

What Makes Knowledge Governmental?

September 2015. It is a hot, sunny day at the end of the “refugee summer” which strangely combined the end-of-summer laziness with a state of particular emergency conveyed by the media. For weeks, the news was dominated by reports about a massive influx of refugees and the resulting break-down of the registry mechanism for new arrivals. The *Bundesamt für Migration und Flüchtlinge* (BAMF), or Federal Office for Migration and Refugees, constituted as the central authority responsible for registration and conduct of asylum processes the epicenter of bureaucratic activity and media criticism during that time. Though I had arranged interviews with BAMF officials for my research project some months ago, I anxiously reconfirmed the appointment a week in advance, almost expecting them to be cancelled due to the latest developments. To my relief, they were not.

The Federal Office for Migration and Refugees lies on an arterial road with heavy traffic south of the center of Nuremberg. It is a large, four-story building spanning over several hundred meters along the road. Originally, the building was erected in 1939 as a barrack for the SS in the immediate vicinity of the National Socialist Party rally area. Today, the building does not reveal much of this history; nevertheless, the uniform brick and granite facade radiates a stern, bureaucratic purpose.

I arrive by car at the BAMF and am greeted by a sign – “Entering Strictly Prohibited” – at the front gate. The security measures are tighter than I had anticipated: there is a security booth by the entrance of the building and a locked double-door entrance. Judging by the visual impression, both have been added relatively recently. After registering with my ID at the security checkpoint, I am given a visitor’s badge which I must wear at all times.

The entrance area was artistically designed to make a reference to the history of the building, a graphic table on the wall presenting it. This artwork and the building’s history seem to be a standard small talk item for visitors: both

people picking me up at the entrance on two consecutive days made almost identical remarks about the enormity of the complex, how easy it is to get lost in the long hallways, and how the artistic design of the entry hall deals with the building's problematic past.

Subconsciously, I expected the state of emergency as conveyed by media to be visible in the physical center of the migration policy system in Germany: some trace of the towering mountains of asylum files waiting to be decided upon, a visual expression of bureaucratic chaos, or at least government officials with files tucked under their arms hastily moving between offices. However, at the site, there is no particular emergency or busy frenzy visible. While I wait to be picked up by my interview partner in the entrance hallway, the lunchtime traffic slowly begins, with small groups of officials chatting about this and that while walking towards the cafeteria. In sum, the scene looks like any other day in any random mid-level federal German government building.

(Field notes, September 2015)

Knowledge Production and Migration Policy Making

The Federal Office for Migration and Refugees is the central executive authority for federal integration and migration policy measures in Germany. It assumed this role relatively recently, as a result of the fundamental migration policy and administrative reforms in 2005 often referred to as a “paradigm change.”¹ This change was triggered by the then newly elected Red-Green Government, which was eager to introduce reform to a policy-field with a decade-long history of political stalemate. At the same time, a rising trend of “evidence-based policy-making” since around the turn of the millennium provided the general context to this political effort.² In 2001, the *Unabhängige Kommission Zuwanderung* (Independent Commission Immigration) was founded to formulate scientifically grounded reform proposals for legal and administrative aspects of migration policy.³ The Independent Commission planned to turn migration into a policy field steered by expert knowledge,⁴ following the intention to “move away from policy based on ‘dogma’ to ‘sound evidence’ of ‘what works’.”⁵

The Independent Commission’s final report clearly stresses the merits of knowledge-informed policy-making:

“The acknowledgement of reality has replaced political taboos. Increasingly, public debate is governed by rationality. Germany needs [...] both permanent and temporary migration for the labor market [...]. How many migrants should come is decided by the polity with the support of the Immigration Council.”⁶

However, sharing the fate of many similar reform attempts, the Independent Commission’s propositions were largely ignored in the subsequent legisla-

1 Engler 2014, p. 67, Kreienbrink and Worbs 2015, p. 330, Bade 2017, p. 198

2 Sanderson 2002

3 Schneider 2010, Scholten 2011b, 255f.

4 Expert knowledge in this context refers to knowledge arising from scientific knowledge production (Cp. Boswell 2009b, p. 4). Knowledge production, in turn, is usually used interchangeably with “expert knowledge” or “research” in the relevant literature (Cp. for example Scholten et al. 2015b, Boswell 2009b, p. 4). In this text, knowledge production will be used in this sense (Cp. Bourdieu 1977).

5 Boswell 2009b, p. 3

6 Unabhängige Kommission “Zuwanderung” 2001, p. 1

tive process.⁷ In particular, the Residence Act was purged from most features which ensured the systematic inclusion of scientific expertise into policy-making. Instead of an independent research institute and the Immigration Council of experts mentioned in the quote above, an in-house Research Group was established at the Federal Office under tight administrative control.⁸ The knowledge production of the BAMF's Research Group will be analyzed in this thesis.

This history is of some relevance for the analysis of governmental knowledge production, since both the Independent Commission's recommendations about the future role of knowledge in policy-making as well as the failure of implementing them represent two competing theory streams. In relation to the former, in government documents and among researches, an instrumental approach to knowledge production is prevalent according to which knowledge is a key resource for political action.⁹ Knowledge in this sense is used as a source of information, as a means of enhancing output quality, or as a source of legitimization.¹⁰ This concept can be traced back to Max Weber's idea of bureaucracy as rule through abstract, impersonal decisions which require technical knowledge on the side of the government official.¹¹ This understanding is mirrored in the legal text describing the tasks of the Research Group as "conducting scientific research on migration issues (accompanying research) with the aim of obtaining analytical conclusions for use in controlling immigration."¹² The instrumental approach of knowledge utilization relates closely to the concept of *Ressortforschung* (Departmental research), a government-sponsored branch of applied research.¹³

However, the ultimate failure of the Independent Commission's reform proposals can be connected to the observation that in practice, policy-making is rarely guided by the ideal of scientifically grounded decision-making. This is even true for knowledge that has been directly commissioned by the

7 Cp. Schneider 2010, 277ff.

8 Bade 2001, p. 32

9 This understanding follows Boswell 2009b, p. 5 in her use of the term instrumental knowledge which includes various approaches sharing the assumption that knowledge is valued primarily for its informational content.

10 Cp. Schneider 2010, 74ff.

11 Weber 2005, 185ff.

12 Quoted from §75(4) Residence Act

13 Cp. Barlösius 2008, Groß 2010, Lundgreen 1986

government, such as the Independent Commission's report.¹⁴ The constant deviation between rhetorical praise of scientific knowledge and actual political practice gave rise to criticism of the mainstream instrumental approach.¹⁵ Several critical accounts aim at explaining this gap: these include a steering-pessimistic system-theory approach, according to which communication errors between the two incompatible systems "politics" and "science" lie at the root of this phenomenon.¹⁶ Similarly, sociology of science studies often point to a cultural difference between science and politics which impedes the correct implementation of scientific knowledge.¹⁷ In her often quoted study on knowledge production in the BAMF, Christina Boswell explains the lack of influence of the BAMF's knowledge production with alternative uses of the knowledge in policy-making, most importantly ex-post legitimization or substantiating decisions already taken.¹⁸

The knowledge production at the BAMF is however hard to capture with these critical concepts as well: On the one hand, the principal criticism of a lack of systematic influence on political decision is valid, since there is actually little evidence for proper instrumental knowledge use. On the other hand, however, critical theories seem to be unable to sufficiently explain exactly why: For example, the above-mentioned systems-theory approach states that systematic differences inhibit proper communication between politics and science as a matter of principle. However, as a detailed discussion of the history of the establishment of the Research Group will demonstrate, the assumption of a systematic policy-science gap cannot be easily maintained.¹⁹ The Research Group managed to establish itself at the center of government migration research with some success. This is visible in the fact that it was able to secure more and more resources over time and established a position within the state administration and to some extent within academia as well. Today, the BAMF Research Group is among the most active publishers of migration and integration research in Germany.²⁰

14 Boswell 2015, p. 36

15 See Boswell 2009b for a detailed discussion of the various alternative approaches to knowledge use in political decision making.

16 Nassehi et al. 2009, p. 7, Kraler and Perchinig 2017, p. 85

17 Boswell 2009b, p. 9

18 Boswell 2009b, *ff.*, Scholten et al. 2015a, p. 318

19 Cp. for example Kraler and Perchinig 2017, p. 75

20 Schimany and Schock 2012, Leibniz-Institut für Sozialwissenschaften 2010, p. 26

Furthermore, if the actual content of this research is analyzed, the major part of the BAMF's studies cannot be attributed to neither symbolic nor instrumental uses in Boswell's understanding.²¹ This is mainly because for the most part, clear policy recommendations are absent of the Research Group's publications. Instead, many publications entail general socio-demographic information on particular target groups or describe institutional or legal arrangements in migration administration. This goes somewhat against what might be expected from a research institution which considers "the preparation, monitoring and evaluation of policy measures or programs"²² as its core responsibility. As a result, most authors agree that the political use of the major part of the BAMF's research projects is "unclear."²³

However, both instrumental and alternative approaches stand at odds with the self-perception of the Research Group: Despite complaints (usually off-tape) that they do not have much political influence,²⁴ BAMF researchers maintain that they do produce politically relevant scientific knowledge. In this context, the Research Group draws on a specific understanding of applied research,²⁵ which is discursively constructed against theoretical, academic research:

"We conduct academic studies, only the research question is usually not theory-driven, and that is a difference to universities. Here, we focus on applied research. [There is a wide array of] policy-counseling institutes which likewise follow an academic approach, which are almost always managed by academically trained scientists, but which have a more diversified audience."²⁶

This self-understanding cannot simply be ignored: It might be true that knowledge production according to instrumental principles does not work

21 Boswell 2009b, p. 182

22 Kreienbrink and Worbs 2015, p. 329

23 Boswell 2009b, 187 f.. Cp. also Scholten et al. 2015a, 318f.

24 Cp. also Boswell 2009b, p. 5

25 Cp. also Barlösius 2008, p. 23

26 "Es sind akademische Arbeiten, [...] nur ihre Fragestellung ist in der Regel nicht theoriegeleitet, und das unterscheidet sich von dem, was an Universitäten passiert. [...] Bei uns steht die angewandte Forschung im Vordergrund. [Es gibt eine große Bandbreite an] politikberatenden Instituten, [...] die [...] auch akademischen Anspruch haben, die natürlich [...] fast immer von akademisch ausgebildeten Leuten geleitet werden, aber die ein breiteres Publikum haben." (Interview with a BAMF researcher, 2015)

in practice, but this does not mean that the knowledge production at the BAMF can be wholly dismissed as mere rhetoric or propaganda.²⁷ In the approach adopted in this thesis, the failure of knowledge production does not constitute the conclusion but rather the point of departure for analysis: instead of pointing out what knowledge production fails to do politically, the question is what it actually does instead.²⁸ Specifically, the thesis focuses on practical aspects of knowledge production, the political effects of the knowledge and the resulting epistemic features of governmental knowledge.

Seeing Like a State

To make this practice-oriented approach productive for the analysis it is worth reflecting on the production conditions of knowledge and the way it is connected to governance. James C. Scott's *Seeing like a State*, a study on several large-scale agricultural modernization and development schemes, provides an inspiring point of departure for this task:

“The premodern state was, in many crucial respects, partially blind; it knew precious little about its subjects, their wealth, their landholdings and yields, their location, their very identity. It lacked anything like a detailed ‘map’ of its terrain and its people. It lacked, for the most part, a measure, a metric, that would allow it to translate what it knew into a common standard measure necessary for a synoptic view.”²⁹

While Scott describes processes of mapping forests, creating cadastral maps, or establishing standard units of measurement and their implications for the exercise of political power, corresponding programs and processes in governmental migration research are apparent: After years of political neglect of the field, standard statistical compendiums were created and updated every year.³⁰ Newly developed meta concepts were applied by replacing the outdated German-foreigner dichotomy in statistics with a new concept (Migrant Background³¹) thereby introducing a standard measure similar to Scott's under-

27 Cp. Ferguson 1994, 17f.

28 Cp. also Foucault 2014, p. 80

29 Scott 1998, 17 f.

30 Cp. Bundesamt für Migration und Flüchtlinge 2006

31 Cp. Salentin 2014. For a definition of the term, see Statistisches Bundesamt 2007, p. 6.

standing. In integration research, a similar strategy towards the standardization of statistical parameters which describe and evaluate the progress of integration is discernible.³² From the body of literature of government migration research, among the most-discussed studies in this time is the work “Muslim Life in Germany” which most importantly established an official count of Muslims on a national level for the first time.³³ In this context, Scott’s approach accurately describes research projects that are hard to capture in the instrumentalism paradigm: Most of this knowledge cannot be connected to a specific political issue, and the according studies hardly ever contain recommendations for policy-making.

Such knowledge has otherwise often been described as lacking political relevance³⁴ or has been attributed to merely symbolic uses of knowledge in the literature.³⁵ In contrast, Scott demonstrates the political usefulness of such knowledge. Scott’s approach connects crucial points between the immediate conditions and methods of knowledge production on the one hand and a greater picture about political power and the establishment of statehood on the other hand.

In this sense, Scott can be regarded as a representative for a research tradition which focuses on the various interconnections between governance and knowledge production. One of the single most important contributions in this line of thought is Foucault’s concept of governmentality, according to which the execution of political power relies increasingly on mechanisms of self-steering and technical, particular knowledge exactly of the kind Scott writes about.³⁶ This approach is particularly useful for the analysis of governmental knowledge production since it avoids two main analytic traps: Firstly, by focusing on the interconnections between governance and knowledge production, the inadequate separation of “science” and “politics” is abandoned in favor of a holistic perspective. This is especially important for the analysis of the BAMF, which sees itself as a “boundary organization”³⁷ since it combines tasks and roles from “both worlds”.³⁸ Secondly, the narrow focus on problem-

32 Cp. Bil and Verweij 2012, Friedrich and Waibel 2012

33 Bundesamt für Migration und Flüchtlinge 2009c

34 Cp. Kraler and Perchinig 2017

35 Cp. Boswell 2009b, p. 182

36 Foucault 2014, p. 17, Rose 1991, p. 675

37 Scholten 2011b, 46f.

38 Kreienbrink and Worbs 2018, p. 243

solving (or the lack thereof) through knowledge in the process of political decision making is broadened to include long-term and indirect political effects of knowledge production.³⁹ Knowledge in this understanding is not a somewhat objective input into politics, but rather formed and co-produced in the course of government. This does not mean that this knowledge can simply be regarded as propaganda, as stated above – the knowledge has to fulfill quite rigid methodological and coherence criteria.⁴⁰ Not coincidentally, the BAMF's methods of knowledge production resembles academic knowledge production quite closely in this regard. However, the most important quality criterion is not theoretical coherence or novelty, but rather the question if the knowledge is useable for government or not. In this sense, the requirement of political relevance is the most important structural feature of governmental knowledge.

Following Scott, this study employs a practice-oriented concept of knowledge production. This perspective is inspired by the basic insight that knowledge does not simply emerge from objective facts, but rather has to be constructed and arranged in a particular way.⁴¹ In this sense, knowledge production is neither “deliberate construction”⁴² nor a straightforward discovery of ex-ante existing truths. This practice of knowledge production becomes apparent in the following quote of a government researcher describing their work:

“We work flexibly with what serves best. [If] we have a concrete question, we look which methods we can use to answer the question posed to us. In this we are not overly committed to a specific theoretical concept. If we refer to definitions [e.g. in the National Migration Report], these relate to statistical data, and the statistical data depends on legal regulations.”⁴³

39 Ozga et al. 2009, 358f.

40 Rose 1991, Boswell et al. 2011

41 Amir-Moazami 2018b, p. 93. Cp. also Gibbons et al. 1994, p. 3

42 Schiffauer 2018

43 “Wir arbeiten flexibel mit dem was da ist. [...] Wir haben eine konkrete Frage, wir schauen uns an mit welchen Methoden wir die konkrete Frage die uns gestellt wird beantworten können. Und sind nicht übertrieben eng hinter [...] einem Theoriekonzept her. Wenn wir Definitionen benutzen [zB. im Migrationsbericht] richtet sich bei uns nach den statistischen Erhebungen, die statistischen Erhebungen wiederum richten sich nach dem was in unseren Gesetzen steht.” (Interview with a BAMF researcher, 2015)

In sum, the production of politically relevant knowledge can be best understood like a pragmatic tinkering with the resources, institutional confines, and strategic opportunities at hand.⁴⁴ At the BAMF Research Group, this tinkering process is visible in many practical aspects of knowledge production: research questions are formulated in a negotiation process involving ministries, researchers, and the Federal Office's administration to balance out different interests of political relevance, scientific credibility, and resource efficiency. Data is usually used because it is available, not because it is especially valid.

This is above all true for the Research Group's main data source, the *Ausländerzentralregister* (Central Registry for Foreign Nationals, AZR). Data from this source is methodologically problematic because it excludes naturalized persons as well as a good share of EU-foreigners; as a consequence, the AZR contains a bias towards the "socio-economically least successful."⁴⁵ Despite this, AZR data is used extensively since it is exclusively available to the BAMF⁴⁶ and therefore constitutes a unique selling point for the BAMF's research. Another pragmatic aspect of knowledge production is the publication strategy which arose from a compromise between academic and bureaucratic practices. As a result, politically relevant knowledge is communicated strategically to maximize its political impact.⁴⁷ The most consistent publication strategy is the practice to gear publication towards avoiding negative feedback. This can be connected to the peculiar position of the BAMF which is frequently blamed for policy failures originating from higher hierarchical levels. To a degree, it also explains the above-mentioned restraint in policy recommendations.

Summing up, if knowledge *production* is read as a metaphor, two meanings of the term "production" become apparent:⁴⁸ On the one hand, production entails a connotation of synthetically, similar to Chomsky's notion of "manufacturing consent" with manipulative intent. On the other hand, production refers to industrial process organization, where multiple workers are organized to collaborate for the manufacturing of a given product. While the connotation of manipulation is surely not irrelevant, this thesis addresses above

44 Cp. also Latour and Woolgar 1986

45 Salentin 2014, p. 25

46 Kreienbrink and Worbs 2015, p. 327

47 Cp. Mayr et al. 2011

48 I follow here Boswell's similar discussion of the word "manufacturing". Cp. Boswell 2018

all the practical aspects of knowledge production in a bureaucratic system which resembles in a way the division of labor in a factory.

Four Features of Governmental Knowledge

The BAMF Research Group has been introduced as a paradigmatic case highlighting the inconsistencies in the theory debate between “instrumentalist knowledge” and various “gap theories” explaining the lack of actual political influence of the knowledge generated. As an alternative, a practice-oriented research perspective was sketched out, focusing mainly on the interconnections between governance and knowledge production.

By itself, this focus on practical aspects of knowledge production is neither original nor surprising – after all, it follows broadly the insights from sociology of science studies according to which knowledge production is the construction of truth according to established methodological principles.⁴⁹ However, in the context of the state, this focus is particularly useful in highlighting the specific features of governmental knowledge as an outcome of the conditions of production conditions as well as policy aims. By and large, four basic characteristics of governmental knowledge can be distinguished:

First, governmental knowledge is politically relevant.⁵⁰ From the perspective of governmental researchers, political relevance is the key difference between governmental and academic forms of knowledge production. In the theoretical literature, however, this relevance is routinely denied on the grounds of according empiric evidence, as mentioned above. The practice-oriented approach reconciles both perspectives: Political relevance is conceptualized as a quality standard for knowledge production, similar to the requirement of theoretical coherence in academia. While it is hard to prove direct influence on single political decisions, political relevance has a decisive impact on the process and outcome of knowledge production. This is for example visible in long-term developments in the research focus: Initially, the Research Group largely drew up its own research agenda.⁵¹ However,

49 Scholten 2011b, 29ff.

50 In this text, the terms “political relevance” and “practical relevance” are used interchangeably. This reflects the according use at the BAMF and the concept of political relevance discussed later in this chapter. Cp. also Harris 2015, p. 27

51 Boswell 2009b, p. 180

after the establishment phase, a strategy of systematically acquiring research mandates from state authorities is clearly discernible, therefore adjusting knowledge production to demand. Regarding the research perspective, a distinct policy relevance effect is visible as well which narrowed down from a broad, all-encompassing overview perspective to specific target groups which are subject to governmental intervention, particularly from the Ministry of the Interior. Furthermore, practical relevance is not a uniform standard of quality but rather a flexible requirement according to the actual practice for which knowledge is produced. In this thesis, four different aims of political relevance will be discussed: Administration, depoliticizing, calming public debate, and legitimization. Administrative knowledge is relevant in the sense of the above-quoted legibility concept, to introduce standard measurements for facilitating political steering (“what gets measured gets managed”⁵²). Depoliticizing is an effect of framing originally political problems in technical terms.⁵³ At the BAMF, this effect is most visible in integration research: Initial research projects were targeted on broader societal issues such as “the impact of immigration on the German Society”,⁵⁴ or the construction of an indicator system for integration.⁵⁵ These projects are meanwhile replaced by technical examinations of the impact of integration courses, or the examination of integration parameters of single legal status groups.⁵⁶ This narrow perspective contributes to the changed understanding of integration, which is framed not as a political problem for the society as a whole, but rather as a technical task for the appropriate government authorities, thereby depoliticizing the issue.

Another discursive function of knowledge is calming the public debate to silence overly racist, xenophobic or otherwise undesirable statements about migrants (Muslims in particular) by superior knowledge and “objec-

52 Karabell 2014, p. 13

53 Ferguson 1994, p. 256

54 Bundesamt für Migration und Flüchtlinge 2005a

55 The integration report series from 2008–2012, see also Bundesamt für Migration und Flüchtlinge 2009b, p. 31: “The aim of the integration report is [...] to display the immigration status of the immigration population in Germany to the broad public.”

56 For example, immigrating spouses (Bundesamt für Migration und Flüchtlinge 2014b), Bundesamt für Migration und Flüchtlinge 2012i, university students (Bundesamt für Migration und Flüchtlinge 2012h) and graduates (Bundesamt für Migration und Flüchtlinge 2014a)

tive facts".⁵⁷ Finally, legitimization is a frequently described political use of knowledge if studies are conducted to bolster ex-ante a specific political claim or strategy.⁵⁸ Legitimizing knowledge is for example visible in the BAMF's dual concept of migration potential: In the understanding of the BAMF, migration potential entails both migrant action (potential of migrants) and structural migration pressure as an indicator for future movements (*potential* migration). However, these elements are employed context-specific, depending on regions of origin.⁵⁹ In this way, the dangers of *potential* African and Eastern European migration potential are underlined, whereas the economic potential of migrants from EU-countries is emphasized. In this way, the BAMF's understanding of migration potential mirrors neatly the EU's migration strategy of counterbalancing intra-EU freedom of movement with increased efforts to seal off the external borders.⁶⁰

All in all, political relevance is the most important single feature to form and influence the knowledge production at the BAMF. It can thus be considered both the key difference to academic knowledge production and a valuable entry point for analysis if different potential uses for knowledge are considered.

Second, governmental knowledge is inert and structurally conservative. This structural feature follows both from the fact that knowledge is produced in a government authority and again from policy relevance considerations. Structurally, the most important reason for conservatism is according demand on the side of ministries: According to Barlösius, ministries prefer probed and uncontroversial knowledge over experimental, "peak of science" oriented research.⁶¹ Arguably, this effect grows stronger with the degree of dissemination of a given publication.⁶² This explains the numerous copy-pasted passages of the Migration Reports, the Research Group's flagship annual publication: These repetitions are not a corner-cutting strategy, but

57 Cp. Schepelern Johansen and Spielhaus 2018, p. 128, Boswell 2009b, p. 201

58 Cp. Boswell 2009a

59 Potential of Migrants: Bundesamt für Migration und Flüchtlinge 2014e; Migration Potential: Bundesamt für Migration und Flüchtlinge 2009d, Bundesamt für Migration und Flüchtlinge 2012a.

60 Bade 2013, p. 15, Kratzer 2018b

61 Barlösius 2008

62 Another effect causing structural conservatism are expected political controversies triggered by research on controversial topics such as the naturalization study discussed later in the text.

rather constitute the outcome of the multiple checks and editing levels this document passed in the course of its production.

Additionally, structural conservatism can be considered an outcome of the bureaucratic organization of knowledge production. Typical bureaucratic media of knowledge production such as memos, tables, statistics, and most importantly annual reports share a logic of accumulation: over time, additional data points are connected to a time series; the data thus becomes increasingly valuable.⁶³ At the same time, the introduction of a new concept becomes more and more costly since “you have to start with square one”, as a government researcher explained.⁶⁴ Therefore, once appropriate indicators, categories and statistical concepts are established, they are remarkably stable. This can lead to effects similar to Beck’s “zombie categories”, when concepts stay rigidly in place even when the social phenomenon they allegedly describe have changed.⁶⁵ The “Guest Worker” framework illustrates this feature of governmental knowledge well: Based on a governmental report series on foreign labor recruitment from the 1960s, social research on foreigners quite consistently employed a five-country comparison scheme reflecting the numerically most important “Guest Worker” recruitment countries of origin (Turkey, Italy, Spain, Yugoslavia, Greece);⁶⁶ the data presented focused strongly on economic and related social features of the migrant population such as employment rate, income, household size, age and gender specifications, and so on.⁶⁷ In principle, the “Guest Worker” concept remained the leading category system until the concept of “Migrant Background” was introduced in 2005, thus creating the counterfactual impression of the foreign population in Germany as “Guest Workers” from former recruitment countries. This concept came under increasing pressure for the fact that only a declining share of migrants were actual workers, the fact that the share of the largest recruitment countries gradually declined, and the fact that the increasing share of naturalized foreigners rendered the legalistic German-Foreigner divide to a degree irrelevant. The effects of this conceptualization can be illustrated by the stubborn examination of foreigner’s “propensity of return” almost forty years after the

63 Cp. Rose 1991, p. 673 for an overview over the role of numerical data in governance.

64 Research Notes, February 2017

65 Beck 2000, 16ff.

66 Mehrländer 1987, 89ff.

67 Bundesamt für Migration und Flüchtlinge 2010c, p. 25

last “Guest Workers” have been recruited; many of those alleged potential returnees have in fact never lived outside of Germany.⁶⁸

Be that as it may, the “Guest Worker” framework of analysis illustrates quite well the impact of structural conservatism on knowledge production: It helps establishing a proper way of measuring and sorting. Different entities and population groups are quantified by establishing an order of essentially comparable units; furthermore, an agreement over the proper way to quantify and evaluate policies is established (most importantly the number of foreign workers and the unemployment rate).⁶⁹ Furthermore, the framing of knowledge in technical and at times boring and repetitive ways cannot be solely considered a deficit but rather a highly productive feature of governmental knowledge:

“It takes hard discursive work to keep things as they are. Making the world seem stable when it is in fact in constant flux means that wielding power involves the ability to freeze meaning. This has to be done by constantly repeating specific representations of things, actions, and identities, until what one repeats is naturalized to such an extent that it appears doxic.”⁷⁰

The study design of using selected countries of origin as a shorthand for foreigners in general and conceptualizing foreign nationals as temporary work migrants thus supported the long-standing belief that Germany was not a country of immigration, despite overwhelming contradicting empirical evidence. In this sense, structural conservatism and inertia can be regarded quite powerful and productive features of governmental knowledge.

In close connection to the effects of structural conservatism, the BAMF maintains a distinct speaker position throughout the years which can be best described as neutral and objective, the third feature of governmental knowledge. This feature is visible in the impersonal public conduct of Research Group officials: According to the Research Group’s head official, the BAMF’s researchers do not participate in public or academic debates as individuals, but rather as representatives of the BAMF or the federal government, respec-

68 Ibid. For an overview of state-sponsored knowledge production on return migration, cp. Hönekopp 1987b

69 Boswell 2018, 152ff. For an overview over “Guest Worker” knowledge production, cp. MARPLAN 1995 and Mehrländer 1987.

70 Neumann 2012, 79f.

tively.⁷¹ Objectivity is also a deeply engrained feature of the research content, as evident from the example of the Migration Reports. To an academic reader, the reports with endless repetitions and copy-pasted passages from last year's editions are a rather dry reading experience; at the same time, references to theoretical concepts to explain the conceptual background of knowledge production are constantly absent. Both redundancy and presenting scientific concepts as facts, however, do create a specific perspective of objectivity.⁷² This entails an effect of objectification of the research subject through the use of quantitative methods and data, most importantly statistics⁷³ and legal categorizations.⁷⁴ At the same time, the state apparatus itself is objectified, especially its political actions: In the Migration Reports, changes in the legal or institutional make-up are mentioned only in the according year's edition and are never explicated; long-term trends in governance remain largely ignored. The state appears thus as a timeless background unaffected by politics;⁷⁵ it is described as an abstract mechanism of legal norms, authorities and policy aims, whose conduct is described in a technical way. Both perspectives precondition each other⁷⁶ and join together to a distant, uninvolved view, akin to Haraway's oft-quoted notion of the "gaze from nowhere."⁷⁷ However, this perspective cannot be considered a self-explanatory feature of knowledge in a highly politicized policy area such as migration. In fact, the BAMF has a record of publishing alarmist and controversial studies in the past.⁷⁸ In contrast to this, the outwardly boring make-up of the Migration Reports and other research publications can be read like a conscious effort of establishing a somewhat neutral speaker position in between alarmist and multicultural positions. In fact, the thrive for objectivity is proportional to the degree of politicization of a given political question:

"some of our studies draw conclusions on what could be done. But in such a contested area like for example citizenship [...] we didn't do that. We made a proper study, we analyzed [different] effects and presented [the material].

71 Kreienbrink and Worbs 2018, p. 249

72 Doughan and Tzuberi 2018, p. 272

73 Amir-Moazami 2018b

74 Boswell 2018, 1ff.

75 Ferguson 1994, p. 256

76 Cp. Hess 2014, 258f.

77 Haraway 1988

78 Cp. for example Kelek 2006

If you look at the [...] press releases [of two contesting political actors, V.K.], one could think they referred to two different studies. But [...] we were OK with that, because everyone can work with this material.”⁷⁹

This quote illustrates a mechanism through which an objective speaker position is established. It also points to the fact that this speaker position cannot be considered an accidental outcome of bureaucratic styles of text production but rather a conscious strategy. In this sense, objectivity and a distant speaker position can be considered a core feature of the BAMF’s governmental knowledge production, especially in highly politicized issues.

The fourth feature of governmental knowledge is partial blindness, especially towards politically irrelevant features of the object of research. Partial blindness as such is of course not an epistemic problem but rather a necessary result of abstraction and categorization: at every step between raw data and the final analysis, some details of the original material are sacrificed in order to gain a clearer picture, more rigidly defined categories, or abstract units of equal magnitude for comparison. This “translation process”⁸⁰ and the formation of abstract categories are crucial elements of both scientific analysis and bureaucratic administration.⁸¹ However, this process can turn into a source of bias if consistently the same details are sacrificed in the course of translation; knowledge is then blind against these allegedly unimportant facts which are consistently filtered out. This is what happens at the BAMF as an outcome of the thorough internalization of political relevance considerations: In integration research, for example, negative effects of discrimination on integration success are discussed in accordance with the economic usefulness of a given migrant. Conceptually, the integration of privileged immigrants is portrayed as an outcome of both individual and structural factors, thereby stressing the need of an open society and condemning the negative

79 “Es gibt Studien, in denen Schlussfolgerungen drinstehen, was man sinnvollerweise machen kann. [...] Aber in so einem umkämpften Feld wie zum Beispiel [...] Staatsbürgerschaft [...] machen wir das eben nicht. Also haben wir eine saubere Studie gemacht, [...] haben Effekte ausgewertet und haben das dann präsentiert. Und wenn man sich dann die Pressemitteilungen [zweier politischer Akteure, VK] anguckt, könnt man der Auffassung sein, das sind zwei verschiedene Bücher gewesen. Aber [...] damit können wir sehr gut leben, weil dieses Material können alle verwenden.” (Interview with a BAMF researcher, 2015)

80 Schiffauer 2018

81 Affolter 2017, 156f., Jenkins, 7ff.

effects of discrimination on integration. This is contrasted by the analysis of most other immigrant groups, which is conducted as if successful integration was solely the product of individual effort. Discrimination for these migrant groups is portrayed as a “perception” or a “feeling”; the BAMF furthermore tentatively suggests that this might be caused by a lack of integration (if, for example, interactions are overhastily interpreted as discriminating due to a lack of proper German skills).⁸² In effect, the cause and effect relationship between discrimination and poor integration is reversed, depending on the migrant group and ultimately, the steering rationale behind it. This is an outcome of the fact that the BAMF employs different integration concepts: Large-scale studies on most immigrant groups employ a theoretical model of integration based on Hartmut Esser’s integration model. This approach measures integration as convergence of statistical indicators in four categories (cognitive/cultural, emotional, social, and structural integration⁸³). Esser’s concept is however only partially implemented by the BAMF: Those dimensions which contain individual migrant’s features (most importantly language skills, economic situation, etc.) are thoroughly studied, while structural factors (legal barriers, structural discrimination, etc.) are underrepresented. While this selection is usually justified with a lack of according data, it is also caused by an according framework of interpretation: For example, a study on integration course participants revealed that members of visible minorities consistently report the highest levels of discrimination. However, the report does not conclude that this is due to a higher probability of members of visible minorities to be singled out for discriminatory acts. Rather, in line with the individualistic framework of interpretation, the reports suggest (albeit tentatively) that discrimination experience is based on incorrect interpretation of social conflicts as being motivated by racism, which can allegedly overcome by further integration measures.⁸⁴ In this example, data is read in a politically useful way to justify “more of the same” integration measures, not in a critical way to fundamentally address the issue of racism towards visible minorities. This hegemonic interpretation of integration as the responsibility of migrants is put into perspective by integration studies of rather privileged status groups such as university graduates, entrepreneurs and self-employed migrants: In this context, discrimination, operationalized as “the feeling of

82 Bundesamt für Migration und Flüchtlinge 2013b, p. 74

83 Bundesamt für Migration und Flüchtlinge 2009c, 207 f.

84 Bundesamt für Migration und Flüchtlinge 2013b, p. 74

being welcome”,⁸⁵ is reintroduced into the analysis. Here, the Research Group supports the creation of a so-called “Welcome Culture”⁸⁶ for example by drawing conclusions for the optimization of bureaucratic procedures for members of privileged status groups.

In sum, the different representation of discrimination shows that integration is conceptualized according to the perceived political use of the knowledge: The Esser-inspired individualistic framework of analysis is applied to legal status groups where governmental intervention is motivated principally by restriction and surveillance.⁸⁷ In the context of more privileged migrants whose immigration is supported for economic reasons, successful integration is conceptualized as being dependent on both structural and individual success factors. Again, the different concepts are not primarily caused by a different object of inquiry, or the lack of data, but rather by the standard of political usefulness according to which data and research findings are produced and interpreted. Ultimately, this finding points to the fact that political relevance comes at a cost in terms of scientific independence.

The four features of governmental knowledge – political relevance, structural conservatism, objectivity and partial blindness – arise from the material analyzed in this thesis; while it is reasonable to draw connections to structurally similar cases, they are first and foremost relevant for the institution and time under scrutiny here. Also, it is important to note that the four features of governmental knowledge are not an innate feature of all knowledge produced at the BAMF (or, in extension, other government agencies) but are more visible in some documents than in others. All in all, these features can be regarded rather a departure for further inquiry than an all-embracing list. A too reductionist analysis would not do justice to the BAMF’s knowledge production which covers a wide area of topics from regional studies in African, Asian or South Eastern European countries to integration topics such as schooling, media use of migrants, ethnically segregated neighborhoods, as well as descriptive studies of governmental authorities dealing with immigration, integration and asylum.

However, these features are more than just a random list of coincidental findings. Rather, they circle around and focus on one common underlying

85 Bundesamt für Migration und Flüchtlinge 2013d

86 Ibid.

87 Bundesamt für Migration und Flüchtlinge 2009a, Bundesamt für Migration und Flüchtlinge 2009c, Bundesamt für Migration und Flüchtlinge 2014b

political structure, namely the nation state: All these features have been analyzed by researchers under the notion of methodological nationalism – the belief that the nation state is the natural container for the social and political reality.⁸⁸ Methodological nationalism is an especially salient source of bias in the study of problems which by nature transcend the nation state – such as migration.⁸⁹ In this context, this notion has proven to be a powerful source of critique, for example in the study of citizenship,⁹⁰ migration sociology and policy making,⁹¹ historical migration research⁹² and integration research,⁹³ among others. For the study of the knowledge production of the BAMF, however, the critique of methodological nationalism has to be qualified: In the case of the BAMF, as a governmental producer of knowledge, methodological nationalism is a necessity, not merely a source of bias. This is again strongly connected to the BAMF's understanding of political relevance: Political relevance is constructed from the perspective of what might be relevant to the national government. This includes a very narrow understanding of *politics* for which the produced knowledge is relevant: Political relevance is increasingly understood as being relevant to the study contractor, i.e. a government agency (usually the Ministry of the Interior), who is usually interested in technical knowledge, not in fundamental critique of its policies.⁹⁴ In a similar fashion, the most important mechanism creating blind spots arises from the fact that consistently the same information is filtered and ignored not because it is considered irrelevant per se, but rather irrelevant for the study contractor. Inertia and the corresponding perspective of objectivity both create a specific understanding of the state as a timeless background to the processes under scrutiny. Again, while methodological nationalism is a salient and highly relevant source of critique of knowledge production, it has to be kept in mind that the BAMF has highly profited from this alleged bias: For example, the change in the research strategy from a general sociological research-perspective with according broad focus on society to specific target groups strengthened the Research Group's reputation as a provider of politically relevant knowledge.

88 Wimmer and Glick Schiller 2003, p. 576

89 Beck 2004

90 Hollifield 2004, p. 887

91 Bommers and Thränhardt 2012, p. 202

92 Castles 2000, p. 15

93 Bommers 2009, 130ff.

94 Cp. also Boswell 2009b, p. 174

Research questions are confined to the nation state both in geographical and in conceptual terms again for policy relevance considerations. Administrative data – above all the AZR – is used not because it is especially well-suited, but because it is readily available. Thus, rather than an epistemic flaw, methodological nationalism can be considered the common underlying structure of the four basic features of governmental knowledge production. In the following chapters, this common perspective will be analyzed – not only as an epistemic flaw, but also as a specific logic of knowledge production, distinct and separate from academic knowledge production.

Research Program

In this thesis, governmental knowledge production will be analyzed mainly in two respects: Firstly, the production conditions of the knowledge, and second, the epistemic features of the knowledge generated.

The analysis of governmental knowledge production at the Federal Office for Migration and Refugees is structured in three parts: Firstly, the history of governmental research on migration will be analyzed. This analysis serves two ends: On the one hand, this history is reconceptualized as a structural precondition of contemporary knowledge production in terms of intellectual traditions and institutional configurations. On the other hand, the framework of analysis for the BAMF's knowledge production sketched out above will be further elaborated using a neoinstitutionalist approach. This approach draws on narratives as a means of conceptualizing mutual influences of policy-making and knowledge production. Narratives are understood as cause-and effect frameworks; in policy-making, narratives are used to reduce complexity and to legitimize political decisions in a given policy area. For analysis, narratives are operationalized with the construction of a specific target group, the identification of key problems, and political solutions to them.⁹⁵ This framework is used to analyze the main narratives of past policy-making and research. There are two main sets of sources for this analysis: On the one hand, essays and other research documents issued by the BAMF on the history of migration research, which construct a standard historical narrative of governmental migration research. According to the BAMF, the history of migration research is divided into four eras (refugee/resettler research of the 1950s, "Guest Worker"

95 Boswell 2011

research of the 1960s and 1970s, foreigner research of the 1980s and 1990s and the contemporary era). This narrative will be compared to primary sources, particularly government reports. These reports help reconstructing historical eras of migration research and provide useful material for the comparison to the BAMF's version of this history.

The neoinstitutionalist approach renders the mutual influence of knowledge and policy-making visible: Refugee/resettler research was primarily dominated by a nationalistic frame according to which the newcomers were *a priori* part of the German nation.⁹⁶ This included the claim that resettlers were not migrants and therefore their situation was incomparable to later migration streams – in fact, the inclusion of resettler/refugee research of the 1950s in such a historical perspective is the outcome of relatively recent historical research.⁹⁷ In resettler/refugee research, one of the two main research fields was directed towards monitoring various integration parameters (such as employment and income, housing situation and so forth), therefore closely resembling contemporary socioeconomic integration research. The other field of research was directed towards ethnic and cultural aspects which were used to legitimize the inclusion of the resettlers into the national “community of fate”⁹⁸ as well as to maintain the territorial claims on lost eastern German provinces.⁹⁹ In the BAMF version of history, only the first stream of research is mentioned, since it mirrors the contemporary image of instrumental governmental knowledge most closely.¹⁰⁰

In “Guest Worker” research,¹⁰¹ the national paradigm was inverted: The *a priori* assumption was that migrants were not part of the German nation and would stay only for a limited amount of time. Consequentially, national categorizations were paradigmatic for research, which focused increasingly on “Guest Workers” from the largest countries of origin, as mentioned above. The cause-and-effect arguments reverse around the 1968 recession: While initially, the mutual benefit of the German economy, the migrants and the coun-

96 Bommes 2009, 128ff.

97 *Ibid.*, p. 133

98 Aumüller 2009, 161 ff.

99 Nahm 1959, p. 154

100 The ethno-nationalistic stream of research is not mentioned as such; rather, the *a priori* community of fate is regarded as a given (Cp. for example Wollenschläger 2003, p. 41).

101 I follow here Scholten's terminology (Scholten et al. 2015a, p. 319). The BAMF uses sometimes different terms (such as “foreigner research”, Cp. Heckmann 2013) to avoid the paternalistic inscriptions of the term “Guest Worker”.

tries of origin was stressed, more defensive arguments arise around that time around notions of alternativeless and maintaining the standard of living. This is connected to blaming “Guest Workers” (especially their “culture”) for growing problems of the recruitment system. The main elements of this narrative were all constructed during the late 1960s and early 1970s and stay rigidly in place during the next decades, which testifies to the remarkable stability of the “Guest Worker” narrative.

The next phase is sometimes called “a Lost Decade”¹⁰², beginning after the halt to recruitment in 1973, when labor recruitment was stopped due to recession. Until the change of the federal government in 1998, migration policy-making was stalemated by the belief that Germany was not a country of immigration and the successive de-facto inclusion of migrants into social and welfare systems. In this context, the political framing of scientific research according to the “no country of immigration” dogma is very well visible: Integration processes are mostly framed as deficits on the side of the migrants, which are often attributed to culture.¹⁰³ Culture serves as the most important explaining variable for the increasing differentiation among the formerly more or less homogenous “Guest Worker” population while increasing political-legal differentiations within the foreigner population are left unregarded. This again follows the political reasoning that administrative measures are a reaction to, not cause of, integration problems. This is remarkable because the BAMF supports a narrative of an increasing antagonism between “rational” science and “irrational” politics¹⁰⁴ which cannot easily be maintained regarding the strong support of the “no country of immigration dogma by governmental knowledge production. This narrative however serves as an important antagonistic picture for the portrayal of contemporary, “enlightened” policy-making, which is portrayed in the instrumentalist picture sketched out above: Policy-making is grounded on sound scientific knowledge and is regularly evaluated and updated according to the latest scientific findings.

In Chapter 3, the institutional make-up of the Research Group is analyzed, spanning from the foundation of the group in 2004/2005 to its contemporary set-up. Again, the core topic of this chapter is to explore the institutional and structural preconditions to knowledge production; the chapter illustrates how

102 Bundesamt für Migration und Flüchtlinge 2005a, p. 71

103 Cp. Lanz 2007, p. 82

104 Cp. for example Heckmann 2013, 38f.

the various mutual interconnections between policy-making and science as laid out in Chapter 2 are produced in practice.

The newly established Research Group was confronted with a rather blurry mandate as well as an undefined position in the administrative hierarchy; consequently, the time after establishment can be characterized as a struggle for the establishment of an area of competency and influence. In fact, at least initially, the Research Group can be regarded as a “foreign body” in the BAMF, expressed for example in the professional cultures of officials and researchers, the generational difference between the two groups, and conflicting ideas about the long-term orientation of research originating from the Ministry of the Interior, the BAMF leadership and the Research Group. In the literature, this phase is often used as evidence for the “systematic gap” thesis, according to which “science” and “politics” are systems with fundamentally different functioning logics.¹⁰⁵ This interpretation disregards however the increasing integration of research into governance, visible for example in the fact that more and more studies are commissioned by other government agencies (the Ministry of Interior, above all). This process is interpreted as a strategy of mimicking the function and role of a departmental research institute, with varying success. The result of this strategy is ambiguous: On the one hand, a rising research output and a higher institutional status in terms of staff and resources testify to its success and the political relevance of the knowledge generated. On the other hand, the blurry legal mandate as well as the comparably smaller degree of institutional independence leaves the Research Group in an unfavorable situation in times of institutional conflict especially vis-a-vis other departmental research institutions.

In this process, a distinct concept of governmental research is constructed, which is understood as the practically relevant counterpart to academic research. Researchers characterize their work as practical (in contrast to theory-oriented), flexible (in contrast to methodological rigorism) and pragmatic (in contrast to critical). So far, the often-quoted academic disregard for governmental research¹⁰⁶ seems unjustified: Knowledge production at the BAMF follows the same systematic rules as in academia;¹⁰⁷ empiric data is collected and analyzed with scientific methods, publications are referenced and quoted according to academic criteria. The only difference

105 Kraler and Perchinig 2017, p. 85

106 Cp. for example Kraler and Perchinig 2017, 66f.

107 Barlösius 2008, p. 25

between governmental and academic research, however, lies in the practical relevance criterion, as stated above: research is valued if it is useable in the political arena. This difference is however grave: It causes the above-mentioned structural conservatism and inertia, since study contractors strongly prefer such uncontroversial, mainstream knowledge.

The structural conditions of knowledge production are analyzed mainly with the help of expert interviews and documents. The Research Group has issued a series of articles in which it elaborates something like a mission statement, or what can be termed its “self-understanding”. These include articles in scientific magazines, usually commemorating institutional jubilees, and PR material from the BAMF website.¹⁰⁸ This understanding will be analyzed in terms of its capacity as a “double hermeneutics”¹⁰⁹: that means, not the role of the Research Group as such will be analyzed, but rather its role from the view of the involved actors. This approach stresses the fact that institutions are crucially shaped by the shared beliefs and assumptions of their members, which explain the particular strategic orientation of the institution and its development over time. The resulting shifts in institutional configurations and knowledge production strategies can therefore be linked to according shifts in the self-understanding of the Research Group. Expert interviews of current or former BAMF Research Group members and other relevant specialists in the field constitute the other main type of information source for this chapter.¹¹⁰ Expert interviews can be considered a standard methodology of anthropology but increasingly gain more currency in political science as well, especially in explorative studies.¹¹¹ Despite considerable difficulties of access to the field,¹¹² nine interviews of two types were conducted: Firstly, off-record informal interviews which were documented in the field notes; and secondly, recorded semi-structured interviews. All interviews were anonymized and all direct quotes have been edited and approved by interviewees.

108 Cp. Kerpel 2003, Bundesamt für Migration und Flüchtlinge 2013a, Kreienbrink 2013, Bundesamt für Migration und Flüchtlinge 2015d, Bundesamt für Migration und Flüchtlinge 2015a, Kreienbrink and Worbs 2015, Kreienbrink and Worbs 2018

109 Cp. Walzer 1987

110 See list of interviews in the appendix.

111 Cp. Schneider 2010, p. 32

112 Most interview requests as well as permission to conduct field work during an internship were denied. Quotes from interviews were carefully revised and reformulated by interviewees, and released only under the condition of anonymity.

The remainder of the thesis is dedicated to the analysis of the BAMF's research output in chapter 4 by analyzing the material for specific epistemic features arising from the production conditions as laid out in chapters 2 and 3. In a first step, the research output of the BAMF is analyzed quantitatively. The analysis entails Working Papers, research reports and Migration Reports from 2005 to 2015, spanning from the foundation of the Research Group to relatively recent publications. This data is compared against academic knowledge production to determine the relative size and the selection of topics of the BAMF's research output to its peers in academia. While both academic and governmental research focus on socioeconomic integration, discrimination and multiculturalism, both prominent topics in academic research, are almost completely ignored by the BAMF. Methodologically, a clear focus on quantitative research using data from the AZR is discernible.

In a second step, qualitative literature analysis is conducted. Here, the concept of narratives as well as the governmentality-approach is used to construct selected "knowledge-power-complexes"¹¹³: This concept is specifically geared towards analyzing the multiple connections between governance and knowledge production by analyzing the specific practice for which the generated knowledge is relevant. As already mentioned, four selected complexes will be scrutinized: Administrative knowledge with the example of the Migration Reports, depoliticizing knowledge in integration research, defensive knowledge to calm the public debate in the context on research on Muslims, and legitimizing knowledge in regional studies of African and Eastern European Migration.

The four types of knowledge-power complexes render an overview over the topics, methods and features of the BAMF's knowledge production: Two chapters cover integration, and two migration topics; Two chapters focus on broad, general research streams (integration and administrative research) while the other two represent rather specialized knowledge on clearly defined research fields (migration potential and Muslims). Finally, the selection covers both theoretical/conceptual aspects of knowledge production (in the case of general integration research and migration potential) as well as the less theory-oriented, data-driven styles of knowledge production (as in the case of Migration Reports).

The thesis concludes with final remarks on the inherent contradiction involved in the production of both politically relevant and objective knowledge.

113 Cp. Mecheril et al. 2013, p. 20