

SKAD centres on how and why knowledge is defined as valid, in which processes it emerges, how it is transmitted, how knowledge is related to power and which functions it has in society (Jäger 2001). In Keller's words:

"Discourses may be understood as more or less successful attempts to stabilize, at least temporarily, attributions of meanings and orders of interpretation, and thereby to institutionalize a collectively binding order of knowledge in a social ensemble." (2013: 2)

Social actors construct, produce and attribute meaning, and thereby reality, through discourse, in a process of objectifying subjective realities. In line with Berger and Luckmann, Keller argues that shared knowledge emerges through social construction: processes of internalisation, typification and objectivation of knowledge which is then institutionalized, maintained and reproduced through discourses (Keller 2013).

In contrast to the everyday usage of the term discourse as an equivalent of discussion, a discourse is not just an idea that is spoken about and debated. Beyond an idea, existing in language, a discourse is institutionalized and objectified in form of social practices, communication processes, institutions as well as physical objects (Keller 2011b). The objective of discourse analysis therefore is to lay open the processes of social reality construction in institutional settings (Keller 2013). As the setting of my study shows some of the specificities inherent to policy making, I will complement SKAD with some constructivist ideas on policy processes as well as with some insights on the institutional dimensions of policy from argumentative discourse analysis (Hajer 2002; 2003a; 2006).

3.2 The Sociology of Knowledge Approach to Discourse in empirical research

In SKAD, analyzing discourses may encompass the analysis of the contents, the actors involved and their practices in discourse production, the context of the emergence of a discourse, as well as the effects of a discourse (Keller 2011b). In my analysis, I will broadly follow this proposition. The analysis of the processes of producing and establishing the policy discourse is additionally inspired by constructivist policy analysis.

3.2.1 Actors, practices and interaction in the production of policy discourse

With reference to Giddens's concept of the duality of agency and structure (Giddens 1979), Keller explains that a discourse and its structures, its *dispositive* (ch. 3.2.3) persists in and through acts of agency – in being repeatedly refreshed, reproduced,

or reformulated in social practices. Discourses thus exist through social actions and performance (Keller 2005). In SKAD, social actors are considered as “individual or collective producers of statements; those who use specific rules and resources to (re)produce and transform a discourse by means of their practice” (Keller 2013: 72).

Apart from the contents of a discourse, the analysis therefore encompasses who is a bearer of a discourse and in which social practices the actors stabilize or transform a discourse. This means that the actors, their position and role in a discursive field have to be described as well as their practices, such as the interactions between actors of different social groups and positions.

Practices, in the encompassing sense, are defined as socially conventionalized patterns of action, including the use of language. Practices can be defined as discursive, i.e. language-based, such as statements; or as non-discursive practices, i.e. symbolic, such as gestures. Discourse-related practices can furthermore be categorized as practices of discourse (re)production, in the sense that they contribute to discourse reconceptualisation, renewal or change. Keller further describes *model practices*. These are those discourse-related practices that actors engage in as model of an appropriate behaviour within a discourse. They thus are guiding action. As a further type of practice, discourse-independent practices are those action patterns which emerge in social contexts apart from the discourse examined (Keller 2011b; 2013).

For analyzing German science policy, the analysis of discourse-related *discursive practices* has been central. Written and spoken texts, such as policy documents and interviews, which contribute to stabilizing and renewing or changing the policy discourse, have been the key elements of investigation. In contrast, model practices have shown to be of less relevance in the analysis of German policy making for cooperation with developing countries and emerging economies, which can be explained by the different social groups of discourse recipients and producers (ch. 6, 7).

In constructivist insights to policy, policies are conceptualized in a way that fits the discursive approach of SKAD. From a constructivist point of view, political problems can be explained as socially constructed, just like other social phenomena (Hajer 2003a). Manifold influences shape the way in which a political problem is perceived. At the same time, political decisions are understood as hardly stemming from rational decision making based on objective arguments (Hajer 2006). The knowledge embodied in policies rather emerges in a process of discourse production and “both reflects and shapes particular institutional and political practices and ways of describing the world” (Keeley and Scoones 2003: 21). Shore and Wright add that “[l]ike the architecture and internal organisation of an institution, policies reflect the rationality and assumptions prevalent at the time of their creation” (Shore and Wright 2011: 3).

I therefore consider *policies as a type of discourse* with specific rules of formation. Policies influence and shape realities by establishing certain ways of framing problems and perceiving the world. Subsequently, policy discourses define problems, actions to be taken, and specific solutions (Cornwall and Brock 2005). Leach et al. contribute that “different narratives lead to radically different assessments of policy options. Even among different actors in the policy field, different system framings are important and often lead to very different narratives around intervention and action” (2010: 49).

A policy is not just the *outcome* of a discursive process such as a final programme, law, or text, but should be conceptualized as the *entire process* encompassing the framing of a problem, making decisions and implementing policies. Just like discourse itself, policies are “productive, performative, and continually contested. A policy finds expression through sequences of events; it creates new social and semantic spaces, new sets of relations, new political subjects and webs of meaning” (Shore and Wright 2011: 1).

In SKAD terms, the policy process can be considered as an instance of reconceptualisation of a policy discourse, a momentum of renewal or contestation of discourse (Keller 2005). This actualisation of a policy discourse thus is subject to numerous influences. At the same time, policymaking takes place in a contested social and political space, with pronounced elements of power and governance, bureaucratic practices, institutions, etc. (Shore and Wright 2011). While one could easily assume that this would lead to a dominant policy discourse shaped exclusively by those at the higher hierarchical levels, leading to top down policy making, constructive understandings of policy stress that policies emerge “across a political space that could extend from local residents to interest groups, local institutions and authorities, the media, national government and, in some cases, international agencies” (Wright and Reinhold 2011: 86). The production processes of policy discourse are not linear – neither chronologically from decision to implementation, nor top-down from policymakers to recipients. Policies are believed to be continuously altered and shaped in all stages of the process, including in their implementation.

While policies set the official frame for projects, these in turn possess agency to transform policy and act according to their own “hidden transcript” (Mosse 2004). Policy implementation practices turn into complex processes, shaped by the interaction, strategies and discourse employed by all participants involved (N. Long 1992). Following, street level actors – using a term coined by Lipsky (2010 [1980]) – are not seen as neutral implementers, as assumed in some pluralist/interest group approaches to policy. Instead, constructivist approaches believe them to actively contribute to shaping policies. The separation into a policy and an implementation sphere is perceived as obsolete, as bureaucrats such as ministerial staff or funding agencies as well as project participants “prioritize, interpret instructions, deal with

overlapping and contradictory directives, and take initiatives in areas where there might be a policy vacuum”, simply choose to ignore directives (Keeley and Scoones 2003: 32).

Actors might also choose not to take decisions at all or ignore facts, thereby influencing a policy. While some scholars explain the reshaping of policies by street level staff through their attempts to make policies work, others attribute this to their struggle to adjust policies to their values, which might contradict policy goals (Hajer and Laws 2006). Based on empirical insights into policy making, different scholars on policy point out that shaping policies is a messy, complex, non-linear process in which multiple actors simultaneously influence politics during formulation phases and implementation. Policies and their results often differ from the initial objectives and their success depends on informal channels of communication, on coincidences, political windows of opportunity, on the topic’s stickiness; on key persons seconding the issue, etc. In conclusion, actors on all levels as well as external factors heavily influence the policy outcomes, turning it into a non-linear and sometimes random process (Clay and Schaffer 1984; Hajer 2003b; Keeley and Scoones 2003; Scoones 2007; Hornidge 2007; Reis 2012; Mukhtarov 2014). Sometimes, the non-linear, messy nature of policy making even leads to the impossible to identify an author, beginning or cause of a specific policy (Shore and Wright 2011).¹

In view of German science policy for cooperation with developing countries and emerging economies, it remains to be seen if the agency of policy makers as well as other actors involved in implementing policies outweighs the structural constraints of an institutionalized discourse, embedded in a dispositive and practices. A high level of agency would rather lead to change and modification of discourse, while lower level of agency and higher levels of institutionalisation would rather contribute to repetition, maintenance and self-reinforcement of the pre-existing discourse. Empirical analysis will also show if different actors in the policy process possess a level of agency comparable to those of the street level actors described by Lipsky, thus re-interpreting the policy discourse in its implementation (ch. 6, 9).

Power and knowledge

Potentials for agency are closely linked to the power both inherent in the relations between actors as well as in institutional structures. Based on Foucault, Keller and

1 Interestingly, approaches specifically aimed at analyzing science policy and implementation are limited to rational choice-based principal-agent theory as proposed by Guston (1999), Van der Meulen (1998), Braun and Guston (2003). Principal-agent approaches rightfully stress the power imbalances within the relation between the policy level and funded projects. However, they do not shed light on the communicative process of producing meaning (Nullmeier 2001) and do not explain agenda setting processes. Principal-agent theory therefore “fails to detect the collective, but perhaps unintended, consequences of programme funding” (Shove 2003: 376).

other constructivist scholars argue that knowledge production is shaped by and shapes power mechanisms. In his works, Foucault repeatedly points at the inherent link between power and knowledge construction in discourse (Foucault 1972a; 1980a; 1982; 1991).

Taking opposition to different expressions of power as a starting point for conceptualizing power, Foucault distinguishes between sovereign, disciplinary, and governmental types of power (Foucault 1982). Power is defined as “a way in which certain actions modify others” (Foucault 1982: 788).

It encompasses the capacity of actors to structure their own and others’ room of action, to enable, guide or to prevent actions, by drawing on different resources and by using different means (Ziai 2009; Wagenaar 2011). Power can thus be repressive as well as enabling and productive (Foucault 1980a). Hence, power is not exclusively the ability to force one’s own will onto others, “but power is also present where individual decisions are taken voluntarily in a field of action that is structured in a specific way or where a discourse provides only certain ways of constructing social reality” (Ziai 2009: 185).

Power in Foucault’s sense has an element of voluntariness, of internalisation and self-disciplining (Gordon 1991; Ziai 2009). This idea becomes important in view of the anticipatory obedience of some of the project management agencies and researchers towards the BMBF (ch. 7.4, 10.3). Power relies on the potential agency of those acted upon, i.e. their freedom to choose a certain way of acting in reaction.

Making use of power may have different objectives and may sometimes not have intentions at all. While means of exerting power range from threats of violence, to inexplicit rules and explicit laws, from incentives to control systems, power also relies on social attribution. These attributions of power are based on resources, including social and cultural capital (Foucault 1980a; 1982). Power therefore manifests in the relations between actors, in their actions – it is exercised, and it is not a fixed entity, but is *fluid* (Foucault 1980a; Gordon 1991; Ziai 2009). Nevertheless, power relations are inscribed in and reproduced by structures and practice (Hajer 2003a; Wagenaar 2011; Hametner 2013; Keller 2013).

Foucault highlighted the close links between knowledge and power. In his view, humans “are subjected to the production of truth through power and we cannot exercise power except through the production of truth” (Foucault 1980b: 93). He developed discourse as a concept to explain the linkages and defined discourse as the rules for what is *sayable*, based on its *conditions of existence* (Foucault 1991: 60). In this line, power is an inherent element of SKAD. If discourses are attempts to institutionalize knowledge – and in consequence social order (Keller 2013), the analysis of power relations consequently is essential. Power is specifically conceptualized within the actors’ positions within a discourse: SKAD differentiates between speaker positions and subject positions. Both subject positions as well as speaker positions are shaped through a discourse’s way of ordering reality and thus are

product of pre-existing power constellations. At the same time, speaker and subject positions also shape the further distribution of power (ch. 8, 11).

Discourses may suggest collective or individual identities, roles, practices or behaviours to its addressees, for example through model practices (see above). These identity offers are termed *subject positions* (Keller 2011b). In offering subject positions, discourses coin reality and exert power over their addressees by shaping them. The proposed subject positions are instances of power effects (see below). Participants in a discourse internalize subject positions and thereby reproduce power structures. Power therefore always contains elements of self-positioning and positioning through others (Hametner 2013).

Speaker positions, on the contrary, are the potential spaces of actively participating in a discourse. Speaker positions are restricted, however. The exclusion from speaker positions is a mechanism of exerting power itself; but limiting available speaker positions has further power effects: In excluding some types of knowledge, while enabling the integration of others, it shapes the further ways of perceiving reality. Only under certain conditions, actors can legitimately fulfil speaker positions. Institutionalized power and resources – including discourse-independent resources such as financial, cultural or social capital and knowledge – influence whose knowledge is counted as legitimate and spread (Keller 2003; 2013). At the same time, power struggles occur between participating actors about interpreting and establishing a specific interpretation of reality (Keller 2003; 2011b; 2013). SKAD acknowledges the speakers' agency to interpret and modify their speaker position – which may lead to modifications of discourse or the emergence of alternative discourses. In the empirical analysis, this means to consider who is allowed to contribute to a discourse under which circumstances, and who is left out, which actors contribute to a repetition and which actors change a discourse (ch. 7).

In view of the interrelation between policy makers and external scientific experts, literature on science-policy interfaces² additionally helps to understand how

2 Literature on science-policy interfaces is vast. Taking a pragmatic approach, one strand recognizes the political nature of knowledge in policies, but nevertheless assesses how scientific knowledge could inform and thereby improve policy decision making (Nowotny et al. 2001; Cash et al. 2003; Sarewitz and Pielke Jr. 2007; McNie 2007). From this perspective, if science is to be taken up by policy, the *right* kind of knowledge has to be provided. It thus needs to be context-adapted through a close interaction of users (policy makers) and producers (scientists) in the creation process (McNie 2007). Gibbons, Nowotny et al. conceptualize this type of knowledge as *socially robust*, co-constructed knowledge (Gibbons et al. 1994; Nowotny et al. 2001), while Cash et al. and Clark et al. point at the necessity to provide *relevant*, *credible*, and *legitimate* information to bridge the gap between knowledge, action, and policy (Cash et al. 2003; Clark et al. 2010). Other authors equally emphasize the role of *usable* knowledge. These conceptualisations go beyond simplistic ideas of *evidence-based policies* (Dilling and Lemos 2011; Watson 2005; Haas 2004; McNie 2007). Other authors focus on issues such as the co-construction of scientific knowledge through policy-expectations; necessary institutions, actors, or boundary organisations to make

and why certain types of knowledge become recognized as facts or truths, while others are not admitted into dominant discourse (Keeley and Scoones 2003). Traditionally, policy makers have relied on scientific expertise to inform policy decisions and assumed a linear uptake of expert knowledge based on rational decisions. However, scholars on science-policy interfaces have challenged traditional assumptions on scientific rationality and of the strict separation of knowledge production by science and its utilisation by policy makers (Hoppe 1999). The process of knowledge exchange between science and policy is seen as non-linear, and boundaries become contingent (Lyall 2008).

Leach et al. (2010) show that the value attributed to scientific evidence is a social construct itself, which serves particular objectives rather than providing objectivity. Establishing a policy by mobilizing certain facts based on science as a master frame is a tool of legitimizing, depoliticizing, and pretending objectivity (Irwin 2008). What is accepted as valid or legitimate knowledge within policy thus correlates with the policy makers values (Sarewitz and Pielke Jr. 2007; Miller 2001; Keeley and Scoones 2003). Maintaining the belief in policies as neutral outcomes of science-based processes, or in science as impartial provider of evidence (such as in concepts of evidence-based policy) fails to acknowledge the social construction of evidence and political nature of policy making (Nowotny 2007).

Discourse coalitions

Speakers use different resources and strategies to stabilize or destabilize a discourse, such as money, power, influence, reputation, etc. (Keller 2011b). Establishing a discourse coalition is a specific strategy to produce or maintain a discourse. Discourse coalitions involve different actors and form themselves around specific discourses. A discourse coalition, as similarly defined by Hajer and Keller, therefore can be defined as a community of actors that gather around a common story line, using a common speaker position, while not necessarily sharing a common background (Keller 2001; Hajer 2006).

While in political sciences, analysis is often carried out based on organisations as units of analysis (Pritzlaff and Nullmeier 2009), an important aspect of discourse coalitions is that they group together actors around similar ideas, not around their institutional background. This means that they can form across institutional borders, and different positions within organisations or within social groups are possible. Social group and discourse coalition are not identical. However, existing discourses shape speaker positions for members of a social group, who still have agency to reinterpret the discourse (Nullmeier 2001; Hajer 2006;

knowledge exchange possible; or on the role of knowledge in policy change (among others Childers and Evans 2009; Jansen 2010; Guston 2001; Cash 2001; Holmes and Clark 2008).

Keller 2011b). Coalitions are built for diverse reasons. In the concept of policymaking applied here, a common idea unites a group of actors. In case of the policy discourse on science cooperation with developing countries and emerging economies, entry to the coalition is limited through the BMBF's powerful position. It includes ministerial staff, implementation agencies, as well as some external actors, while others are excluded (ch. 7).

3.2.2 Policy contents: concepts, ideas, and knowledges in policies

An empirical analysis of discourses that exclusively focuses on actors or processes of policy discourses would be incomplete: the contents, ideas and knowledge in policies themselves are an indispensable part of the analysis. According to Keller,

“one essential goal of discourse research is indeed to answer the question of what knowledge, what objects, relationships, properties, subject positions and so on are claimed to be ‘real’, by what means – such as meaning schemata, storylines, moral and ethical assessments – this takes place, and what different formation rules and resources underlie these processes.” (Keller 2013: 78)

In contrast to positivist approaches to policy, which often focus on interest as main motivation of actors (Nullmeier 2001), SKAD and other constructivist approaches do not perceive ideas as linear results of or instruments for pursuing a specific interest. Different motivations can lead to similar ideas. No predefined interest is assumed to motivate actors. On the contrary, interests and motivations are perceived to have complex causes which cannot be explained by plain self-interest and rational profit maximisation, as rational choice approaches might postulate (Griggs 2006; Hajer 2006). Actors might pursue institutional as well as private interests, projects and agendas, which in themselves are influenced by previous discourses (Keller 2011b). Furthermore, the fact that actors may have specific interests does not necessarily mean that these enter a discourse in a predefined form. Pursuing interests is one possible motivation, but not the only and primal explanation of discursive construction of reality. What's more, existing interests might not even influence the contents of a discourse explicitly. It is thus not always possible to trace interests by looking at the contents of a discourse. There might be hidden agendas or deviating motivations behind the verbalised contents of a discourse (Keller 2011b). I will therefore follow SKAD and focus on the ideas manifested instead of underlying interests.

In view of the contents of discourse – and this is a main contrast to other types of qualitative research on perspectives or to content analysis – discourse analysis focuses not on individual utterances, but on typical statements. This focus on manifestations of the typical, collective knowledge, once again leads back to Berger and Luckmann's seminal work on social constructivism (1966) and the underlying

typification processes which guide the individual's perception of the world as well as their actions. Statements gathered in empirical research are thus part of a body of typical patterns of thinking. As such, they do not only stand on their own as individual utterances but are representative of a type of statement (Keller 2001).

The analysis of the contents of discourse is based on the phenomenological structure of discourse that explains how a problem is constituted. The phenomenal structure of a discourse

“includes cognitive devices like the concepts used to name an object, the relations between those concepts, the introduction of causal schemes and normative settings, the dimensions, urgencies and legitimations for action, as well as the kind of practices considered to be suitable to a particular phenomenon.” (Keller 2005: [29])

Analyzing the phenomenological structure thus means to examine how certain ideas are conceptualized and which knowledge perspective is chosen. The topics included, the nature and dimensions of a problem constituted within a specific discourse, the cause-effect relations established, objectives of policy, proposed actions as well as subject positions following from it will be described based on empirical data (ch. 9). In addition, I will examine if any categories or social typifications are proposed within the discourse, as these often serve to establish and maintain a specific order of reality (Keller 2013) (ch. 10).

Constituting a specific reality through discourse necessarily means to implicitly or explicitly exclude diverging ways of perception or interpretation, while at the same time depreciating differing positions. This explains why often various competing, alternative, sometimes hidden discourses coexist around a single phenomenon. One aim of the analytical description of phenomenal structures therefore is to reconstruct different discourses in a field (Keller 2011b) – therefore I will also show alternative positions on science policy (ch. 7).

3.2.3 Effects of discourse

In addition to the discourse-related practices as well as subject positions, discourses have effects on the real world through their dispositives, which Foucault defines as strategic infrastructure to intervene in the world and to exert power (Foucault 1980c). Grounded on Foucault's original idea of discourse (1972a), Keller defines a dispositive as “institutionalized infrastructural elements and assemblages of measures (such as areas of responsibility, formal procedures, objects, technologies, sanctions, educational procedures and so on)” (Keller 2013: 71).

The dispositive can thus be described as the institutionalized infrastructure of discourse, which encompasses material objects (such as a technology), but also normative and legal elements, such as laws or regulations, formal and informal

social institutions and practices (such as bureaucratic procedures), cognitive and normative patterns etc. (Keller 2011b; 2013).

Dispositives – much like discourse-related practices, speaker positions and subject positions – have a dual function. On the one hand, a discourse is embedded in, reproduced and manifested in its dispositive, which thus stabilizes and reinforces a discourse in addition to discourse related practices (see section above). At the same time, dispositives provide specific approaches to dealing with specific issues, suggest problem solutions and guide action (Keller 2001). They are a means of power and structuring reality in the sense of knowledge politics: Through a dispositive, a discourse produces effects on the real world and intervenes in it (Keller 2011b; 2013). In consequence, discourses thereby coin a specific reality. They exert power through their institutionalized discursive practices and dispositive. These enforce, stabilize or change meanings and define what can be said, i.e. what is perceived as valid knowledge in a specific discourse. Thereby, discourses orient thinking and social practices (Bührmann and Schneider 2008). Discourses thus are (self-reinforcing) power structures with external effects.

Many discourse theorists stress that discourse shapes and influences realities, often relating to Foucault's ideas of power (see above). Ball for example argues that policies establish “regimes of truth’ through which people govern themselves and others” (1993: 14). Leach et al. similarly contend that discourses have power effects through contributing to a *conduct of conduct* in Foucault's sense, as “knowledge, institutions, power relations and people's senses of themselves may come to interlock, mutually reinforcing each other” (Leach et al. 2010: 77). If dominant, a discourse can limit the policymaker's room for action: Alternative pathways might become impossible to think of (Leach et al. 2010; Wagenaar 2011). More actor-oriented perspectives, in contrast, consider discourse as a structural element but less as a totalizing frame: Multiple interpretations of reality coexist within different subdiscourses (N. Long 1992; A. Long 1992). Whether stressing room for action or structural constraints, questions of agency or power are a central topic for discourse analysis.

According to Nullmeier (2001), discourse analysis only makes sense if it includes the analysis of power and dominance. Otherwise, the line between discourse analysis and institutional analysis or analysis of agency/structure becomes blurred. Indeed, dispositives are related to the sociological concepts of institutions or structures. However, while social institutions and structures refer to conventionalized patterns of practices, to social norms and rules, dispositives also encompass materialities. In addition, a dispositive emerges in relation to a problem or an issue, is aimed at intervention, even though dispositives rarely follow a strategic master plan (fieldnotes, discussion with R. Keller on the differentiation between dispositive and institution; 25.09.2014). What further distinguishes the analysis of discourse (and its practices, dispositive) from the analysis of social institutions (and

structure/agency) is that discourses make authoritative claims of validity, embodying Foucault's idea of knowledge and power. Hence, the analysis of discourse should include an analysis of why a certain knowledge order prevails in a specific policy field (Nullmeier 2001). In view of its power effects or influence, a discourse can be defined as dominant, if next to a specific perception of a problem, alternative views are suppressed and practices and dispositive are shaped accordingly (Keller 2011b). Nevertheless, even if a discourse becomes dominant, there might still be room for struggles over the definition of truth, the correct interpretation or implementation of a problem or a policy (Hajer 2003b). It is a question of empirical analysis to find out in relation to which practices, dispositive, resources, and power relations a discourse becomes dominant in policy or stays alternative, marginal or subliminal.

3.2.4 Beyond the borders of a discourse: Context

The institutional, historical and social context of a specific discourse play an important role as background of the production of statements and practices. Pre-existing discourses, institutions, practices, and structures are constitutive elements of explaining path dependencies and the dominance of a specific policy discourse (Keller 2013).

In order to reflect the influence of the context on the emergence of a discourse, Foucault used the concept of a *historical a priori*. The historical a priori describes those structures, practices, distributions of power as well as coincidences and other elements of (social) reality (which may or may not be discourse-related) that make up the *conditions of possibility* for a discourse (Foucault 1972a). Discourses are thus anchored in pre-existing conditions, of which actors may be unconscious of, but which provide the grounds that enables the emergence of a discourse while restricting the emergence of others.

Based on Foucault's idea, SKAD incorporates a similar idea of discourse itself as well as speakers within a discourse being entrenched in preceding context:

"Social actors are embedded in the historical a priori of established symbolic orders and institutionalised power/knowledge-regimes. In order to enter a given discursive field they have to draw on existing subject or 'speaker' positions whose criteria of performance are beyond their control." (Keller 2005: [11])

In consequence, discourses, available speaker positions, as well as the actors involved are influenced by and predetermined through interdependencies within the discourse in question as well as through other discourses and discourse-external social conditions, available resources, etc. (Foucault 1991).

In view of the empirical focus of this book, the specific context of science policy includes the institutionalized relations between different actors, which exist independent of the discourse on science cooperation with developing countries and

emerging economies, but nevertheless heavily influence it. Their relation cannot be explained as an effect of the specific discourse on cooperation. Instead, it is an effect of a larger, encompassing political discourse. This *core discourse* lies at the heart of the BMBF, coining its overall thinking and its practices, including the discourse on science cooperation with developing countries and emerging economies (ch. 8).

At the same time, the pre-existing institutional hierarchies of power and dependence between the BMBF, funding agencies, projects as well as external actors are highly influential on discourse production. Power imbalances influence who is considered as legitimate speaker and who is not, and in consequence which type of policy discourse is maintained. Therefore, it seems relevant to describe the structural and institutional settings and relations between implemented projects, policy officers and funding agents (ch. 7).

