How social impact assessment can contribute to conflict management

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ABSTRACT

The potential for conflict is omnipresent in all projects, and even in all human interactions, and conflict itself leads to many second-order social impacts. This article examines the contribution of the methodological approach used in social impact assessment (SIA) to conflict management. We view conflict as a process that has its own dynamic, and is to be expected in all situations. By using game theory (prisoner's dilemma), we describe and conceptualize this process and highlight the importance of communication in managing conflict. We demonstrate the potential use of SIA in preventing, managing and resolving conflict. Emphasis is placed on the participatory character of SIA and the role of public media. In contrast to existing literature, our focus is not restricted to the typical fields of study of SIA (e.g. environmental conflicts), but understands conflict itself as a field of application. In this sense, conflict-sensitive SIA can be understood both as an extension to the SIA tool kit and a broadening of the scope of SIA application.

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1. Introduction

Although generally having a negative connotation, conflict constitutes an undeniable characteristic of human interaction. Donohue and Kolt (1992, p. 4) define conflict as "a situation in which interdependent people express (manifest or latent) differences in satisfying their individual needs and interests, and they experience interference from each other in accomplishing these goals". Since needs and goals are diverse and people necessarily rely on others to some degree, conflict can never be entirely avoided. However, when managed effectively, conflict is potentially beneficial. It may, for instance, inspire creative solutions and organizational change by prompting groups to oppose generally-accepted, but outdated principles (De Dreu, 1997). The process of conflict resolution may also improve social relations and strengthen social capital in the long run (Barrow, 2010; Donohue and Kolt, 1992). Indeed, it could be argued that freedom of expression is directly related to the potential for conflict because of the ability to express individual opinions that may vary from those of others. Thus, conflict is fundamentally intertwined with principles of democracy and should not generally be inhibited or suppressed. Nevertheless, the common perception of conflict focuses on its destructive aspects, which may be experienced as the undermining of social relations, the experience of negative emotions and, in the case of severe escalation, physical violence, injury and even death.

The fact that the impact of conflict is context-dependent highlights the importance of *conflict management* as a methodological and practical approach (Vanclay, 2012). Conflict management, as used in the organizational psychology and management literature (see e.g. Conbere, 2001; De Dreu, 1997; Wall and Callister, 1995), refers to efforts made to support the constructive aspects of conflict and to limit the destructive ones. In this sense, conflict management attempts to maximize benefits and minimize costs of conflict.

The definition of conflict presented above emphasizes its social nature, as illustrated by the emphasis on the interdependence between actors — if parties had other options in pursuing their goals, conflict could be avoided. In this sense, conflict is inherently social both in terms of causes and consequences. A prominent cause of large-scale societal conflicts is the implementation of policies (Russell et al., 2010) or development projects by government agencies or private enterprises, especially in situations of resource extraction (Kemp and Vanclay, 2013). Some examples of instances where conflict has occurred include: mining projects (e.g. the Tambogrande Mining Project in Peru, Muradian et al., 2003); hydropower construction projects (Karjalainen and Järvikoski, 2010); environmental or cultural heritage protection (e.g. windfarm on Urk, the Netherlands; Langbroek and Vanclay, 2012); and policy decisions (e.g. global protests against the Iraq war, Walgrave and Rucht, 2010). Therefore, the approach and methodology of social impact assessment (SIA) (Esteves et al., 2012; Franks and Vanclay, 2013), which analyzes the social impacts associated with these types of projects, is appropriate and necessarily addresses conflict management (Kapelus et al., 2011; Sairinen, 2011). Ideally, SIA should serve to prevent harm that might arise from conflict, and arguably should assist in reducing pre-existing conflict in a community (João et al., 2011; Vanclay, 2003; Vanclay et al., 2013). However, the nature

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of the dilemmas that SIA practitioners face and the limited timeframe as well as the strong and opposing interests of concerned stakeholders may lead to the emergence of conflict despite, and often after, the implementation of an SIA process (Baines et al., 2013). Therefore, it is clear that the spheres of conflict management and SIA overlap.

The relationship between SIA and conflict has been recognized and analyzed in the literature, albeit with a strong focus on environmental conflict management (e.g. Barrow, 2010; Karjalainen and Järvikoski, 2010; Manring et al., 1990; Persson, 2006; Sairinen, 2011). While this focus is valuable due to the connection between development projects and environmental impact assessment (EIA) and because of the prevalence of conflict in environmental contexts, it limits the potential application of SIA to other conflict situations. A wide range of other applications can be envisaged. Project-level conflict risk assessment, for instance, is advocated by International Alert (2005), especially for extractive industries. Conceivably, this could be extended to a broader spectrum of activities. For instance, the recent expressions of public opposition to general socio-political and economic developments – such as the Occupy Movement (see Dean, 2012), the riots in Greece following budget cuts (e.g. Smith, 2012), and the Arab Spring (see Kandil, 2012) – represent conflict situations that may not have generally attracted the attention of SIA practitioners, but which could benefit from the application of SIA methods.

The focus of this article therefore lies with the general socio-economic importance of conflict. Conflict is not understood solely as a consequence of a given project development, but is interpreted as potential field for the application of SIA. The aim of this article is to articulate how SIA can inform the process of conflict management at its different stages and support the constructive and sustainable resolution of conflict.

In order to investigate how SIA can be applied in conflict situations, first the distinction between conflict-sensitive SIA and conflict impact assessment is discussed. Second, an overview of the varied nature of conflict and its likely social impacts is presented. Third, a game-theoretic framework for thinking about conflict escalation is introduced. Fourth, the opportunities for SIA to address conflict at the stages of conflict prevention, management and resolution are illustrated. Fifth, due to the close interrelations between SIA and public participation, the importance of public involvement in conflict-sensitive SIA is examined before concluding with remarks about the limitations and challenges of this approach.

2. Conflict-sensitive social impact assessment

As described above, the interrelations between SIA and conflict situations are widely acknowledged. Conflict-sensitive SIA is a form of SIA that explicitly considers and addresses conflict situations (Kapelus et al., 2011). It could be argued that Peace and Conflict Impact Assessment (PCIA) (Bush, 1998; Hoffman, 2004) is similar, however, PCIA is usually applied within a context of peace-building and the prevention of violent conflicts (Bush, 1998). PCIA was not specifically created to be applied to situations with a stable institutional context, i.e. where peace-building is not necessary and violence unlikely. Clearly though, conflicts and their social impacts also occur in these circumstances, although their extent and appropriate conflict management strategies may be quite different.

Barrow (2010) argues that PCIA focuses on existing conflicts, whereas conflict-sensitive SIA focuses on conflict potential. Although this does not invalidate the application of PCIA methods within SIA, it does mean that PCIA may not generally be the most effective or efficient framework of impact assessment in conflict situations. This article therefore focuses on the more general approach of conflict-sensitive SIA.

3. Conflict as a social process

At the core of conflict situations is a disagreement between two parties (or stakeholders or rights holders), which is reflected in a divergence of interests. It is important to note that this divergence does not need to be objectively true but depends strongly on each party's perceptions. Thus, conflict can result from the subjective belief that the other party has opposing interests, regardless of the accuracy of this perception (Wall and Callister, 1995).

Manifestations of conflict are diverse and can occur at interpersonal, inter-group, inter-organizational and international levels (Wall and Callister, 1995). Donohue and Kolt (1992) highlight that conflict at an individual level can be latent or explicit, and they characterize conflict as a process having seven levels of tension ranging from no conflict to overt dispute and a complete breakdown of communication. Similarly, social conflict ranges from a failure to communicate or cooperate, to open protest, surreptitious acts of sabotage, and outright eruptions of violence. The focus in this article lies with large-scale, inter-organizational and inter-group conflicts, as these provide the most potential for the application of SIA.

The characteristics of a given conflict depend on the behavior of the opposing sides, which may contribute to constructive or destructive conflict. Constructive conflicts allow a strengthening of personal relations and may lead to gain on both sides, whereas a destructive approach focuses on short-term, face-saving actions (Donohue and Kolt, 1992). The escalation of conflict to the extent that it results in violence or significant property damage can never be constructive and should be avoided.

Before continuing below with a discussion of the social impacts of conflict, it is important to note how active (as opposed to latent) conflicts develop. International Alert (2005) distinguishes between structural causes, proximate causes, and triggers. Structural causes of conflict are identified as the underlying preconditions that are conducive to conflict and deeply embedded in political and social institutions. Proximate causes are the more immediate causes of conflict, and may be the consequences of structural ones. These categories are not direct causes of active conflict, but rather the underlying factors that determine if and how conflict will develop. They may also form the basis of a latent conflict. Triggers represent the most direct cause of overt conflict as they refer to a specific event that initiates a conflict or its escalation.

Since each conflict has many different facets, a precise analysis of the social impacts of a given situation depends on the specifics of the case. However, drawing on Vanclay's (2002) conceptualization of social impacts, it is possible to identify some of the consequences that are likely to occur in most conflicts.

- Conflict may disrupt economic activity. A disagreement between a corporation and workers, for example, could lead to reduced productivity through shirking, pilfering or reduced workplace harmony. At a more serious level, conflict can lead to strike action leading to a halt in production for an extended period of time. This could lead to unemployment or a temporary loss of income, with individuals experiencing financial hardship. For companies, disruptions can have financial and social costs in terms of delays in production, and a loss of reputation and shareholder value (International Alert, 2005).
- Conflict may disrupt social activity, people's daily lives can be interrupted and the quality of their living environment (liveability) can be reduced while conflict occurs.
- Conflict may harm social relations leading to decreased social cohesion, a weakening of social capital, and reduced resilience. This may lead to psychological, sociological and economic effects within a society due to social disintegration.
- Conflicts may lead to property damage, thus imposing costs on firms and individuals.

- Conflict imposes costs on institutions, increases the workload on institutions, and there is an opportunity cost associated with the loss of staff time while people are deployed on activities to address the conflict.
- Eruptions of violence may create risks and actual harm to the physical and mental wellbeing of people including the possibility of death. An example of this was the strike at the Lonmin Marikana mine in South Africa which led to the killing of some 34 workers on 16 August 2012 (BBC News, 2012).
- All these mentioned effects contribute to general feelings of annoyance, unease, uncertainty and fear thus undermining trust in others and society in general.

It should be kept in mind that conflict is usually initiated to attain a certain goal, the value of which could potentially outweigh the negative impacts created in the process of achieving it, thus leading to a net welfare gain despite the conflict. It is important to note that, despite some negative impacts, conflict may also result in beneficial social impacts, for instance through facilitating processes of democratization, which may improve social cohesion.

While the above-mentioned impacts and more are possible, not all will necessarily occur in a given situation. If escalation of the conflict can be prevented, the probability of the most severe social impacts (i.e. physical violence or death) occurring will decrease significantly. Nevertheless, fear of harm and anxiety are still likely to occur, since they are based on individual beliefs and perceptions of the situation. As there is a possibility of escalation in any given conflict, and since the consequent social impacts are typically detrimental, this possibility should be kept in mind when considering a specific conflict situation. For this reason, a game-theoretic framework for thinking about the escalation of conflict is presented in the next section.

Box 1
An example of conflict escalation in infrastructure development.

> A recent example of conflict escalation was the decision to use anti-riot water cannons at a protest against the remodeling of the central station in Stuttgart, Germany on 30 September 2010 and the ensuing escalation of that conflict (see Novy and Peters, 2012). The pictures of violent police action against protesters, many of whom were children and elderly people, caused public outrage nation-wide and brought the legitimacy of the project into question. Moreover, the disproportionate reaction to the protest by the police is considered to have contributed significantly to the strengthening of the opposition to the project and potentially caused a shift in communal and regional politics towards the Green Party (Schultz, 2010). The conflict management strategies that were used caused significant social impacts and interfered with the resolution of the conflict. Not only could conflict-sensitive SIA have prevented the triggers of this conflict in the first place, monitoring and evaluation of conflict management strategies would have called attention to their impacts and consequences.

4. Modeling the escalation of conflict

Glasl (1990) categorizes the dynamics of conflict by presenting a model with three levels of outcome. The basis of the model is that escalation progresses from one potential level of outcome to another, depending on the actions of the parties. The first level of outcome represents peaceful resolution by means of discussion or negotiation and results in a *win–win* situation where both parties attain a satisfactory outcome. The second level is a *win–lose* situation, where one party attains their goals while the other does not. This typically occurs because

one or both parties refuse to make concessions. Besides not having attained their goal, the losing party may also experience psychological losses, such as a loss of face or dignity, and/or financial losses, for example, the cost of lawyers. The third level (*lose–lose*) is characterized by major escalation to the extent that winning no longer is an objective or even a possibility. Parties may attempt to destroy each other and may be willing to accept losses as long as the other party's losses are greater. Parties may even accept self-destruction in order to destroy the opposing party.

Glasl's (1990) model illustrates that an earlier solution will generally be preferable to solutions at a later stage of escalation: win–win solutions are preferable to win–lose outcomes; and win–lose outcomes are preferable to lose–lose outcomes. This can be conceptualized in game theory by representing a conflict as a standard prisoner's dilemma game. The prisoner's dilemma is a classic model in game theory to describe situations where individual incentives create outcomes that are jointly undesirable for the concerned parties (Jost and Weitzel, 2007; Rapoport, 1974). A game theoretic framework provides a simple analysis of a wide range of complex decision processes and can be applied to, for example, issues of international security and the tragedy of the commons in environmental terms (Hardin, 1968; Lumsden, 1973; Soroos, 1994).

When applying the prisoner's dilemma game to the escalation of conflict, both parties or players have a choice of two strategies: either to pursue a strategy of escalation, or to make concessions (see Fig. 1). In the logic of the game, if one party chooses escalation when the other party chooses concession, the escalating party will achieve its goals and therefore win, while the conceding party loses. However, when both parties choose escalation, neither achieve their goal and the conflict remains unresolved. In a win–lose situation, the winner will dictate the solution of the conflict, which is why the winner would prefer this outcome to win–win. A lose–lose situation occurs when no direct resolution of the conflict is possible. In this case, the conflict may stay unresolved or a new attempt at resolution may be necessary. To be a true prisoner's dilemma, the outcome of lose–lose must be preferable to lose–win for the losing party. This could be the case if, for example, lose–lose secures the option of renegotiation or prevents a settlement that is undesirable for the losing party. While the precise payoffs clearly depend on the terms of each situation, a prisoner's dilemma game will occur if each party strictly prefers to be the sole winner of the conflict and if outcomes deteriorate with escalation (as illustrated in Glasl's, 1990 model). Here, the dominant strategy of both parties is to choose escalation, even though this leads to a collective suboptimal outcome.

In the context of the described game, the result of both players following their dominant strategy is lose–lose, which is a worse outcome than win–win. Therefore, when using a game-theoretic approach applied to conflict escalation, the prediction is that, despite the fact that concessions by both parties would yield the most favorable outcome, the individual choices of the opposing sides will lead to the worst possible outcome. However, as in the classic prisoner's dilemma game, the superior outcome of win–win can be attained through effective communication and commitment to cooperation.

The prisoner's dilemma is an abstract and simplified representation of conflict. It assumes individual rational behavior in an economic sense and the short-term self-interest of both parties. Also, the presented framework is of a one-shot game (i.e. with no learning), which is appropriate for most inter-group conflicts, although the model could be extended to repeated games. In general, framing conflict escalation as a prisoner's dilemma game yields a simple representation of the interplay between individual decisions and the overall outcome. In the context of conflict management and SIA, such a perspective is valuable because it emphasizes the role of incentives: the actions of parties within a conflict are determined by their perceptions of what can be gained from a given strategy. Therefore, in order to avoid escalation of a conflict, incentives must be adjusted such that cooperation is more desirable than

	Player B — Concession	Escalation
Player A — Concession	**win-win**	**lose-win**
Escalation	**win-lose**	**lose-lose**

Fig. 1. Payoff matrix in a prisoner's dilemma game of conflict.

escalation. The following section addresses how SIA may support conflict management in achieving this outcome.

5. SIA in conflict management

5.1. Conflict prevention and anticipation

The most obvious possibility for the application of SIA in the context of societal conflicts, and the one that is currently most widely accepted, is using SIA to prevent conflict (Barrow, 2010; Manring et al., 1990; Peltonen and Sairinen, 2010). Indeed, the literature describing the importance of SIA in project development emphasizes that SIA is capable of preventing conflict by evaluating and managing negative social impacts thus decreasing the conflict potential of a given project, and that the role of SIA in conflict prevention is a central argument why conducting SIA is beneficial for profit-seeking institutions (Esteves and Vanclay, 2009; Esteves et al., 2012; Kapelus et al., 2011; Vanclay, 2013; Vanclay and Esteves, 2011). In contrast to EIA, which is explicitly embedded in legislation, the decision to conduct SIA is often taken, not as a result of legal requirements, but at the discretion of the proponent (Esteves et al., 2012). Kapelus et al. (2011) describe the costs and risks associated with conflict, which range from property damage and security costs to a collective boycott of a firm's product. In general, conflicts cause considerable financial and psychological costs, which may be avoided through implementation of conflict-sensitive SIA.

According to the International Principles for Social Impact Assessment (Vanclay, 2003, p.6), "the goal of impact assessment is to bring about a more ecologically, socio-culturally and economically sustainable and equitable environment". Therefore, SIA focuses on wellbeing in all social dimensions and has an explicit concern to promote equity and to avoid conflict (Vanclay, 2006). In undertaking SIA, understanding the circumstances and analyzing the different positions and perceptions of stakeholders are emphasized. The methods of data collection and the processes of scoping and prediction of likely impacts, combined with the explicit formulation of mitigation opportunities, illustrate the potential of SIA to prevent conflict. This is facilitated by undertaking an assessment from the perspective of impacted individuals and groups to gain insights into potential conflict issues. Addressing the mitigation of negative social impacts allows stakeholders to solve issues before they lead to overt conflict.

SIA encourages the anticipation and identification of conflict (Esteves and Vanclay, 2009; Esteves et al., 2012; Vanclay, 2003). This occurs in data collection for scoping and stakeholder analysis, as well as through continuous monitoring. The reliance on primary data in the SIA allows for greater anticipation of conflict and provides better predictions than approaches based on information of stereotypical conflict situations (Manring et al., 1990). This is due to the fact that conflicts may be triggered by subjective evaluations of events and therefore the source of conflict may not be evident. Similarly, presumed conflict factors may not necessarily initiate a conflict in certain environments because they were not perceived as such. Where a conflict occurs because of the perceptions of people, the survey methods used in SIA might detect conflict potential early when it is latent or in the process of forming. In contrast to other impact assessment methodologies, SIA recognizes that subjective feelings and perceptions are valid impacts and indicators of impacts, partly because they lead to negative experiences and may trigger conflict (Vanclay, 2002, 2012). Therefore, even if all manifestations of conflict cannot be prevented – for example if mitigation attempts are insufficient – SIA may still provide an indication where conflict is likely to occur. This provides planners and firms with the possibility to assess the conflict potential of projects and to formulate plans and strategies for conflict mediation or negotiation in advance. This may significantly facilitate the resolution of conflict, have a de-escalating effect by preventing rash action, and thus reduce the negative social impacts associated with conflict.

5.2. Conflict identification and management

In cases where conflict cannot be prevented, it is crucial to identify which situations or behavior promote conflict. As pointed out above, conflict can emerge when one party perceives that the other interferes with a goal, regardless of whether the other party intends or realizes this. However, active conflict management and resolution usually require both sides to be aware of the conflict and to take action to address the issue. Early identification and recognition are thus especially important for latent conflicts as the non-articulation of disagreement hinders constructive approaches to resolution and may therefore lead to a more rapid escalation once the conflict becomes active (Donohue and Kolt, 1992). Besides identifying conflict potential in a preliminary analysis of issues and stakeholder interests, SIA requires the continual

monitoring of social impacts and thus continues to identify conflicts once they have emerged.

Manring et al. (1990) propose that SIA is a valuable tool in conflict management as it may allow identification of the underlying issues. In the later stages of a conflict and especially when antagonism arises, it may be difficult to uncover the actual causes, i.e. the issues that need to be addressed to resolve the conflict. Since SIA is designed to identify even subtle social impacts, it can provide valuable information on the different perceptions of stakeholders and identify areas where misunderstandings between opposing parties persist.

Besides providing information on the underlying causes and perceptions of a conflict, SIA could also inform conflict management directly by evaluating the social impacts of the implemented conflict management strategy. Manring et al. (1990) propose that SIA could be used to predict the behavior of the opposing parties in a conflict, although they do not specify how this could be achieved. Nevertheless, it is clear that the manner of conflict management significantly shapes the social impacts of a conflict and determines whether escalation will occur. SIA could be used to inform the ongoing evaluation of strategies and preliminary analysis of conflict management methods. Since times of conflict are often characterized by agitated emotions, careful evaluation of the consequences of strategies is called for in order to avoid unintended side effects and the escalation of conflict.

5.3. Negotiation and conflict resolution

Negotiation represents an attempt to solve a conflict by discussion between opposing parties. In practice, negotiation can be limited to being a discussion between the conflicting parties themselves, can occur in a court or other legal setting, or can involve a third party acting as a mediator or arbitrator (Wall and Callister, 1995). Successful negotiation results in an acceptable outcome for both parties thus marking the resolution of the conflict.

Ross (2003) stresses the potential for SIA to inform negotiations as well as to provide a framework for the future evaluation of the agreement. Indeed, when SIA is implemented in order to study a specific conflict and the SIA practitioners are perceived as being impartial, parties may agree to use the collected data as the common ground of information for the negotiation process making additional fact-finding unnecessary (Sairinen, 2011). This role for SIA is especially valuable when little common ground exists and negotiations may be complex or tedious.

Kapelus et al. (2011) suggest that the use of information collected through an SIA provides an opportunity to promote the building of trust between opposing parties. Reciprocal trust is crucial for sustainable conflict resolution because, once negotiation is completed, both parties need to commit to the outcome. If there are doubts among the parties about whether the other will renege on a commitment, the parties may not feel obliged to abide by the agreement. In the game-theoretic framework presented earlier, Player A will only choose the concession strategy if convinced (i.e. trusting) that Player B has credibly committed to not choosing escalation.

Loss of trust not only renders the current negotiation process fruitless, it also hinders future negotiations and may cause escalation of the conflict. SIA can foster trust among conflicting parties via two channels. First, trust itself is a process, built through on-going interaction, and cannot be created in a static, one-time assessment (Kapelus et al., 2011). The dynamic approach of SIA allows focusing on relationship building by providing continual evaluation of impacts and ongoing monitoring. In this way, SIA may act as a security mechanism for both sides to detect whether the other party is breaking their word. Second, since a loss of trust can occur on the basis of mere perception of deviation from an agreement, the explicit focus of SIA on the perceptual and corporeal experience of impacts and local knowledge (Vanclay, 2002) may reveal signs of a loss in trust early on, thus allowing parties to address misperceptions.

Consistent with the principle of SIA having a responsibility to promote democratization (Vanclay, 2003, 2006), SIA may have an empowering effect in cases of an imbalance of power between conflicting parties. Ross (2003) illustrates that SIA serves to articulate the needs and demands of minority groups thus providing them with a stronger bargaining position in negotiations. Further, the explicit commitment to human rights and concerns of equity within the practice of SIA (Kemp and Vanclay, 2013; Vanclay, 2003) implies that practitioners should take a stand on these issues. While a theoretical commitment cannot guarantee that negotiations will lead to fair outcomes, SIA nevertheless improves the chances by introducing an impartial source of information. Since unfair outcomes of negotiations, or outcomes perceived as such, are unlikely to yield true resolution of a conflict, SIA can be used as a tool to increase the likelihood of resolution of conflict through establishing trust and facilitating negotiations.

5.4. Monitoring and grievance mechanisms

Social impacts are not static but change according to new developments and circumstances. Continuous monitoring of the situation therefore represents an important building block of SIA practice (Esteves et al., 2012). Since conflict is a dynamic process, the associated social impacts differ with the stage of the conflict and its characteristics. As a consequence, the role of SIA in conflict management does not end with a negotiation outcome but remains important as long as the conflict issues persist. Monitoring includes continuing analysis of the conflict and its impacts, as well as evaluation of the conflict management and resolution strategies. In this sense, SIA may not only support sustainable conflict resolution for a given conflict, it may also provide valuable experiences to address future conflicts with the same or similar actors or issues.

An important aspect of monitoring the development of the conflict lies in the establishment of grievance mechanisms. Grievance mechanisms establish communication between the stakeholders and allow the identification of conflict potential in its early stages, thus preventing escalation (Kapelus et al., 2011). According to the United Nations *Guiding Principles on Business and Human Rights* (United Nations, 2011), non-judicial as well as judicial mechanisms are needed. Principle 31 of the Guiding Principles provides effectiveness criteria for non-judicial grievance mechanisms — they should be legitimate, accessible, predictable, equitable, transparent, rights-compatible, based on continuous learning, and based on engagement and dialogue. Only where the concerned parties are aware of a grievance mechanism and trust in its fairness and effectiveness will it be used to communicate their concerns.

While grievance mechanisms are inherently important due to their connection with human rights, they are even more important in conflict situations for several reasons. First, a human rights infringement clearly indicates a conflict issue itself. Therefore, grievance mechanisms that are meant to address human rights infringements simultaneously address the conflict issue. This illustrates the intertwined nature of human rights and social conflicts. Second, a direct means of communication through grievance mechanisms ensures that the individual perceptions, which could form the basis of the conflict, are noticed and addressed in a timely manner thus preventing escalation. Third, adequately-designed grievance mechanisms can foster trust between parties thus facilitating the process of negotiation and conflict resolution. Finally, grievance mechanisms are fundamental to addressing (perceived) imbalances in power between opposing parties. Power relations affect conflict management because they influence the communication of information (Partidario and Sheate, 2013) and can interfere with conflict mediation (Peltonen and Sairinen, 2010). In line with the use of SIA to establish trust and serve as an impartial source of information, integrating adequate grievance mechanisms with conflict-sensitive SIA may prevent harm from conflict and support sustainable resolution.

6. Conflict-sensitive SIA — a participatory process

The previous section illustrated how SIA can be implemented in the context of conflict, facilitate conflict management, and support resolution. However, the main advantage of conflict-sensitive SIA lies in its participatory nature and the principle to involve all concerned parties. Furthermore, it is the explicit concern about social impacts and perceptions thereof that contributes to the value of SIA in conflict situations. Indeed, considering the broad reach of the internet, public participation in SIA and in conflict situations more generally affects a wide audience. Due to the constant availability of the media and the accessibility of online social networks, public involvement in conflicts is not restricted to the conflicting parties themselves, but can involve a wide range of interested stakeholders. Below, the role of public involvement in conflict-sensitive SIA is examined in general and with a specific focus on the role of media.

6.1. Public involvement in conflict-sensitive SIA

Barrow (2010) suggests that a participatory approach to SIA is more likely to yield positive outcomes for a given environmental project and may help to avoid conflict. Roberts (2003) supports this claim in his comparison of consultative versus participatory models of public involvement. Although a participatory approach may be more difficult to implement, the direct involvement of stakeholders provides greater confidence in the outcomes of the impact assessment and reduces the risk of conflict. However, it has to be kept in mind that, while SIA is usually participatory, it is not equivalent to public participation as the emphasis is on assessing and managing impacts, and not on consulting the public (Ross, 2003).

There are two reasons why conflict-sensitive SIA needs to be especially participatory when compared to SIA in other contexts. First, situations of conflict are likely to result in the development of antagonism and create barriers to communication. In order to use SIA effectively in such a context, it is crucial to separate true social impacts from statements made for the sake of the discussion only, i.e. as strategic manipulation, to spite or distance oneself from the opposing party, or as a result of momentary anger. Hartz-Karp and Pope (2011) provide various examples about how methods of deliberative democracy may improve communication between groups, yield valuable insights into needs and demands, and position SIA as a deliberative rather than a descriptive method. Second, it is important for the successful application of SIA in a conflict situation to ensure that the SIA practitioner is not perceived as catering to the needs of only one party. This is due to the fact that the de-escalating functions of SIA crucially depend on the practitioner being perceived as impartial and reliable by both parties. Therefore, an approach to SIA is needed that explicitly encourages participation and empowerment, and signals that the points of view of all opposing parties are equally valid and valuable.

6.2. The role of the media in conflict-sensitive SIA

Despite romanticized notions to the contrary, the idea that the media are not impartial reporters of events but take an active role in political decision making is widely accepted in the academic literature (e.g. Graber, 2007; Klarevas, 2003; Page, 1996). This is reflected for instance in discussions of the 'CNN Effect', which suggests that the media coverage of events actively influences foreign policy decisions, especially concerning interventions in a conflict or humanitarian crisis, by shaping public opinion and creating pressure on policy makers (Gilboa, 2005). Since media reports rarely address peaceful and constructive conflicts, but tend to emerge when a conflict is on the verge of escalation, the impact of the mass media is a sensitive matter. It has been suggested that extensive media coverage may increase the risk of escalation, although the evidence for this is mostly anecdotal (Jakobsen, 2000). On the contrary, media involvement may have beneficial effects as it may draw attention to the conflict issues.

In discussion of recent societal conflicts, the importance of the so-called 'New Media' (social networking, Web 2.0) has been emphasized. This importance is based on observation of the influential role of user-created and web-based descriptions of events and expressions of opinion. Since this form of media is open to everyone, it lends itself well to the organization of collective action, for instance in protesting against a certain policy or project. In particular, social media play an important role in cases where the mainstream media do not report impartially on the conflict, for instance because they are controlled by one of the conflicting parties or by others with a vested interest. New media also allows broadening the scope of involvement because information can easily be spread to other places, as illustrated by the use of social media during the Arab Spring (Howard et al., 2011; Khondker, 2011). The recent protests in Turkey, which were initiated by a contested development project of Taksim Gezi park, were also influenced strongly by the use of social media in distributing evidence of violent police action (Harding, 2013). Thus, the internet and other new media and social networking have the potential to fundamentally change the process of conflict. This arguably calls for a re-thinking of conflict management strategies (Aday et al., 2010).

When using SIA in a context of conflict, it is important to realize that the media coverage itself may cause social impacts and is an important factor in forming public opinion. Media themselves represent a source of information and provide a venue for the expression of public opinion, both of which may be used in the SIA process. Indeed, the use of media is also an effective channel to inform stakeholders and address potential misperceptions (Melone et al., 2002).

Since the mass media is an important actor in conflict management, it is appropriate to regard them as a key stakeholder when considering a conflict situation. This has the benefit of making the implicit channels of influence visible and allows actions to be taken to prevent potential escalation. Furthermore, the likely increase in the importance of new media in the organization of conflict provides opportunities and challenges for the practice of SIA. On the one hand, the public nature of new media allows new methods of data collection and may thus improve SIA by making it more participatory. On the other hand, the use of new media in SIA may introduce a selection bias, since accessibility and capability to use these forms of communication differ considerably among social groups illustrating a form of digital divide (Mayer and Cornfield, 2003). Additionally, the use of social networking or other forms of new media raise concerns about the benefits and dangers of anonymity in situations of conflict. While anonymity allows stakeholders to state their opinions without fear of consequences, anonymous concerns may be more difficult to address and could potentially be motivated by strategic behavior. In general, the role of the media in SIA has not been addressed widely and the developments in the field of new media on the practice of SIA should be considered in future research.

7. Conclusion

Conflicts represent complex social problems and, although they emerge frequently, they are always a challenge for the opposing parties and society. Conflicts are diverse in nature and depend on a variety of implicit factors and subjective perceptions, which make them hard to grasp. In contrast, the social impacts of conflict are more tangible and manifest themselves for instance in economic, socio-political and emotional reactions by the concerned parties. Since many of the social impacts of conflict are negative, effective conflict management is essential and should be aimed at reducing negative impacts and preventing escalation.

Social impact assessment may improve conflict management in all stages of the conflict. When SIA is implemented for a given project, it serves to prevent and anticipate conflict by identifying potential conflict

factors and suggesting mitigation measures. Where conflict has already emerged, SIA targeted at identifying the underlying issues of conflict may be useful in choosing appropriate conflict management strategies. SIA also plays a role in evaluation of these strategies through the possibility of examining their social impacts. Furthermore, SIA can inform the negotiation process by providing detailed and independent data on stakeholder interests and perceptions and also support the creation of trust, especially when integrated with adequate grievance mechanisms. All in all, the positive role of SIA in conflict management is caused by the practical advantages of the method – the focus on perceived impacts and emphasis on ongoing monitoring and evaluation – as well as the underlying principles of SIA (Vanclay, 2003), which urge practitioners to promote equality and democratization. The beneficial effect of SIA in a conflict situation is likely to be supported by a higher degree of public participation, as direct involvement of the public is necessary for effective negotiation and resolution.

Despite the fact that SIA can support management, the methodology should not be understood as a panacea for conflict. The effectiveness of SIA in conflict management will vary with the specific conflict issues and the details of implementation of the assessment, as well as with the willingness of the concerned parties to cooperate and participate, and with the general institutional background. Indeed, arguably SIA could be harmful for conflict resolution in some unique instances, for example if it introduces redundant or controversial information and thus alienates the concerned parties (Manring et al., 1990). Even if SIA can help disentangle complexities, conflict will still be a problematic phenomenon that needs to be addressed with care. Moreover, questions remain as to the precise role of the media in the process of conflict-sensitive SIA.

In conclusion, the role of conflict-sensitive SIA is two-fold. First, when implementing SIA for a specific project, practitioners should keep the potential for conflict in mind, especially to consider and uncover latent conflicts, and to prevent escalation. In this sense, awareness of the omnipresence of conflict and the benefit of appropriate conflict management can inform SIA generally. Second, when addressing any conflict, conducting conflict-sensitive SIA either as an extension to a previous assessment or as an independent process may support conflict management. In terms of the game-theoretic framework presented in this paper, conflict-sensitive SIA may help in achieving a superior outcome (i.e. win–win), thus illustrating the potential of SIA to enhance situations and not merely to mitigate harm (João et al., 2011). In essence, conflict management and SIA pursue the same goals: solving complex social problems with the intention to create the greatest benefit at the lowest cost. This does not imply that one can replace the other; it does, however, indicate that integration of the two approaches within the application of conflict-sensitive SIA may yield an improved strategy and these previously distinct professional fields should therefore be open to learn from each other.

References

Aday S, Farell H, Lynch M, Sides J, Kelly J, Zuckerman E. Blogs and bullets: new media in contentious politics [Internet]. Washington: United States Institute of Peace; 2010 [Available from: http://www.usip.org/publications/blogs-and-bullets-new-media-in-contentious-politics [accessed 5 November 2013]].
Baines J, Taylor CN, Vanclay F. Social impact assessment and ethical social research principles: ethical professional practice in impact assessment. Part II. Impact Assess Proj Apprais 2013;31(4):254–60. http://dx.doi.org/10.1080/14615517.2013.850306.
Barrow CJ. How is environmental conflict addressed by SIA? Environ Impact Asses Rev 2010;30(5):293–301.
BBC News. South Africa's Lonmin Marikana mine clashes killed 34 [Internet]. Africa: BBC News; 2012 [17 August, Available from: http://www.bbc.co.uk/news/world-africa-19292909 [accessed 5 November 2013]].
Bush K. A measure of peace: peace and conflict impact assessment of development projects in conflict zones [Internet]. Working Paper No.1. Ottawa: International Development Research Centre, Peacebuilding and Reconstruction Programme Initiative and the Evaluation Unit; 1998. [Available from: http://www.conflictsensitivity.org/sites/default/files/Measure_of_Peace.pdf [accessed 5 November 2013]].
Conbere JP. Theory building for conflict management system design. Confl Resolut Q 2001;19(2):215–36.

De Dreu C. Productive conflict: the importance of conflict management and conflict issues. In: De Dreu C, Van de Vliert E, editors. Using conflict in organizations. London: Sage Publications; 1997. p. 9–22.
Dean A. Occupy Wall Street. Harv Int Rev 2012;33(4):12–5.
Donohue W, Kolt R. Managing interpersonal conflict. Newbury Park: Sage Publications; 1992.
Esteves AM, Vanclay F. Social development needs analysis as a tool for SIA to guide corporate-community investment: applications in the minerals industry. Environ Impact Asses Rev 2009;29(2):137–45.
Esteves AM, Franks D, Vanclay F. Social impact assessment: the state of the art. Impact Assess Proj Apprais 2012;30(1):35–44.
Franks D, Vanclay F. Social Impact Management Plans: innovation in corporate and public policy. Environ Impact Asses Rev 2013;43:40–8.
Gilboa E. The CNN effect: the search for a communication theory of international relation. Polit Commun 2005;22(1):27–44.
Glasl F. Konfliktmanagement: ein Handbuch zur Diagnose und Behandlung von Konflikten für Organisationen und ihre Berater (Conflict management: a guide for diagnosis and resolution of conflict for organizations and consultants). 2nd ed. Bern: Freies Geistesleben & Haupt; 1990 [German].
Graber DA, editor. Media power in politics. 5th ed. Washington: CQ Press; 2007.
Hardin G. The tragedy of the commons. Science 1968;162:1243–8.
Harding L. Turkey's resistance image forged as pepper spray burns woman in red dress [Internet]. The Guardian; 2013 [5 June, Available from: http://www.theguardian.com/world/2013/jun/05/turkey-lady-red-dress-ceyda-sungur [accessed 5 November 2013]].
Hartz-Karp J, Pope J. Enhancing effectiveness through deliberative democracy. In: Vanclay F, Esteves AM, editors. New directions in social impact assessment. Cheltenham, UK: Edward Elgar Publishing; 2011. p. 253–72.
Hoffman M. Peace and conflict impact assessment methodology [Internet]. Berlin: Berghof Research Centre for Conflict Management; 2004 [Available from: http://berghof-handbook.net/documents/publications/hoffman_handbook.pdf [accessed 5 November 2013]].
Howard PN, Duffy A, Freelon D, Hussain M, Mari W, Mazaid M. Opening closed regimes: what was the role of social media during the Arab Spring? Seattle: PITPI Working Paper; 2011. [Available from: http://pitpi.org/index.php/2011/09/11/opening-closed-regimes-what-was-the-role-of-social-media-during-the-arab-spring/ [accessed 5 November 2013]].
International Alert. Conflict-sensitive business practice: guidance for extractive industries [Internet]. London: International Alert; 2005 [Available from: http://www.international-alert.org/resources/publications/conflict-sensitive-business-practice-guidance-extractive-industries [accessed 5 November 2013]].
Jakobsen PV. Focus on the CNN effect misses the point: the real media impact on conflict management is invisible and indirect. J Peace Res 2000;37(2):131–43.
João E, Vanclay F, den Broeder L. Emphasising enhancement in all forms of impact assessment: introduction to a special issue. Impact Assess Proj Apprais 2011;29(3):170–80.
Jost PJ, Weitzel U. Strategic conflict management: a game-theoretical introduction. Cheltenham, UK: Edward Elgar Publishing; 2007.
Kandil H. Why did the Egyptian middle class march to Tahrir Square? Mediterr Polit 2012;17(2):197–215.
Kapelus P, Richards E, Sherwin H. Conflict-sensitive impact assessment. In: Vanclay F, Esteves AM, editors. New directions in social impact assessment. Cheltenham, UK: Edward Elgar Publishing; 2011. p. 288–305.
Karjalainen TP, Järvikoski T. Negotiating river ecosystems: impact assessment and conflict mediation in the cases of hydro-power construction. Environ Impact Asses Rev 2010;30(5):319–27.
Kemp D, Vanclay F. Human rights and impact assessment: clarifying the connections. Impact Assess Proj Apprais 2013;31(2):86–96. (http://www.tandfonline.com/doi/full/10.1080/14615517.2013.782978).
Khondker H. Role of the new media in the Arab Spring. Globalizations 2011;8(5):675–9.
Klarevas L. Media impact. In: Rozell MJ, editor. Media power, media politics. Lanham: Rowman & Littlefield; 2003. p. 265–96.
Langbroek M, Vanclay F. Learning from the social impacts associated with initiating a windfarm near the former island of Urk, The Netherlands. Impact Assess Proj Apprais 2012;30(3):167–78.
Lumsden M. The Cyprus conflict as a prisoner's dilemma game. J Confl Resolut 1973;17(7):7–32.
Manring N, West C, Bidol P. Social impact assessment and environmental conflict management: potential for integration and application. Environ Impact Asses Rev 1990;10(3):253–65.
Mayer JD, Cornfield M. The new media. In: Rozell MJ, editor. Media power, media politics. Lanham: Rowman & Littlefield; 2003. p. 297–317.
Melone SD, Terzis G, Beleli O. Using the media for conflict transformation: the common ground experience [Internet]. Berlin: Berghof Research Center for Constructive Conflict Management; 2002 [Available from: http://www.berghof-handbook.net/documents/publications/melone_hb.pdf [accessed 5 November 2013]].
Muradian R, Martinez-Alier J, Correa H. International capital versus local population: the environmental conflict of the Tambogrande Mining Project, Peru. Soc Nat Resour 2003;16(9):775–92.
Novy J, Peters D. Railway station mega projects as public controversies: the case of Stuttgart 21. Built Environ 2012;38(1):128–45.
Page B. The mass media as political actors. PS — Polit Sci 1996;29(1):20–4.
Partidario MR, Sheate WR. Knowledge brokerage: potential for increased capacities and shared power in impact assessment. Environ Impact Asses Rev 2013;39:26–36.
Peltonen L, Sairinen R. Integrating impact assessment and conflict management in urban planning: experiences from Finland. Environ Impact Asses Rev 2010;30(5):328–37.
Persson J. Theoretical reflections on the connection between environmental assessment methods and conflicts. Environ Impact Asses Rev 2006;26(7):605–13.

Rapoport A. Prisoner's dilemma: recollections and observations. In: Rapoport A, editor. Game theory as a theory of conflict resolution. Dordrecht, the Netherlands: Reidel; 1974. p. 17–34.

Roberts R. Involving the public. In: Becker HA, Vanclay F, editors. The international handbook of social impact assessment. Cheltenham, UK: Edward Elgar Publishing; 2003. p. 258–77.

Ross H. Environmental mediation. In: Becker HA, Vanclay F, editors. The international handbook of social impact assessment. Cheltenham, UK: Edward Elgar Publishing; 2003. p. 296–314.

Russell AW, Vanclay F, Aslin H. Technology assessment in social context: the case for a new framework for assessing and shaping technological developments. Impact Assess Proj Apprais 2010;28(2):109–16.

Sairinen R. Environmental conflict mediation. In: Vanclay F, Esteves AM, editors. New directions in social impact assessment. Cheltenham, UK: Edward Elgar Publishing; 2011. p. 273–87.

Schultz T. Griff zur Notbremse (Grasping the emergency brake). [Internet]Süddeutsche Zeitung; 2010 [13 October, Available from: http://www.sueddeutsche.de/politik/stuttgart-und-die-gruenen-griff-zur-notbremse-1.1011325 [accessed 5 November 2013]].

Smith H. Anger in Athens as Greek austerity measures passed [Internet]. The Guardian; 2012 [7 November, Available from: http://www.guardian.co.uk/world/2012/nov/07/greece-austerity-protests-violence [accessed 5 November 2013]].

Soroos MS. Global change, environmental security, and the prisoner's dilemma. J Peace Res 1994;31(3):317–32.

United Nations. Guiding principles on business and human rights: implementing the United Nations "protect, respect and remedy" framework [Internet]. New York: United Nations; 2011 [Available from: http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf [accessed 5 November 2013]].

Vanclay F. Conceptualising social impacts. Environ Impact Assess Rev 2002;22(1):183–211.

Vanclay F. International principles for social impact assessment. Impact Assess Proj Apprais 2003;21(1):5–11.

Vanclay F. Principles for social impact assessment: a critical comparison between the international and US documents. Environ Impact Assess Rev 2006;26:3–14.

Vanclay F. The potential application of social impact assessment in integrated coastal zone management. Ocean Coast Manag 2012;68:149–56.

Vanclay F. Developments in social impact assessment: an introduction to a collection of seminal research papers. In: Vanclay F, editor. Developments in social impact assessment. Cheltenham, UK: Edward Elgar Publishing; 2014. [in press].

Vanclay F, Esteves AM. Current issues and trends in social impact assessment. In: Vanclay F, Esteves AM, editors. New directions in social impact assessment. Cheltenham, UK: Edward Elgar Publishing; 2011. p. 3–19.

Vanclay F, Baines J, Taylor CN. Principles for ethical research involving humans: ethical professional practice in impact assessment part I. Impact Assess Proj Apprais 2013;31(4);31(4):243–53. http://dx.doi.org/10.1080/14615517.2013.850307.

Walgrave S, Rucht D, editors. The world says no to war: demonstrations against the war on Iraq. Minneapolis: University of Minnesota Press; 2010.

Wall JA, Callister RR. Conflict and its management. J Manag 1995;21(3):515–58.

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