Title:
Living in a landscape of risk in Java / Indonesia

name of the authors
1. Manfred Zaumseil
affiliation:
Internationale Akademie für innovative Pädagogik, Psychologie und Ökonomie gGmbH (INA)
an der Freien Universität Berlin
full address:
Malteserstraße 74-100 D- 12249 Berlin Tel.: 030-83 85 20 31
Private address : Wildganssteig 96, 13503 Berlin, Germany

e-mail
zaumseil@zedat.fu-berlin.de

telephone
xx49 0343673480

2. Johana E. Prawitasari-Hadiyono
affiliation,
Faculty of Psychology, Gadjah Mada University
full address.
Bulak Sumur, Yogyakarta 55281 INDONESIA
Private address: Jl. Ki Mangsunsarkoro 27, Yogyakarta 55111, Indonesia.

e-mail
jepe@ygy.centrin.net.id / johana@ugm.ac.id

telephone
xx62-274-901127 (Office)
xx62-274-515456 (Home)
Abstract:
We sketch how risk is constructed in social science and disaster research and use the findings of an investigation about an earthquake in Java to show what it means for the local people to live in a disaster-prone area. Characterizing this we develop the concept of «risk inclusion» and examine how this concept is inscribed in the local landscape, in the meaning given to the quake, in the way of individual and social coping and in the construction of future. Finally we show problems which arise if externally introduced strategies of disaster risk management are introduced into the local cultural understanding of life.

INTRODUCTION
Threat, danger and risk are realities people have to cope with. Mainstream risk research analyzes how people’s risk perceptions and interpretations deviate from «objective» risks and how this is related to their values and belief systems (Zinn, 2010). In the past a deficit perspective dominated, especially in psychological research. The aim was to find out what sort of bias in perception and mental processing was responsible for distorting reality. Meanwhile the ability of people to judge the relevance of risk has been re-evaluated. But in risk management and risk governance the opposition between real risks and their biased, subjective perception is still dominant and is connected with opposing method	extsuperscript{1}’s like technical approaches and psychological measuring.

More recently the understanding of risk has become more complex and is complemented by ways of social construction which influences what counts as objective reality as well as what constitutes the subjective impression. Zinn (2010) notes for the present discussion: «The belief that risks are objective, subjective as well as socially constructed might be seen as common ground in risk research» (Zinn, 2010: 13) But the relative importance of the elements in this triangle is a matter of debate.

Objective risk
Objectively assessing and judging risk is based on the evaluation of the likelihood of dangerous threatening or harmful events and of the vulnerability of those exposed. Seen like this: «A risk is the product of vulnerability and endangerment» (Wisner et.al. 2004: 51). In the definition of risk in the context of disaster research a «hazard» as an environmental event is related to the lack or capacity of persons to cope with it within their living conditions. By

\textsuperscript{1}
relating a hazard to peoples possibilities of coping it gets the meaning of a danger or a threat. In sociological and psychological risk research the term «risk» is often applied to the presence of an obvious environmental threat (like the presence of a nuclear power plant or an active volcano) without explicit reference to vulnerability of the people exposed. In this case the risk assessment is reduced to the likelihood of the hazard to happen. The objective, measuring approach can also be applied to the assessment of the vulnerability of a given social unit and the affected environment (Wisner et al., 2004). It is mainly a technological approach which proceeded from risk assessment to the management of risk. By this there was a shift to people’s capacity to protect themselves and becoming resilient (see Norris et al., 2008) rather than just analyzing their vulnerability that limits them.

Resilience has been shown not to be based only on «objective» knowledge which is usually represented by expert claiming scientifically gained universally valid knowledge. Another source of knowledge in the evaluation of hazard and vulnerability has been valued as experienced based local knowledge (see Bankoff, 2003, Dekens, 2007).

In the Western discourse there is some dispute about what phenomena should be regarded as risks. Beck (1992) has advanced the idea that the new social uncertainties and the individualization of risk are a major threat in late modernity. Tulloch & Lupton (2003) argue that these grand claims of theorizing lack empirical support and they offer research strategies to investigate risk in everyday life and in social and cultural context.

There is a tendency of reification of the objective and universal approach to risk which may obscure the questions of the subjective as well as social, cultural and political processes which give risk its meaning. Henwood et al., (2010) show the methodological problems «when researchers define research situations from the outset in terms of universal notions of risk.» (par. 3) and they recommend to value the diverse ways to produce risk knowledge.

Subjective risk
Subjective risk is how people perceive and interpret as well as act upon a risk. Research has shown, that most people exposed to a seismic threat and who are aware of it do not much to reduce their vulnerability (Solberg et al., 2010) From Western perspective this may seem counterintuitive. This assessment has been thought to be related to a so called «optimistic bias». «White males» have been found to be prone to this bias and members of so called «collectivistic cultures» with an emphasis on a relational, interdependent self-concept are said to be less optimistic. (Palm et al.,, 1998, Harris et al., 2011) reexamined the methods of unrealistic optimism research and showed how the results of studies demonstrating unrealistic
optimism could parsimoniously be viewed as statistical artifacts rather than demonstrations of a genuine human bias.

Solberg et al., (2010) show in their review about seismic hazard adjustment that most of the studies act on wrong assumptions:

The studies assume that the most important causes of seismic adjustment can be conceptualised as mental processes that take place primarily within the individual mind. These processes are further assumed to be primarily consciously available cognitive representations of risks, norms, control and so on. Thus individualist and rationalist assumptions have dominated the research (Solberg et al., 2010: 1673).

He shows that the causal chain does not start rationally from risk perception to produce a risk concern and leads from there to a special practice (seismic adjustment). Instead of this the adjustment is a practice related to norms in a social and cultural context. «Issues of cultural identity, power and trust need to be brought centre stage.» (Solberg et al., p. 1674)

Zinn (2010) shows the different conceptions of the subject in risk research. The individualized risk subject is thought to take cognitive and rational decisions but was typically biased through different influences on perceptions and mental processing. Now it has been replaced by a subject with a softer rationality working quite successfully with heuristics (see Gigerenzer, 2008) intuition and emotion (see Slovic, 2010) These psychological models are general theories about human functioning. Zinn (2010) argues for the introduction of a biographical perspective because everyday practice in the confrontation with risk is formed by life circumstances. This opens up subjectivity for the biographical, historical and social context and connects to the social construction of risk.

Social construction of risk

Individual ways of coping and living with risk are socially embedded and framed by the interaction of the social and cultural context with the physical environment. Within the social and cultural arena (see Long, 2001) many different actors influence the discourses about what constitutes a risk and how to deal with it. Media, politics, economics, different social groups and people at risk themselves form the public and personal representations on the background of cultural heritage. Especially today in the context of a disaster and the often following efforts of risk management there are many external agents from the arena of humanitarian aid (see Hilhorst et al., 2010), national and local aid which influence the emerging discourses about risk. In the following we present different social constructions of risk and show what different assumptions and interests are connected with it.

Bankoff et al., (2009) illustrate how different actors in the Phillipines use different policies of risk for their respective interests. The policy of the state is transforming a disaster into an
abnormal and singular event. This covers the root causes of the harmful consequences and supports the political goal that it is sufficient to restore the community to its previous state without changing anything in the social order. Non-governmental organizations use a quite different conception of risk. They see the disastrous consequences of a hazard as an outcome threat of a bad policy of the state which has to be changed. Bankoff (2003) and Bankoff et al., (2009) suggest that the state of normalcy of a secure and ordinary life is a Western myth. Instead Bankoff (2003) presents data about the Phillipines which show that disasters are a fact of life and a frequent life experience in the Philippines. Learning to live with hazard and coming to expect disaster is necessarily part of the daily routine in the islands. There is a long history, from at least the seventeenth century, of mutual assistance associations and networks at the local level devoted to sharing risk and spreading misfortune. (Bankoff et al., 2009: 689).

Coming from this understanding it may be necessary to reverse the perspective on risk. The question would be which form of risk adjustment, which psychological, social and economic balance can be maintained in the evident presence of threat and which amount of certainty is necessary for everyday living."

The singularisation of disasters allows its exclusion from the normalcy of everyday living. Possibly people are overburdened by the constant awareness of the presence of a severe threat and prefer an optimistic outlook towards future. This can go together as Bankoff (2003) shows with a preparedness towards natural hazards which root in practices, stances, values and the «local knowledge».

The opposition of the «realist» position of an «objective» risk and a biased subjective processing which we find in risk management and disaster research is itself a special construction of the problem of risk. The biased subject or the biased community has to be elucidated by knowing experts about the probability of impending natural hazards to be prepared and having control. Implicit in this model is separating and opposing humanity and nature, the former having control over the latter, a special idea of expertship and a peculiar idea about the singularity of disasters and the certainties of ordinary life.

A historical view (as used by Bankoff 2003) or a evolutionary perspective as taken by Wulf (in this book) uncovers the presence of catastrophes as element of the man-environment interaction and possibly as a motor of processes of development. In the environmental change – literature (see Brown et al., 2011, Pelling 2010) we find theoretical models which claim to explain under which conditions disasters produce a conservation or a transformation of social order. Pelling et al., (2011) use case examples to show the distinction between different forms of resilience that support rigidity or transformation. In relation to this they differentiate a form of risk management which stabilizes the status quo and another one which champions
innovation as «adaptive management».

In the anthropological and historical view on man – environment interaction (Casimir, 2008) we find a different perspective on the problem. Casimir (2008) points to the early cognitive distinction within Judeo-Christian and later Cartesian thinking into categories of «humanity» and «nature» which is rather peculiar on the background of many different meanings of environment and nature. Using the example of dealing with volcanic eruptions in Indonesia Schlehe (2008) shows in the same volume how nature is constructed in Java. It is not seen as opposed to culture but as parallel to human society and there are close associations between cosmos, morality and social conduct. So a disaster provides a source for the construction of manifold meanings and the interpretation and manipulation of social and political relations. What is interesting on the background of Bankoff and Hillhorst ideas about the «normalcy» of risk and threat is what Schlehe (2008) calls the ambivalence towards nature «people experience powerful awe-inspiring and destructive forces in nature as well as life-giving qualities. In general, the «dangerous» sites in nature are not perceived in a purely negative way, they are considered spiritually endowed and sacred.» (Schlehe, 2008: 278)

Summarizing we see that the construction of risk is done by many actors with different interests which form the politics of risk. The notion of risk is closely connected with a network of related basic assumptions about reality and basic stances and feelings about being in the world which can be seen as a safe or as dangerous place. It has to do with the construction of nature and cosmos and the range of human agency within it. In the international framework of risk management the opposition of an objective explainable environment and a biased subjectivity is used to educate people how to prepare themselves against possible hazards. There is not enough knowledge about what people in different cultural contexts feel, think and do about their being or not being threatened and how the presence of hazards is part of their everyday social life and their psychological ecology.

Additionally in most risk research religious framings which are of great importance in most parts of the world are neglected. Another important frame of reference are the narrative and discursive structures which form experience as Toshio Kawai shows in this volume for the Japanese context. These religious and socio-cultural framings are closely connected to psychological dispositions and stances how severe events are accepted and dealt with.

In the following sections we want to show how the presence of an eventually persisting threat
is included in the feeling, everyday living, the practice, and future of people in Java / Indonesia\textsuperscript{ii} who suffered an earthquake some years ago.

**Risk from environmental hazards in Java / Indonesia**

In this contribution we use selected data and results of a larger project which will be published as a book\textsuperscript{iii}iv, in which we will present a model of the whole process of coping with disaster and with disaster aid. For the purposes of this broader research, the disaster which took place in 2006 in the region (DIY) of Yogyakarta (Bantul) and Central Java (Klaten) in Indonesia provides an example with which to explore the intertwined issues of coping and aid. The earthquake that occurred in the early morning of 27 May resulted in the destruction of 280,000 houses and the deaths of almost 7000 people. Three villages, which vary in distance from the epicentre of the tremor, have been chosen as research sites. To collect the data, we conducted narrative and guideline-supported interviews with villagers and aid workers, focus-group interviews and field observations during multiple short field trips starting 3 years after the earthquake. Opportunities for feedback on the village and regional levels provided a different set of data. In 2011 additional data was collected about the future of the villages with a participative research strategy.

Grounded in our research we developed the concept of «risk inclusion» which may be seen as a part of coping with a persisting threat and with future. Risk inclusion takes place in a special physical and social environment which we call the landscape of risk.

In the following section we follow the hypotheses that in such a landscape of risk there is the formation of a locally specific dealing with environmental threat which can be show in everyday practice, in social relations, in values and religious orientations and in psychological dispositions. We call this way of dealing with risk in disaster-prone areas »risk inclusion«. We think it is different in Java compared e. g. with Japan or the Phillipines and it is object of change.

We will develop the concept of risk inclusion by exploring the meaning given to the earthquake and the way of individual and social coping with it. Furthermore we use results from participative research about the future of the community and their inhabitants to discuss how it is related to risk.

*The landscape of risk*
In the local geography of risk we find an inscription of history and meaning: The province «D. I. Yogyakarta» is composed of the town Yogyakarta and a rural area around. The town with 500,000 people in the middle part of Java is a vivid center of Javanese culture, arts, tradition, modernity and science. It is full of students at the 80 Universities and there is a dominance of modern muslim middle class. The whole Yogyakarta province including the rural area has 3.3 Million inhabitants with 90% Muslims, Christians and a Buddhist and Hindu past. The Sultan is the head of the government who is a businessman as well as the head of the traditional court with its ceremonies. The palace of Sultan Hamenkubuono X. is in the middle between the active volcano Merapi with its Volcano Ghosts in the north and the Indian Ocean governed by Ratu Kidul the mystical Queen of the Sea in the south (see Schlehe, 2008). Beginning with Senopati in the 16th century the Sultans are symbolically married with Ratu Kidul and «are legitimated and protected by both spirit kingdoms» (Schlehe, 2008, p. 279) against the dangers of the volcano and the sea. Both, the spirits of the Mountains and those from the sea receive offerings from Senopati and his successors in the yearly Labuhan sacrificial ceremony. So the Sultan is seen as being responsible for the spiritual balance regarding the forces of the ocean and the volcano. (see spiritual axis in graphic) Although modernist Muslims refrain from this as
supersticious, most Javanese in that area – Muslim and non-Muslim – have this idea integrated in their worldview. In the present period of democratization and decentralization in Indonesia, there is a revival of tradition (Henley and Davidson 2008), in the name of self-determination and the reestablishment of local elites. Schlehe (2010) states that Javanese people are not more ‘superstitious’ than people elsewhere and that they know that there are scientific, geological reasons behind an earthquake. They know that they are living in a red zone of tectonic activity (see the fault line of crustal plates in the graphik’). But for many Javanese causality is rooted in the spiritual realm as well. (Schlehe 2010).

Within our research project we interacted with the recent history of social change and the impact of hazards resp. disasters in the region as well as Indonesia as a whole. There is a long history of disasters – big volcano eruptions (the biggest in Sumbawa 1815 and the eruption of the Krakatau in 1883) and sea- resp. earthquakes. In the recent history the Mt. Merapi near Yogyakarta erupted in 1994 and in Oct. 2010 during our data collection. But our research project was about the longterm consequences of the earthquake in the southern part of D. I. Yogyakarta in May 2006. 17 months before, there was the big Tsunami hitting the coast of Aceh/Sumatra (2200 km away from Yogyakarta) in Dec 2004 with a death toll of 170000. In July 2006 there was a Tsunami again at Pangandaran/ Java and in Sept 2009 another earthquake in Padang/Sumatra.

**The meaning of the earthquake**

In Our Bantul case it is a general shared representation to understand the earthquake as warning or reminder (peringatan) or as test (cobaan), examination (ujian). Less often it is seen as an expression of the wrath of Allah (murka Allah). Often the meaning is explained parallel to a scientific understanding (e.g. living in a zone of dislocation of crustal plates). Mostly the idea of reminder, admonition and test is not directly related to the cause of the disaster or its harmful consequences. Admonition in our data is understood more general – it concerns the basic relation between humankind and the Almighty or the Supernatural. Although the personal meaning of the admonition is rather diverse and can be discovered as the deeper wisdom (hikmah) (see below), a common feature is the message, that humans are basically without control and power in relation to the Almighty. So the admonition, warning, or test aims at the faith in and commitment to the Higher Being(s) in the face of divine almightiness. The spiritual lesson from the earthquake aims at surrender rather than
(primarily) control. It is outside the control paradigm of risk appraisal / instrumental coping (Lazarus et al. 1984). People see themselves in a sort of dialogue with the supernatural which acts through nature. This position within world and cosmos includes the possibility of natural hazards— and is a general feeling in everyday understanding of not being in control of the natural, supernatural, social/political and personal world.

Local key concepts of coping and risk inclusion

personal coping

Coping is the way how action is related to the understanding of a threatening situation. To go into more detail about local ways of coping with risk let us make the acquaintance of Mrs L.:

Foto: Mrs. L.

Mrs. L. is married, 31 years and has 5 children. The eldest daughter (at that time 10 years) died under the debris of the house. The other daughter (with shorts) showed deviant behavior some months after the event. Mrs. L. had another baby after the quake. The family is rather poor compared to its neighbours and has no ricefield.

In the picture Mrs. L. is sitting 3 years after the quake in front of her small house (which is still without plaster.) She says:

Well as a matter of fact, I surrender (pasrah) like this, whatever it is, I accept it (nrimo). No matter what is going to happen, I will accept it. I prepare myself (siapkan diri). I should be prepared - if I suffer a loss or not. If there will be another disaster, I may die. So I will be prepared, as they say, that this place is quake-sensitive... Maybe it will not be long that it will happen again. In fact, people should do something and make effort (usaha), as far as we can, right Mrs.? But yeah, although we make the effort, I am destined to have limited fortune. .. We really should accept what happens (nrimo) and always acquire self knowledge, true! As for me, well, I’m more able to get closer to God, like that. Believe stronger in God being fair; He has given a bitter test (cobaan) to me. But he also gave me a new baby. The deeper meaning/wisdom (hikmah) for me is, that I just love my children more, and in my opinion, the deeper meaning (hikmah) is that I’m a better person than before.

Through Mrs. L we get a basic understanding of the key terms: which signify a psycho-spiritual stance: «pasrah» denominates a trustful surrender which is combined with «nrimo» as a basic acceptance of what happens. It means gaining strength, serenity and inner peace by accepting the own powerlessness and limited knowledge.
It appears as the opposite of gaining immediate environmental control by instrumental behavior. However, this stance fosters pragmatic action and effort (usaha) within the given limits.

Without this trustful surrender and devotion to the Allmighty there is no support by this higher power or being (Allah/God). There is a basic trust in the benevolence of the Allmighty and in a hidden wisdom (hikmah) of what is happening.

As for Mrs. L. pasrah/nrimo is fundamental for being prepared, we find a completely different conception of preparedness compared to international risk management within the Western control paradigm of being prepared in the technical sense.

Those who adhere to the model of effective environmental control may misunderstand pasrah and related concepts as fatalism.

Mrs. L. expresses a devotedness to the benevolent Allmighty Power or Being and a trust in a hidden wisdom (hikmah). From there she makes a connection towards action. It is this trustful surrender which gives strength and serenity for effort & pragmatic action within the given limits (usaha). Compared to the dominating Western perspective there is an overdetermination of powerlessness (or limited power) that translates into trust and therefor stands for a general positive outlook. The relation between trustful acceptance and surrender on one side and effort and problem solving action (usaha) on the other is mediated by general orientations and virtues which qualify the mode of action. Ideally it is a stance of inner peace (tentram) and tranquility which implies control of negative emotions. The practical, situation-specific action (for instance, helping others, ensuring survival, etc.) is infused with and carried along by the attitude and positive feelings that result from the simultaneous creation of a relationship with the spiritual and the social surroundings. At the same time, virtues are realized through this action, such as dengan ikhlas (whole-hearted and willing), semangat (with dedication), sabar (patient), santai (serene) and menata hati (control of one’s inner being).

The limits of pragmatic action are seen as given by limitations set by limited resources, power relations within the villages, and social rules. These limits refer to the root causes for an unequal exposure to hazards and can only be overcome by changing the given social order.

**social coping**

The above mentioned personal stances and virtues are closely connected to the social world and to collective action. The quality of tentram (peaceful, quiet, calm) can be applied to the inner world (batin) as well as to ones outer social relationships (as tentram lahir). This is closely related to the Javanese idea of rukun which means harmonious integration and
regulation of conflicts by a sort of guided communal harmony (*rukun*). The conjuration of and commitment to *rukun* is a strong force of communal control which often is functionalized as conservation of the given social order. At the same time it can be understood as a strong bond of communal cohesion when threatened by a danger.

The same function has the tradition of mutual support (*gotong royong*) in Javanese communities. There is a vivid discourse in our data about the function, the obligation, the strength, the possible decline of gotong royong about coping with disaster which shows the importance and salience of the concept for the people in the villages.

Finally there is a discourse about local wisdom in which all the stances, orientations and virtues described above are constructed and identified as «Javanese» vi. The official report of the post earthquake rehabilitation and reconstruction program for Yogyakarta and Central Java (Tim Teknis Nasional, 2007) is put under the heading of «Living in a disaster prone area relying on local wisdom». In this report local wisdom is seen as a special tradition of social coping. *Gotong royong*, the tradition of mutual help is connected to modern principles of community-based disaster risk management (Davis et al, 2006, Davis 2011), empowerment, participation and decentralization in a common discourse. The report states that «local long standing traditions of deliberation for consensus» (Tim Teknis, 2007: vi) had been the foundation of a sort of guided need assessment in local groups and decentralized distribution of money. Local wisdom discourses convey positive images of the own culture and give rise to local pride. The Tim Teknis Nasional (2007, p. 38)) as well as the local governor of the Province stated that the people of Bantul showed a better way of coping with the quake than those in Aceh when confronted with the Tsunami 17 months before.

Another key concept of social coping we found three years after the quake was that of a general feeling of safety and social embeddedness (merasa aman dan nyaman – feeling safe and pleasant) which seems to push back a feeling of being threatened. This was not specifically directed towards a specific threat but it was a basic feeling of consistency and trust within the neighbourhood, community and the religious congregation and it was related to the stabilizing and calming effect of the daily routine. There is a partial crossover with the concept of social capital.

So some key concepts of social functioning and presently salient discourses about social relationships and values can be understood as being an answer to the threat by »natural» hazards. If we follow Bankoff (2007) emotional and psychological adaption as well as manifold forms of community mobilisation and mutual self help develop in societies in which disasters are frequent life experiences.
We think that beside the threat by hazards there are other influences which formed communal harmony (*rukun*), mutual self help (*gotong royong*), the whole complex of local wisdom generating local pride and the general feeling of safety. But these concepts fit to the permanent presence of threat and constitute answers which seem to be adaptive. Their salience points to the inclusion of risk into the social realm.

**Risk Inclusion**

If we put together all the findings we see that the inclusion of risk can be seen as a part of a general adjustment to risk in disaster-prone areas. It is a special stance towards threats and towards vulnerabilities.

- It is a shared representation of the «natural» presence of threats which must not be a conscious awareness – it is more contained in practices, values, narratives.
- It is counterbalanced by a general feeling of safety, social embeddedness, everyday routine and positive outlook.
- Both - threats and safety - are seen to be in the hands of divine or supernatural forces and can be modified more or less by personal, familial and or community actions.

We think that there are different forms of risk inclusion in different contexts. Toshio Kawai shows (in this book) that the way of inclusion in Japan is different. There is a variety of cultural handling and of politics of risk (see Bankoff *et al.*, 2009) – it may be included or excluded from the official discourse and from everyday practice. As Bankoff *et al.*, have shown, treating disasters as singular events can be a form of risk - exclusion from the everyday horizon to preserve the present social order. Risk management and risk control strategies are technical measures including a special planning-rationality which are often introduced by stake holders from outside into a disaster prone area where they meet with different local concepts/ and rationalities which are often implicit in practices and values. Additionally imported concepts and strategies often do not fit the conditions in the villages and compete against local configurations of relevance and shortage of resources in village life.

So pragmatic action is limited by the local social and political order and the economic conditions. It is informed by the present psycho-spiritual and socio-psychological background of risk adjustment with a cultural/contextual specificity which often is poorly understood. These conditions meet in a post disaster context with externally introduced guided efforts of risk
According to Solberg et al., (2010)

Issues of cultural identity, power and trust need to be brought centre stage. Their absence in much of the literature speaks to a profound theoretical limitation, grounded in late modern political and cultural frames. These seek to explain behaviour as if it was purely a matter of (ir)rational individual choice in a controllable world. (Solberg et al., 2010: 1674)

Years after a disaster in an area at risk there is a coexistence and an interaction between externally introduced risk management and pragmatic action. The latter is informed by existing local knowledge including ideal stances and social practices. Through national policies, international agents and the media new ideas of risk control and about trauma as a new concept for enduring personal suffering are introduced and locally adapted by different actors. The whole process of adjustment takes place in the tension between conservatism and transformation.

After two years of research we had got a picture of the perspectives of the village people on their coping with the disaster around 3 – 4 years after the event but we had the impression that
our coping approach and our quake-related interviewing was a strategy of imposing our questions on the village people. Did the present village life represent long term coping with the disaster or was it rather coping with the hardships of life? How do village people living in a «red zone» of environmental threat (and «knowing» that) deal psychologically, emotionally, and practically with the persisting presence of this threat? Or is the relevance of a persistent threat just a construction of observers looking from outside and having a different frame of referencing in which risk does not belong to normalcy?

This leads to the question of theoretical research approach and methods. As we have seen in the psychological research the individualized and cognitive access is rather limited. Questionnaires do not tell very my about everyday living. Interviews give a better picture but the focussing on threat introduced by the researcher produces a distorted result. Henwood et al., (2010) and Pidgeon et al., (2008) discuss this question in relation to their research about living near a nuclear power plant in Britain. Referring to Tulloch et al. (2003) Henwood et al., (2010) try to put a knowing, reflexive and social risk subject at centre stage of their investigation. Zinn (2010) comments:
The approach does not develop a fully biographical argument, which would interpret people's risk perception of nuclear power as part of their more general approach to dealing with biographical risk and uncertainty. For example, instead of examining how people experience their life in general, they focus on "experiences of living close to the nuclear power station" and thereby frame the interview and the interviewees' awareness in relation to the nuclear power station.»( Zinn, 2010: 51)

We did not go into the past but tried to overcome our focus on present threat by catching the view of the villagers into future by participative research.

**Turn to participative research**

To get a hint to understand the social and psychological normalization of a situation which outside observers perceive as threat we decided to learn from the villagers how they construct, plan and anticipate their future. To avoid the methodological problem of focussing on the context of threat, risk and worrying introduced by the researcher we chose a participative research strategy. In the third and last year of our research project, we planned to stimulate pieces of performative social practice about personal and village future (masa depan meaning: period/era ahead) by participative research. By this we hoped to get pictures of
future produced by the villagers themselves (including risk adjustment if it is made relevant) less biased by our ideas about what people should do and think about.

The plan included to give away control about method and content to our local NGO-Partners from ICBCvii – The German team members took a counseling and accompanying role and our Javanese team members were responsible for the implementation.

Shortly before a planned visit of the German team members to Yogyakarta could take place, in order to develop a common understanding of the purpose and process of the participatory research with our NGO-partners, the project was stopped by the eruption of the volcano Merapi nearby: The spiritual leader Mbah Marijan who had predicted that there will be no danger for his village burnt with his followers in his house. Yogyakarta was covered with ashes and hosted 30 000 refugees from the Merapi area. Our Indonesian team members were involved in rescue and relief activities for the Merapi victims and refugees.

With a delay of three months we could start the participative research. We were not sure how the recent disaster in the neighbourhood would influence the outlook of the village people towards future.

We addressed existing social groups (Youth and children groups, women groups, farmers groups etc) in the villages to stimulate visions and images about future. People engaged slowly and soon more and more enthusiastically and active in producing 3 films, 4 booklets, discussions, pictures, interviews, 2 posters and public demonstrations about future “Masa depan”. There were presentation of their products at big public village meetings.

All the pictures and activities and products around future had a positive / solution-oriented outlook and there was no reference to any risk or threat by a disaster.

Future in the products inter alia was:

• a bright time that will come,
• s.th. positive to achieve – aspiration, (in children/adolescents: what I want to be)
• village development concerns (health, children development, agriculture)
• positive handling of village conflicts within guided harmony (rukun)

Discussion

We were surprised about the positive outlook and the absence of disaster-related threat, worries and sorrow in the products about future. The task to produce and present s.th. about the future was understood in the way of giving a rather general – i.e. non-disaster specific –
and encouraging message, a suggestion how to handle community problems in the future in a better way. Future was constructed as desirable goal. The issue of disaster threat or the need for disaster preparedness was absent. Although, our qualitative interviews in the previous research period had shown an awareness about living in a disaster-prone area before if we deliberately had asked for it. But obviously this aspect of future was only verbalized if deliberately asked about.

Tekeli-Yesil et al., (2011) reported a rather similar awareness in the situation of a predicted earthquake in Istanbul, which they call a «realistic» perception. So we think it is too easy to impute a denial of threat to the villagers. If we take the perspective of a normalcy of threat which was proposed by Bankoff (2007) for the Phillipines then uncertainty of living conditions is a sort of normal background of life and some of our interview partners explained to us that it is no use to move to another place because risk is everywhere in Indonesia and it is better to submit one’s own fate into the hands of Allah. The everyday pragmatism, the daily routine with a general feeling of safety, social embeddedness and positive outlook seems to be fostered and not to be constrained by this (spiritual) background. So risk inclusion via acceptance and trustful surrender while simultaneously striving for the best seems to be adaptive in Java. And if risk management is introduced it is important to understand the complex notions of preparedness: worldly orientated pragmatic preparedness might be forstered by spiritual surrender and the acceptance of the immutable. What seems to be an overdetermination of powerlessness combined with the idea of a benevolent higher power creates a contrasting foil of hope and positive outlook and thus supports active engagement in pragmatic action. So human agency and the conceptions of the inner and outside world are constructed in a quite different way compared to Western thinking where powerlessness has a different meaning.

**Conclusion:**

If risk management is imposed by international or national agencies the constraints of the Western control model should be kept in mind: It is an overdetermination of having the power to control by a top-down logic and often implies a neglect of locally prevalent psychosocial and cultural realities. What may be overlooked are specific forms of resilience within local forms of risk inclusion. We discussed the distinction made by Pelling *et al.*, (2011) between a rigid and a transformative form of resilience. The Javanese case and the form of risk inclusion found there looks like tending to rigidity and supporting the given social order. But as Beatty (1999) and Schwarz (2012) show there are much hidden varieties
and tensions with a transformative potential under the broad roof of commonly conjured general terms and concepts.

**Acknowledgement**

We thank Silke Schwarz and Mechthild von Vacano for their critical comments to earlier versions of this article.

«»

**Literature**


---

i In biographical research there are approaches to explore the construction of certainty at the individual level (Zinn 2004). Less is known about the collective level.

ii The research with the title „Individual and collective ways of coping long-term with extreme suffering and external help after natural disasters: meanings and emotions“ was funded by the Fritz Thyssen Stiftung from November 2008 to October 2011.


v According to the results of Takeshi et al. (2009) the fault may be a bit more in the east of the Opak fault line in the picture – what seems to be not so important in this context.

vi We discussed the construction of the „Javanese“ in another publication (see Zaumseil & Prawitasari-Hadiyono, 2012) and Antlöv, 2005)

vii ) ICBC (Institute for Community Behavioral Change is a Yogyakarta-based NGO, Director: Edward Theodorus. Cooperating researchers from ICBC were: Nindyah Rengganis, Lucia P. Novianti, Tiara R. Widiastuti.