Change* 20(1) 82-95

Ong W 1983 *Ramus: methods and the decay of dialogue: from the art of discourse to the art of reason* Harvard University Press, Cambridge, MA

Perberdy P S 1948 *British Guiana: report of a survey on Amerindian affairs in the remote interior* Colonial Development and Welfare Scheme No. D. 246, Georgetown/London

Ramella M and Olmos G 2005 *Participant authored audiovisual stories (PAAS): giving the camera away or giving the camera a way?* LSE Paper in Social Research Methods, Qualitative Series 10, LSE, London

Riley M 2003 Guyanese history, Makushi historicities, and Amerindian rights in: Whitehead N L ed *Histories and historicities in Amazonia* University of Nebraska Press, Lincoln, USA 141-159

Rose D 2005 An indigenous philosophical ecology: situating the human *The Australian Journal of Anthropology* 16(3) 294-305

Roth W E 1915 An inquiry into the animism and folk-lore of the Guiana Indians in *Thirtieth Annual Report of the Bureau of American Ethnology, 1908-1909* Washington DC 103-386

Schneider W 2002 *So they understand: cultural issues in oral history* Utah State University Press, Logan, Utah

Scheffer M and Westley F R 2007 The evolutionary basis of rigidity: locks in cells, minds and society. *Ecology and Society* 12(2) 36
<http://www.ecologyandsociety.org/vol12/iss2/art36/>

Schomburgk R H 1840 *A description of British Guiana: geographical and statistical*
Frank Cass & Co. Ltd., London

Staats S 1996 Fighting in a different way: indigenous resistance through the Alleluia
religion of Guyana in Hill J D ed *History, power, and identity: ethnogenesis in the
Americas, 1492-1992* University of Iowa Press, Iowa 161-179

Stephan B, Folke C and Johan C 2010 Social-ecological memory in urban gardens –
retaining the capacity for management of ecosystem services *Global Environmental
Change* 20 255-265

Walker B, Carpenter S, Anderies J, Abel N, Cumming G, Janssen M, Lebel L,
Norberg J, Peterson G D and Pritchard R 2002 Resilience management in social-
ecological systems: a working hypothesis for a participatory approach *Ecology and
Society* 6(1) 14 <http://www.ecologyandsociety.org/vol6/iss1/art14/>

Wenger E 1998 *Community of practice: learning, meaning and identity* Cambridge
University Press, Cambridge

Wetlands Partnership 2006 *State of the North Rupununi Report* Darwin Initiative
Guyana Partnership, Georgetown

Wetlands Partnership 2008 *The North Rupununi Adaptive Management Process
(NRAMP)* Darwin Initiative Guyana Partnership, Georgetown

Wheeler J 2009 'The life that we don't want': using participatory video in researching violence *IDS Bulletin* 40(3) 10-18

Wilson P and Stewart M 2008 Indigeneity and indigenous media on the global stage in Wilson P and Stewart M eds *Global indigenous media: cultures, poetics and politics* Duke University Press, London 1-35