ibility in view of German taxpayers or political players rather than being aimed at capacity building within partner countries.

As discourse-related practices, these efforts of discourse reproduction are much more common than model practices in the context of science policy for cooperation with developing countries and emerging economies. The lack of empirically observable model practices can be easily explained by the distinct groups of actors as producers and recipients of discourse: Across groups of different actors with distinct practices – such as working routines within a ministry vs. standardized types of knowledge generation in science – model practices necessarily play a small role. Practices within the policy making sphere do not apply, and thus cannot serve as a model for practices in other social spheres.

6.3 Policy makers as change agents

Heads of unit often could, but rather don't change the discourse – policy continuation is more likely than policy change. Nevertheless, the BMBF is not a static system, as becomes evident through developments such as the introduction of new concepts like sustainability as a guiding frame for environmental research (ch. 8.2) or coming up with innovative funding initiatives such as the African RSSCs. In some cases, actors have used and even stretched the room for agency.

Considering international cooperation, the BMBF for a long time maintained the principle of "no exchange of funds".[3] BMBF staff commonly assumed that bureaucratic rules of project funding prohibited new formats of cooperation with developing countries and emerging economies, in which international partners would receive a cofunding as well. Many interviewees repeated this position without questioning it. Deeply internalized, they took this as an official rule or law and did not stop to question it. And indeed, the legal frame of research funding in Germany is rather adjusted to fund national research than at international cooperation.

Nevertheless, in some cases, the initiators of funding initiatives were willing to scrutinize the rules in order to change the discourse and its assumptions through novel approaches, innovative modes of funding etc. In the Megacities initiative, for example, international partners were funded to a certain extent, despite the general allegations that this was not possible: "The rule was 'no exchange of funds', but it wasn't realistic to follow that through" (PT07). Another interviewee states even more explicitly:

3 The rule of *no exchange of funds* is closely related to the idea of cooperation on eyelevel (ch. 9).

> "The impossibility to fund partners is not carved in stone. There is no document in the BMBF that states: In Peru we can fund that, in Egypt we can't. That's within the decision power of the units. And if a head of unit likes a project, they may decide to encompassingly fund the project partners. But in a subsequent project, another head of unit could also decide not to fund partners at all, or not fund PhD students. That is in their decision scope… that's the freedom of funding research. We don't have to stick to the DAC list and fund least developed countries but not others. That is our freedom in the thematic units." (PA03)

The room for agency was thus even larger than other BMBF employees believed. The policymakers involved in the Megacities initiatives seized the scope for decision-making and stretched the rules. In view of the African RSSCs, at their time novel in scope and approach of (co)funding infrastructure, capacity development and partners abroad, an interviewee even commented on their capacity to not only stretch, but to change the regulative structures:

> "In such an innovative format as WASCAL/SASSCAL, you cannot assume that everything runs as smoothly as on the beaten track. You have to develop new ideas and convince Department Z [i.e. the Administrative Department] that the normal criteria have to be adapted. And we successfully did so." (PT01)

Despite of the common understanding, project funding rules thus could be adjusted and did not exclude certain types of cooperation, such as transferring funds abroad (interview with PA08). In funding SASSCAL and WASCAL, the BMBF finally commissioned the German development bank KfW to act as an intermediary in order to fund the projects in their envisioned scope, including infrastructure.

The African RSSCs are also a showcase of the possibility to modify the underlying discourse and its dispositive, i.e. its infrastructures. Therefore, the common statement of the BMBF that the legal frame of project funding doesn't allow funding international partners is to be seen as an expression of the need to justify the prevailing mode of cooperation – i.e. not to cofund partners:

> "From my experience, rules for project funding can be bent, and in any case, they don't prescribe in detail what you may and may not do. But these new paths are complicated and time and resource consuming and relatively open-ended. It's not a standard procedure that you apply. And if someone in the ministry doesn't want to, he will say that it's not possible. If you tell them about involving the KfW in the RSSCs financial administration, they will ask if it is an exemption from the rules or a precedent case. The individual head of unit can always say that this is too much hassle, and he's not even wrong. But in general, we have to ask ourselves if the project funding instruments and rules still fit our ambitions in international cooperation." (PA09)

The bureaucratic hurdles for innovative types of funding are high, and once again it remains within the decision-making scope of the individual policy maker whether he/she wishes to take a troublesome and time-consuming route into a new direction and possibly fail in doing so – or to remain within the old, safe path. Examples such as the Megacities initiative and the RSSCs show that the legal frame – a dispositive of the traditional discourse on how cooperation should be carried out – can be adjusted to novel approaches.

6.3.1 Coincidences with consequences

According to Foucault, contingency is an element of any discourse (Foucault 1972b). The discourse on international cooperation – both in its conceptualisation as well as in the practice of funding – confirms this idea. The empirical data collected in the BMBF suggests that individual agency, often coupled with a high degree of coincidence, is a pronounced and decisive factor for decisions on cooperation.

Rather than strategic planning, coincidences contributed to enabling cooperation with certain countries and not others, in certain thematic areas and not others. This becomes very transparent in the choice of certain partner countries in the Sustainability Subdepartment (on partner countries in the International Department: Box 6-1). The selection of specific partner countries is not only subject to agency, but also to chance. Interviewees state that international cooperation often commences with political commitments arising from political visits of high-level ministerial staff to potential cooperation countries (interviews with PT02, PT03, PA01, PA05). Individual actors at higher levels play an important role, as they have the power to act as change agents, who introduce novelties in policy such as a new topic or a new cooperation country:

> "It's the people who started to act who strengthened international cooperation in environmental issues in the BMBF. If the people in charge of the Subdepartments are interested in cooperation, it will develop accordingly. If they are not, it won't. In the past, all Heads of the Sustainability Subdepartment apparently seconded international cooperation." (PA02)

Other interviewees explain how the agency and power of the individual actor also may hinder international cooperation: "It was person-related. I tried to start activities with the past head of unit, but the person was not interested. It wasn't her focus, she didn't even speak English. Thus, no international cooperation took place in that area" (PA14). As the quotes illustrate, the decision-making capacity of the head of unit, inscribed in the ministerial structures, may both enable and restrict actions. In seizing the power of making decisions, actors influence policy directions, contribute to change in discourse or to its repetition, thereby staying within known paths.

Seemingly trivial individual capacities or preferences (such as language skills) thus may influence policy directions. In this line, other interviewees pointed out that some heads of units had personal favourites among cooperation countries (interview with PT03). Coincidence thus enters policy discourse as a coincidence of preferences, which in return is enabled through the space of individual agency:

> "In my subdepartment, there were heads of unit who pursued international cooperation enthusiastically. They wanted to renew the water supply in Teheran. That was caused by coincidences. They knew somebody, like guest researchers in a research institute. Coincidences!" (PA12)

External public, political or scientific discourses often inspire novel policy initiatives – and therewith combine elements of contingency as well as rational decisions in policy making. While the occurrence of external events and discourses and the individual staff member's capacity to act as a change agent – or early adopter – is mainly contingent, the decision to introduce novel policy initiatives based on external discourses is perceived as rational, I would argue. In any case, external discourse often inspires ministerial change agents, who adopt and transmit new discursive directions into concrete policy initiatives – often supported by a corresponding discourse coalition (ch. 7). The development of the Megacities initiative is an illustration of discursive change based on external discourse events such as the publication of scientific reports on urbanisation, which inspired the funding initiative. With the funding initiative, The Global Change Unit deviated from the usual focus of the BMBF on technological development and pursuit of German interest, and instead focused on issues related to climate change and resource efficiency in Megacities, often from non-technological points of view. Interviewees traced the readjustment of focus within the Megacities initiative towards energy efficiency and climate change to external drivers, such as impacting IPCC reports or uprising public debates about climate change, which raised it on the political agenda (interviews with PT07, PA03). In case of CLIENT, political agreements on higher levels lead to the introduction of novel actors into the discourse coalition and novel funding practices. In some cases, members of the alternative discourse coalition also seem to have been able to promote change: The publication of the WBGU's 2011 report on great transformations sparked a general reconsideration of decision-making processes within the Sustainability Subdepartment, which lead to opening up agenda processes for the newest edition of FONA at least on a superficial level (interviews with EE20, EE21, EE23; ch. 7.3.3).

In other cases, the room for contingency in policy is enlarged by leaving decisions up to the research community. This is the case if a general decision on international cooperation is taken by the BMBF, but the particular call for funding does not specify partner countries – as in the IWRM call which specified regions, but not specific countries; or in the Megacities call, which specified neither region

nor countries (BMBF 2004a; 2004b). The selection of partner countries in this case therefore depended on the researchers' interests – based on a conscious transfer of decision-making power from the head of unit to the research community.[4]

It is important to bear in mind that coincidences are often starting points, discursive events, which in themselves are random, but which may have consequences as they spark the reinterpretation of a discourse. The coincidences described here – in form of personal preferences and choices, the interpretation of arguments in a certain direction – etc. – have been incorporated within the discourse's dispositive and contents, thus have succeeded in influencing it. What originates as a contingency thus may lead to institutionalisation and become part of a mindset.

6.3.2 Shaped mindsets and internalized discourse

In addition to institutional practices, norms and organisational shape, discourse also shapes the actors' mindsets, thus exerting a governmental type of power (Foucault 1980a). In this line, SKAD stresses that despite individual agency, actors are always influenced by previous discourse, which leaves imprints on their individual preferences and capacities. Discursive assumptions coin ways of acting and thinking in the ministry. Even individual choices and decision making are therefore shaped by pre-existing discourse. The prevailing mode of thinking thereby guides decisions, thus enhancing the reproduction of discourse, rather than change.

In consequence, the internalized beliefs delimit the scope of agency: Although the decision on cooperating internationally (or not) is taken by seizing the available decision-making power within the working units of the Ministry, the respective department's prevailing mindset prevents deviation (next to institutional structures and norms). Taking an opposite perspective, this means that the mind set (as well as institutions) might also be an enabling factor. If international cooperation relies on individual agency and is contingent to a certain degree, actors need to be embedded in enabling organisational structures. At the same time, they need to be able to draw on accepted legitimations within the repertoire of potential arguments – either embodied in strategies or in the mindset.

Following, while the science policy discourse in general is embedded in institutional structures and practices of discourse production that rather enhance self-reinforcement, making repetition more likely than change, spaces of adapting and changing the policy direction do exist. The decisions to extensively foster international cooperation with developing countries and emerging economies in the Sustainability Subdepartment, or to maintain a national focus in research

4 I understand this to be a tribute to the freedom of research, which paradoxically is often referred to as a value in German science policy, while at the same time fostering applied science in specific areas aimed at specific objectives.

on information and communication technologies, are based on individual choices and the willingness to take risks – which in return are subject to coincidence as well as previous discourse, limited and enabled by the surrounding dispositive. As such, the Sustainability Subdepartment's Global Change Unit can also be pictured as an institutional niche enabling a diverging discourse on research cooperation with developing countries and emerging economies. The readiness of policy makers within the Global Change Unit to deviate from the discursive core assumptions of the BMBF in its funding initiatives (ch. 8, 9) may on the one hand be enabled through the unit's thematic focus or through the individual capacities and preferences of individuals. But I would argue that additionally, the unit offers a tradition of thinking and congruent macrostructures which increase the likeliness of deviation.

The empirical observations in this chapter therewith second the constructivist understandings of the non-rationality, non-linearity and contingency of the policy process (Scoones 2007; Shore and Wright 2011; Hajer and Laws 2006), while at the same time highlighting the complex interplay between structure and agency in SKAD.