6   Practices of policy production between structural frames, strategies and spaces of agency

Based on the concepts exposed in chapter 3, I consider policies to be a specific type of *discourse*, and the policy setting as a specific setting of discourse production, with particular actor constellations, power relations and institutions in place that shape the specific policy discourse on cooperation with developing countries and emerging economies in sustainability research. Ideas within a specific discourse develop in parallel to a *dispositive* and *discourse-related practices*. The ideas that make up the content of a discourse thus are embedded in a structure and institutions that contribute to its stability (Keller 2013).

According to Keller, an analysis of *dispositives* in SKAD cannot essentially to be delimited from other types of institutional analysis (Keller 2001). A point of differentiation lies in the dispositive's purpose-orientation, however: In contrast to the concept of a social institution, a dispositive is meant to cause effects. These include sustaining the discourse's organisation of knowledge and reality on the one hand. In stabilizing the order of knowledge and the order of those actors involved in knowledge generation, the dispositive exerts an internal power effect on the (re)production of discourse. On the other hand, as an infrastructure of intervention, dispositives also aim at causing external effects, which will be subject of chapter 10.

The *practices* of creating new policies – including policies in practice such as new calls for proposals for research funding as well as creating policies on a more strategic level such as programmes – are instances of discourse reproduction. They involve individual choices, decisions and actions that maintain or challenge the previous discourse – in the case empirically investigated here on cooperation with developing countries and emerging economies in sustainability research. Each decision made reflects a choice in favour of a particular policy direction with its corresponding story line and conceptualisations, while discarding alternatives. In their decisions, policy makers are not completely free to pick from an unlimited stock of arguments or ideas. While actors select new topics regularly – they do not repeat calls on the same research topics over and over – they stay within the boundaries of the discourse. As a *system of dispersion*, a discourse may enable a multitude of differ-

ent ideas which unfold under the same conditions and rules of formation (Foucault 1972a).

Discourses are contingent on previous social conditions, thus depending on and further influencing social orders and knowledge (Keller 2001; Keller 2013). In the policy setting investigated empirically, I therefore consider the arguments used, decisions taken, choices made in view of the direction and scope of policies as well as the deeper rationale of science policy to be embedded in a *dispositive*. This dispositive encompasses the BMBF's organisational structure and institutional responsibilities, including their financial endowments; the practices of decision making and funding; as well as the different rules and norms institutionalized at different levels. The elements of the dispositive aimed at external effects include measures aimed at implementing policy, ranging from calls for proposals to projects implemented in line with the BMBF's policies; to controlling instances such as selection committees; the project management agencies working on the BMBF's behalf; accompanying projects, etc. (ch. 10).

Pre-existing political strategies and programmes embody structures as well as ideas of discourse and thereby potentially guide further discourse production. They are both containers of contents as well as crystallisation points of the norms and rules underlying discourse production. This turns them into highly interesting research subjects.

6.1   Structures and agency in the process of discourse actualisation in science policy

Before a funding initiative translates into an actual research project, policy actors take plenty of decisions at different stages of time and at different levels of responsibility: Actors in power of decision making define a topic and decide about a potential international focus, in some cases define a specific cooperation country or region, publish a call for proposals specifying objectives of research, conditions of funding, etc. If policy is discourse, each of these determinations can be considered as occasions of (re)producing statements, practices and dispositive of the policy discourse. In every decision taken, the prevailing discourse on research cooperation with developing countries and emerging economies may be maintained or altered. The creation of funding initiatives is thus a momentum of the social production of knowledge in policy, through which a specific way of conceptualizing international cooperation is (re)produced.

6.1.1 Formal distribution of decision-making power in the BMBF

While one could assume that policy discourses are shaped exclusively by actors at higher levels of power and that political decision making follows top down processes, constructive understandings of policy stress that policies are developed at diverse hierarchical levels (Wright and Reinhold 2011).

The way in which policies emerge in the BMBF endorses this idea empirically. Decisions about new funding initiatives are made at the level of working units (*Referate*). Heads of units determine topic, cooperation country as well as mode of research to be funded. Although the consultation and exchange with other actors is common (ch. 7), final decision-making power lies within the working units. This room for agency is officially inscribed in governmental regulations, which grant a high degree of autonomy and decision-making capacity to the individual working units in German ministries:

> "In principle, Federal Ministries break down into directorates-general [i.e. *departments*], and sections [i.e. *units*], the key unit within the structure of a Federal Ministry normally being the section, which is the initial decision-making authority in all matters assigned to it within its area of competence." (Bundesregierung 2011: Kap. 3, §7 [1])

BMBF *heads of units* (*ReferatsleiterInnen*) as well as scientific staff of the BMBF highlight this high degree of independence in decision making: "A ministry is very much organized bottom up. And a head of unit has the highest level of influence on the thematic focus." (PA07)

The individual units consequently bear the main decision-making capacity in view of funding and thematic priorities. This fact is interesting also in view of the presumably political nature of policy making: Decisions on research policies on the level of funding initiatives are not taken in the official political arena, the *Bundestag* as the German parliament. While the Bundestag officially passes high-level strategies, such as the High-Tech Strategy or the Internationalisation Strategy (ch. 8), it is merely informed about, but not included in the design of programmes and initiatives.[1] Instead, the officially non-political administrative level within the ministry takes decisions, including those on the details of the BMBF's general budget allocation through defining the content of calls for funding (Ober 2012; Ober and Paulick-Thiel 2015).
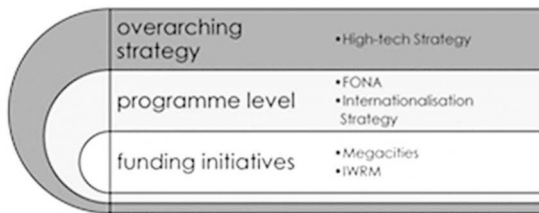
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1 This argument is based on the lack of any documents or interviews referring to FONA being passed through the parliament. In addition, searching in common internet search engines for the keywords "FONA"+"Bundestag"; "FONA"+"Kabinettsbeschluss" brought no results in contrast to a search for "High-Tech Strategy"+"Kabinettsbeschluss".

6.1.2   Strategies: enabling or restricting decisions?

Strategies are a further structural element which formally enhance agency rather than having restricting effects on the internal processes of policy production. Quite unlike the policy field of development cooperation, which is embedded in international agreements concerning partner countries and thematic priorities, the BMBF possesses a very high degree of liberty in view of its policies, the selection of partner countries and cooperation strategies (ch. 7). On this background, the BMBF's own political strategies for cooperation with developing countries and emerging economies in the field of sustainability research are the subject of analysis here, especially in view of their function for (re)producing discourse. In the common use of the word, a strategy signifies a "plan of action designed to achieve a long-term or overall aim" (Oxford Dictionaries 2017b). Based on this definition, the general purpose of the BMBF's strategies political strategies would be to guide future actions. Indeed, according to the Internationalisation Strategy itself, it is meant to be "a guide for further activities of the participating Ministries and aims to increase the inter-departmental coherence of the individual measures they are implementing on their own responsibility" (BMBF 2008a: 11).

If funding initiatives are instances of (re)producing science policy on the smallest scale, meaning on the most practical level, leading to interventions in the world in form of research projects, then programmes and strategies make up the discourse's overarching body: Funding initiatives are embedded in a nested system of political strategies and thematic programmes. These presumably outline the general direction of policy and to provide a frame for policy initiatives on a lower scale (fig. 6-1). The High-tech Strategy lies the discursive core of the BMBF and as such is discussed in detail in chapter 8. On the more concrete level of the science policy continuum, funding initiatives intend to translate the broader policy outlines into practice (ch. 9).

Figure 6- 1: Interrelation of initiatives, programmes and strategies

Source: Own elaboration

The BMBF issues its strategies on different levels and in different scope. Termed *Rahmenprogramm*, *framework programmes* such as FONA (BMBF 2015e) or the BioEconomy Strategy (BMBF 2010a) are meant to provide an official frame to smaller scale BMBF policies such as *funding measures* or *funding initiatives*, which, as in the case of FONA3, may be bundled within *flagship initiatives* (or funding *priorities*) which thematically group together several funding initiatives.

In most cases, programmes are based on thematic research priorities, such as sustainability-related research in the case of FONA. The scope of thematic programmes normally matches the thematic responsibilities of specific departments or subdepartments within the BMBF and extends only to the boundaries of the respective department. More encompassing or crosscutting *strategies*, in contrast, are meant to guide actions beyond a specific department. Examples for the latter are the High-tech Strategy (BMBF 2006; 2010c; 2014) or the Internationalisation Strategy (BMBF 2008a; 2016b), which even span the entire German government (ch. 8).

The decision autonomy of the heads of unit becomes even more evident when scrutinizing the relation of funding initiatives and strategies or programmes. On paper, the Internationalisation Strategy as well as FONA are the two most relevant strategical programmes for the cooperation with developing countries and emerging economies in sustainability research.

FONA

Officially, FONA is the guiding programme for the BMBF's endeavours in sustainability research, thus providing a frame for the thematic funding priorities within the Sustainability Subdepartment. FONA has been renewed and updated several times since it was issued first and is now in its third edition (BMBF 2005a; 2009a; 2015e). While FONA specifies a number of thematic fields of interest, including Global Responsibility – International Networking; Earth System and Geotechnologies; Climate and Energy, Sustainable Management and Resources and Social Development (BMBF 2009a), the programme does not explicitly determine specific areas of future funding. Funding initiatives are decided about in separate decision processes by potentially different actors.

Although most funding activities of the Sustainability Subdepartment at the time of research could be linked to the thematic scope of FONA2, the programme as such left room for deviating from its focus. As FONA2 indicated, it was a "thematically unrestricted programme framework, [and] further topics or new priorities can develop if scientific, technical or social developments require it" (BMBF 2009a: 57). Similarly, FONA3 leaves open space for changes, justified through maintaining the option to react to external developments in sustainability topics:

"In addition to the insight from the evaluations of the ongoing and completed measures, the contents of FONA[3] will be continuously monitored to verify whether new sustainability themes and trends should be included, either in a technological or a social dimension." (BMBF 2015e: 37)

Consequently, while research projects funded within the thematic scope of sustainability generally fall into the range of topics identified in FONA, they don't necessarily have to. FONA is thus a programme that may adapt to current and actual research needs on the one hand, and to potential real-world changes on the other. From the normative point of view of making science usable for sustainable development, a research programme with inscribed flexibility is more suitable than a rigid one, as it takes into account the complex reality of sustainability as well as the learning nature of research (WBGU 2016). At the same time, the room for potential divergence inscribed in FONA in view of thematic priorities widens the space of agency of individual heads of units to shape the policy discourse (in cooperation with external actors, ch. 7); thereby further enhancing their decision-making power.

Internationalisation Strategy

Funding initiatives for international cooperation in sustainability research additionally fall into the scope of the BMBF's policies for international cooperation. As crosscutting strategies, the Internationalisation Strategy (BMBF 2008a) and the International Cooperation Action Plan (BMBF 2014o) set the overarching frame for funding international cooperation across the entire BMBF – including thematic departments such as those responsible for different areas of sustainability research. As a strategy of the entire German Government, the Internationalisation Strategy formally even targets international cooperation beyond the ministerial boundaries of the BMBF.

Yet, while the Internationalisation Strategy in fact guides and informs the endeavours and funding activities of the BMBF's International Department, whose budget is explicitly aligned with the strategy (Bundesregierung 2012a), neither the Internationalisation Strategy nor the Action Plan are binding rules for the thematic departments within BMBF or for the other ministries that officially adhere to the Internationalisation Strategy. It is not a rigid frame determining their future decisions on funding measures. The Internationalisation Strategy is designed to guide actions, but, as it states itself, "the decision on implementing the measures in the special programmes of the individual government departments is taken by those responsible for the programmes" (BMBF 2008a: 23).

In concrete terms, this means that the BMBF's International Department cannot prescribe any internationalisation efforts to be taken through the Internationalisation Strategy or Action Plan. While they guide the International Departments

own activities, the working units within the thematic departments, such as the Sustainability Subdepartment remain with the decision-making power to spend their budgetary resources according to their own priorities regarding extend, topics and partner countries of cooperation (interview with PA03). A BMBF employee of the International Department comments that "[w]e are not authorized to issue directives. We have to persuade the others. However, we have usually been successful in arousing interest in international cooperation in the long run" (PA08). Another BMBF employee adds that "[i]f a head of unit in a thematic department does not want to cooperate internationally, the Internationalisation Strategy cannot oblige him, then he doesn't. It is a very soft steering tool" (PA07).

Hence, in view of funding measures, even official intergovernmental strategies such as the Internationalisation Strategy or the Action Plan merely demonstrate aspirations, but the International Department is not in a position to impose international cooperation activities on other departments through the Internationalisation Strategy. In addition to lacking institutionalized sanctions for not following internationalisation efforts, neither strategy nor action plan provide incentives in form of additional budget assigned for international cooperation to be funded by other departments. Regarding discourse (re)production in form of funding initiatives for international cooperation in sustainability research, the heads of units' room to both reiterate or deviate from the previous direction of the policy discourse is potentially large.

The Internationalisation Strategy's lack of power in triggering cooperation reflects the distribution of power within the BMBF: The International Department cannot draw on any structural or financial resources to act upon the action of the other departments (ch. 7). Although envisioned to have effects on the entire government, the Internationalisation Strategy's power effect is limited to the International Department. The Internationalisation Strategy remains a paper tiger in view of its power of steering international action. Internationalisation is not a policy core value, but rather an add-on to thematic science policy. The lack of financial endowments and other mechanisms of enforcing international cooperation through the strategy mirrors the distribution of power within the ministry and demonstrates that crosscutting strategic action is difficult in light of a constant struggle to maintain independent decision-making power. At the same time, the lack of internal acceptance of the Internationalisation Strategy also points at the absence of an encompassing institutional identity and goals beyond departmental boundaries and beyond high-tech ideas (ch. 7).

6.1.3   Seizing spaces or following the lines?

In contrast to common understandings, I have shown in the previous section that the BMBF's strategies formally only provide a repertoire of the envisaged direction

of new initiatives. The non-prescriptive nature of the Internationalisation Strategy and FONA, as well as the lack of binding country strategies (Box 6-1; ch. 7) hypothetically provide a large space of agency for actors in the working units in the Sustainability Subdepartment as well as other thematic departments. Formally, there are little restrictions for decisions to deviate from or remain true to thematic programmes in the topics of cooperation, nor for the decision for or against international cooperation through the Internationalisation Strategy.

Box 6-1: The role of strategies for selecting cooperation countries in the International Department

In the International Department, the prioritisation of international cooperation partner countries is closely interlinked with the objectives of international cooperation as laid out in the Internationalisation Strategy. Similar to the Sustainability Subdepartment, the International Department fostered cooperation with developing countries and emerging economies rather contingently for a long time (ch. 6.3) – based on the partner's interest and as a consequence of past tradition, not based on German lines of strategy:

"We most likely cooperate with countries that are highly willing to cooperate and that approach us. If they don't, we don't like to run after them. And we consider with whom intensive cooperation existed in the past, such as with Egypt or with South Africa." (PA08)

The quote additionally illustrates that despite of a rhetoric of *cooperation on eye-level* (ch. 9), cooperation with developing countries and emerging economies is still considered as a charitable act that Germany condescendingly accepts – but is not actively striving for. In the past, cooperation with developing countries was not considered as a strategic priority for the German side. However, in the late 2000s, the International Department started to consider cooperation with developing countries and emerging economies more strategically. In view of developing countries, an interviewee explains that "[t]here was a paradigmatic change in BMBF policy when they started to systematically engage with the cooperation with developing countries in 2008. Not only cooperating with the best, where the benefits are evident, because we get something out of it, such as knowledge, resources or research infrastructures." (PT04)

The increased relevance of cooperation with developing countries and emerging economies manifested itself in rising expenditures for cooperation as well and also was reflected politically, as "[i]n the coalition agreement and in the Internationalisation Strategy there was a mandate for us to increase cooperation with developing countries and emerging economies and since then we have put massive efforts into

cooperation in education and research, also in terms of financial budget. In the last ten years, it has increased almost 100 %." (PA08)

Expenditures for cooperation with African countries alone increased even more dramatically: from EUR 11.9 million in 2005 to EUR 50.8 million in 2013 (BMBF 2014b: 2). Beyond the broad outlines of cooperation with developing countries and emerging economies within the Internationalisation Strategy and the Action Plan, no strategies on thematic priorities or partner countries exist yet: "There is no monitoring from a broader perspective, such as which regions have which strengths and what does that mean for our efforts in international cooperation" (PA09). However, at the time of research, the International Department was making first attempts to select partners among developing countries and emerging economies on a more rational basis by developing own criteria of selection, such as the stage of development of the science system (interview with PA07).

Even so, the current list of the BMBF's cooperation countries does not only mirror German willingness to cooperate but mirrors the readiness and capability of the partner countries to cooperate in science, too. The lack of any of those countries classified as least developed countries (LDCs) on the list of cooperation countries (Appendix B-2) might not only be attributed to the unwillingness of the German side to cooperate with the LDCs that shines through in interviews – but might equally be attributed to the different developmental priorities of the LDCs, which might not include cooperation in science. In most LDCs, the scientific landscape is characterized by lacking institutions, infrastructures and personnel in science as well as research funding.

While FONA is strategically followed, the Internationalisation Strategy resonates far less within the BMBF outside of the International Department. In contrast to the core ideas of German science policy as bundled in the High-tech Strategy which guide the ministry in its main discursive direction and structurally organize the entire ministry's flow of funds (ch. 5, 8), the Internationalisation Strategy is of little persuasive character and structural impact. As a consequence, in view of internationalisation policy, the approaches and levels of cooperation within the different thematic departments of the BMBF differ substantially: The Sustainability Subdepartment has a strong and rather long tradition in funding cooperation with developing countries and emerging economies. In contrast, cooperation with developing countries and emerging economies is barely funded at all in the Department of Key Technologies, while funding initiatives for cooperation have been launched in recent years in the areas of health issues or bio-economy in the Department of Life Sciences (ch. 5, Appendix B-2).

However, if the strategic frame does not necessarily guide decisions, what does? On which basis are decisions then taken? The choice of particular topics and co-

operation countries illuminates that policy-makers themselves often perceive the decisions to be based on rational and strategic choices (ch. 8, 9).

6.2   Following a beaten track: Discourse reproduction

As chapter 6.1 shows, within the thematic departments, plenty of spaces for agency exist that might enable a deviation from previous discourse or lead to a repetition of discursive assumptions in view of cooperation with developing countries and emerging economies. The head of units' autonomy as well as decision-making capacity would theoretically enable them to make far-reaching decisions about a change of directions. Nevertheless, although there is room for agency, it is not seized regularly.

While some elements of the policy discourse's dispositive, such as the rules for decision making, have an enabling function and open a space of agency, other elements of the dispositive rather restrict policy options and make repetition more likely than change. Even if they are endowed with official decision-making power, actors in the BMBF are surrounded by the infrastructural elements that stabilize discourse. Practices, norms, rules, the accepted body of knowledge embodied in strategies delimit their options.

The underlying structures of the BMBF, its organisation into thematic departments and a separate international one, endowed with financial resources according to specific distributional schemes, the laws and regulations which empower ministerial heads of unit to make decisions, as well as the contents of policy discourse embodied in policy documents may be interpreted as an institutional context or a *historical a priori*, as *conditions of possibility* (Foucault 1972a) for the specific policy discourse on cooperation with developing countries and emerging economies in sustainability research.

Foucault distinguishes between the dispositive and the historical a priori by highlighting the dispositive's strategic aims of intervening (Foucault 1980c), while Keller argues that the dispositive is equally aimed at providing an "infrastructure of discourse production" (Keller 2005: [10]). In view of the stabilizing function for discourse, dispositives are related to the notion of path dependency, which describes that established paths become more likely to be trotted on again. Once a certain direction (of a decision, organisational structure, technology) is taken, structural or discursive innovation becomes unlikely, as recursive processes positively reinforce the initial direction: Paths once taken narrow down room for alternatives and limit opportunities of action. History thus inscribes itself in the organisation and its shape. Beyond shaping options and constraints of action, historical pathways