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Constructions of Effectiveness and the Rationalization of Counterterrorism Policy: The Case of Biometric Passports

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This article argues that counterterrorism effectiveness is a distinct, discursive construction that politicians use to offer a rationalization of measures adopted under conditions of inherent uncertainty. Even in the face of multiple limits of knowability, decision makers need to offer "rational" justifications complying with persisting expectations of "evidence-based" policy and sound deliberation in modern societies. This article develops a new perspective on the political role of counterterrorism effectiveness highlighting the symbolic importance of knowledge claims and prevailing standards of modern rationality. It illustrates its arguments through a case study on the justification of biometric passports as an effective counterterrorist tool.

Starting in June 2013, newspaper reports relying on information provided by whistleblower Edward Snowden revealed the existence of secret, large-scale surveillance and eavesdropping programs run by the U.S. National Security Agency (NSA). In response to this disclosure, U.S. officials rushed to ensure the public that the programs were not only lawful but also an effective measure in the fight against terrorism. The Director of the Federal Bureau of Investigation (FBI), Robert Mueller, for example, argued that the measures under discussion may be able to prevent "another Boston" in the future and—if they had been in existence at the time—might have foiled plans for the 11 September 2001 (9/11) attacks.[1] Both claims defy any empirical validation, but conjectures such as those made by the FBI director are emblematic of a larger problem in post-9/11 counterterrorism policy. On the one hand, decision makers around the globe in response to the attacks of 9/11 have adopted a plethora of invasive counterterrorism measures that expand the powers of security agencies and inflict severe legal, political, and economic costs upon societies. On the other hand, it is seldom possible to assess the effectiveness of responses to the terrorist risk with real certainty and to establish systematic causal links between the introduction and use of individual measures and the prevention of terrorist attacks.[2] Strikingly, the lack of knowledge about effective counterterrorism policies has

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prevented policymakers neither from taking controversial and drastic decisions nor from regularly justifying them with reference to their alleged "effectiveness."

This observation is of imminent importance for our understanding of counterterrorism policies because students and practitioners of counterterrorism regularly propose effectiveness as a crucial measure of "success" in the fight against terrorism. In the first years after 9/11, government officials and policy experts adopted the larger framing of the "War on Terror" and—taking up a rather rhetorical question by Donald Rumsfeld—searched for general yardsticks to assess whether the United States and its allies were "winning or losing" this war.[3] With growing questions regarding the appropriateness and efficacy of the wave of post-9/11 counterterrorism measures, both civil liberties activists and terrorism scholars demanded systematic reviews and called for "meaningful evaluations" and an "evidence-based" approach to counterterrorism.[4] Policymakers have also sought to address mounting criticism through a small, but growing, number of official evaluations and stocktaking exercises.[5] Academic and official claims of effectiveness, thereby, increasingly become a source of legitimation and sight of contention for policies adopted in the name of the fight against terrorism.

So far, the counterterrorism literature, however, has not systematically reflected on the distinct role of effectiveness claims in the politics of counterterrorism. Many terrorism scholars raise serious doubts regarding the effectiveness of counterterrorism politics as well as dominant attempts to measure it.[6] They address the practical problems of measuring effectiveness and suggest alternative metrics, but tend to ignore the inherently constructed nature and political function of effectiveness claims. Studies dealing with the symbolic dimension of counterterrorism stress that communication and visible action can be more effective than repression and counterviolence.[7] Yet, they do not address the symbolic role of effectiveness claims as such. Critical studies on counterterrorist discourse examine how hegemonic threat constructions and enemy images make possible current practices in the "War on Terror"[8] or study how certain forms and representations of knowledge about anticipated future risks enable governments to enact preventive policies of surveillance and social control.[9] This group of critical scholars deals with the discursive, social, and political roots and consequences of counterterrorism policies, but it largely leaves the study of effectiveness to more "traditional" terrorism studies and disregards the distinct role of effectiveness claims in counterterrorist discourse.

This article bridges these two fields and contributes to the empirical study of counterterrorism effectiveness as well as to critical analyses of counterterrorist discourse. It engages the increasingly relevant question of effectiveness while also advancing a critical approach to this issue, which keeps in mind the limits of knowability as well as the constructed nature and political functions of effectiveness claims. It intends neither to dismiss the search for causal links in the fight against terrorism nor to discourage evaluations of invasive legal instruments. Indeed, researchers should hold officials accountable to their claims of effective problem-solving as much as possible. However, keeping in mind the inherent limits of knowability, research should also start to interrogate the underlying representations of and assumptions about effectiveness that drive and enable specific policies in the first place rather than simply restricting itself to the search for better data, models, and methods to measure how effective counterterrorism policies actually are.

This article argues that counterterrorism effectiveness is a distinct discursive construction, which political actors use to offer a rationalization of controversial measures in the fight against terrorism. Even if there are severe limits of knowability, the introduction of far-reaching or drastic measures in modern societies always requires a "rational" justification with reference to their effectiveness based on some claim to "objective" evidence.

As there is not much explicit theory on the concept of effectiveness,[10] this article draws on the wider literature in the sociology of risk, knowledge and organizations to highlight the symbolic, political role of knowledge claims in the response to uncertain risks[11] and the prevailing influence of modern standards of rationality for the legitimacy of political organizations and their decisions.[12] On this basis, the article submits that effectiveness claims are a necessary and powerful—but often overlooked—element of modern justificatory discourses. Their distinct role in the politics of counterterrorism, therefore, warrants special scrutiny and draws attention to the question how politicians, security agencies and other counterterrorist actors construct effectiveness in political discourse and how they utilize it for the justification of concrete policies.

First, the article reviews essential problems in the measurement of counterterrorism effectiveness in order to reveal the limits of an evidence-based counterterrorism policy. Second, it develops the argument that claims of effectiveness are an important and distinct element in the rational justification of counterterrorism policy in modern societies. Third, it features an illustrative case study analyzing the justification of biometric passports through effectiveness claims in the U.S. and the European Union (EU). After discussing the case study results, it finally considers the wider scholarly and political implications of a critical perspective on claims of counterterrorism effectiveness.

Counterterrorism Effectiveness and the Limits of Evidence-Based Policy

Over time, it has become apparent that the wave of measures adopted after 9/11 has resulted in substantial social, political, and economic costs while observers increasingly contest its efficiency and efficacy. To remedy the mistakes of the seemingly arbitrary adoption of a myriad of new measures, critics have called for systematic and transparent cost–benefit calculations[13] and proposed the ideal vision of an "evidence-based" approach to counterterrorism relying on "scientifically rigorous evaluations."[14] These demands reflect a larger trend towards "evidence-based policy" and performance evaluations, which has taken hold in Western democracies over the last few decades and left its imprint on many political and societal sectors, including criminal justice. The underlying rationale has been to use scientific and professional knowledge to determine "what works" and put political decision making on a more "rational" footing, leaving behind the purportedly narrow-minded politics of the day. Sanderson[15] traces this belief back to the legacy of the enlightenment and regards it as manifestation of the "optimistic assumptions of modernity, of progress driven by scientific advance." Answering the question whether "we won" in the "War on Terror" and whether the results were worth the costs, therefore, is a central concern for politicians aiming to preserve their reputation and to justify their decisions.

The problem is that even sophisticated academic research cannot determine the problem-solving effectiveness of most counterterrorism measures with real certainty. There is no shortage of attempts to identify building blocks for strategies or manuals of effective counterterrorism based on assessments of the threat at hand and experiences in specific countries.[16] Yet, they primarily rely on anecdotal evidence and expert assessments trying to put forward specific policy solutions, but they do not conduct systematic evaluation and effectiveness analyses. Only a handful of researchers have developed more general frameworks for the systematic study of the effectiveness of counterterrorism measures. Most of them aim to measure effectiveness using rationalist models and quantitative tools, such as game theory and regression analysis.[17] Scholars have also applied this line

of reasoning to individual measures, such as "targeted killings" and house demolitions in Israel.[18]

However, the state of research basically remains dispersed and confined to probabilistic arguments, abstract models and contested assumptions that do not really add up to cumulative knowledge. While this may partially be attributed to a mere lack of research in a still "under-researched" area,[19] there also seem to be challenges and limitations that are of a more fundamental nature. Studying effectiveness related to complex social and political processes always raises difficult ontological and epistemological problems.[20] However, there are also more peculiar obstacles affecting counterterrorism research. If they agree on anything, terrorism experts seem to share the view that terrorism is a "complicated eclectic phenomenon" that can arise out of various motives and contexts.[21] This not only impedes accurate assessments of the probability of attacks and their expected damage. Statements about the effectiveness of countermeasures are an equally intricate question. An exhaustive review of the counterterrorism effectiveness literature is beyond the scope of this article, but three hurdles seem to stand out in particular: the diversity of measures and contexts, the choice of appropriate indicators and the attribution of observable effects to specific causes.

First, counterterrorism measures are characterized by an almost unmanageable *number and variation* and are implemented in very different *contexts*. They range from innumerable changes in legislation, such as tightened criminal laws or new rules for the disposal of explosives, to countless new practices and technologies, such as biometric passports or cargo scanning. They include rather simple, apparently harmless measures without direct effects on citizens' rights, such as the locking of cockpit doors in aircrafts, as well as comprehensive prevention strategies and large-scale surveillance programs or even "targeted killings." All these measures operate under very different conditions and pose different challenges for the measurement of effectiveness.[22] Moreover, the same measure might yield very different effects in different contexts and cases as the dynamics of terrorism can vary among different times, regions, groups and even individuals. For example, de-radicalization strategies might work in some cases, but fail to achieve their goals or even produce new "radicals" in other contexts by sparking feelings of discrimination and exclusion. Thus, there is no universal standard or accepted cumulative knowledge about counterterrorism that one could easily transfer as "lesson learned" or "best practice" from one case to the other.

Second, the results of assessments strongly depend on the *indicators* one chooses, on whichever basis. Goal-attainment can be measured at various levels ranging from the issuing and implementation of relevant policy measures to observable changes in terrorist behavior to the actual decline of terrorist activity and prevention of attacks as a result thereof.[23] Official counterterrorist objectives follow political logics and are notoriously "imprecise, ill-defined and inconsistent."[24] They are often limited to unspecific and hardly verifiable goals, such as deterring attacks or enhancing information flows, and they regularly pursue counterterrorist purposes alongside other objectives, such as general crime prevention. Public evaluations tend to prefer quantifiable, indirect and intermediate indicators, such as the number of terrorist attacks or arrested and killed suspects. Yet, this does not mean that the measure under consideration contributed to enhanced levels of security and to the prevention of attacks, nor does it rule out other intended or unintended reverse effects.[25] For example, assessments of measures to counter terrorist financing often restrict themselves to measurable output, such as the amount of frozen assets, which does not say anything about the measure's impact on terrorist groups and the likelihood of future attacks.[26] Many indicators of counterterrorism effectiveness rely on contested

assumptions that link measures with expected changes in terrorist behavior. For example, enhanced identification security through biometric passports constitutes a counterterrorist "success" only if one assumes that terrorists will actually counterfeit documents in the preparation of attacks and will be unable or unwilling to do this after the inclusion of biometric features, which is all but self-evident.[27] Moreover, counterterrorism may serve legitimate purposes other than the direct prevention of attacks, such as reducing public fear and retaining trust in democratic institutions.[28]

Third, even if it were possible to agree on adequate indicators for effectiveness, this would not solve the fundamental "attribution problem" (i.e., the causal attribution of an observed effect to a certain policy measure).[29] Apart from the contestedness of the very term, radicalization processes, for example, can depend on so many factors and contingencies that it is hardly possible to disentangle the different influences and establish the counterterrorist effects of de-radicalization programs with any certainty.[30] Impact effectiveness in the sense of deterring terrorists from taking action and preventing terrorist attacks is particularly difficult to prove, as it requires evidence for a direct effect on the non-occurrence of hypothetical events, which might have manifold reasons. The deterrent effects of camera surveillance for potential terrorists, for example, remain highly contested and hard to gauge empirically.[31] In some cases, however, the effectiveness of a measure becomes apparent in retrospect (i.e., when it is possible to establish a link between a certain measure and the disclosure of a specific plot). In 2006, for example, a terrorist plot aiming to detonate peroxide-based liquid explosives aboard aircrafts crossing the Atlantic was thwarted due to initial police surveillance of a suspect. Yet, even in such cases it remains difficult to say in how far a specific measure was actually indispensable and how it related to other measures executed in parallel. Moreover, officials offer their own narratives of why a plot failed and may present the available information accordingly.[32]

Constructions of Effectiveness and the Rationalization of Counterterrorism Policy

The previous section revealed that "hard facts" about the effectiveness of counterterrorism measures are often not available. The next section starts from the observation that even in the absence of reliable knowledge politicians offer justifications for their decisions based on claims of effectiveness. It develops the argument that policymakers construct claims of counterterrorism effectiveness as a rationalization strategy for measures adopted under conditions of inherent non-knowledge in order to comply with prevailing standards of "rational" decision making in modern societies. To make this argument, it draws on the wider literature on the symbolic function of knowledge claims in the politics of uncertain risks as well as on scholarship stressing the persisting importance of modern notions of rationality for the legitimacy of political actors and organizations.

The Need for Rationalization: Uncertainty, the Imperative to "Do Something" and Modern Rationality

Terrorism, like other modern risks, is characterized by multiple "unknowns" and therefore fundamentally defies the logic of calculability, controllability and malleability that lies at the heart of the modern state.[33] Decision makers, thus, cannot rely on established, consensual knowledge about effective responses. However, politicians still need to prove their responsiveness to public expectations that they take care of the risk of terrorism, an

expectation politicians themselves often fuel and exploit. As aptly outlined by Ulrich Beck in his "risk society" thesis, even in situations that are "radically undecidable" due to a lack of knowledge, decision makers feel obliged to respond to demands for the effective protection of citizens against multiple threats. This forms the essential basis of the modern states' legitimation and self-image.[34] This problem applies especially to terrorist attacks as they directly question the ability of states to protect their citizens and seek to spread fear and anxiety. As noted by Bruce Schneier, governments "have to be seen as doing something" and often respond with "security theatre."[35] Examples range from the placement of policemen armed with heavy machine guns in public places to the deployment of visible and "impressive" technologies. Consequentially, politicians feel obliged to take visible and resolute action while traditional standards of problem-solving effectiveness seem increasingly inappropriate. If the main goal of counterterrorism policy is symbolic action to soothe the public's nerves and to demonstrate the state's capacity to act, measures of success should focus on effects on public attitudes. While this may well be a legitimate strategy in some instances,[36] it also means that the actual prevention of attacks is no longer the crucial benchmark

The contemporary logic of precaution takes this imperative to "do something" to the extreme by requiring governments to prevent potentially catastrophic future risks at almost all costs, however low their probability might actually be. This idea renders traditional, rational risk management techniques obsolete and makes non-action seem wholly irresponsible following the idea of "better safe than sorry."[37] Because this kind of precautionary thinking is based on speculative reasoning about possible worst-case attacks in the future, the selection of effective measures can be based neither on past experience nor on established knowledge about future developments. From the perspective of precaution, preventive counterterrorism is not about targeted and experience-based effectiveness in fighting concrete threats, but about the sheer possibility that a policy might contribute to the prevention of unknown future risks, for example by identifying "suspicious" behavior or persons. Any measure being taken has at least the potential to make some future contribution and, as Marieke de Goede put it, "action itself is understood as a measure of success."[38] Thus, one might conclude that the problem-solving effectiveness of counterterrorism measures is deemed increasingly unsuitable or even irrelevant by many political actors.

However, even if politicians pursue non-functional goals and follow different logics, modern rationalized societies commonly expect them to base their decisions on credible evidence and reliable knowledge about expected effects. As hinted at above, the idea of evidence-based policy is deeply encoded in modern societies. It has come into its own in the context of neoliberal reform agendas but it has its deeper roots in "the continuing influence of the 'modernist' faith in progress informed by reason" that is "proving robust against post-modernist attacks on notions of rationality."[39] The underlying rationality expectation, thus, relates closely to fundamental Western norms and ideas, which have emerged in the peculiar process that Max Weber famously described as "occidental rationalization."[40] These norms and ideas now constitute an essential yardstick for appropriate behavior by Western states. It is a key insight from sociological neoinstitutionalism that the fate of modern political organizations depends on the symbolic reproduction of established standards of how their environment expects them to work "rationally," rather than on effective production as such.[41] Thus, even if Frank Furedi may well be right in submitting that contemporary counterterrorism policy is "anything but evidence-based" and rather promotes and follows from a "culture of fear,"[42] the belief

in and the image of evidence-based policy seem to prevail and politicians need to address them.

Strategies of Rationalization: Effectiveness Claims, Symbolic Politics, and Rational Justifications

The next question is how exactly politicians manage to comply with prevalent standards of rationality while adopting decisions under conditions of inherent non-knowledge. One political coping strategy described and criticized by many studies in the counterterrorism literature is to rely on enemy constructions and invocations of crisis, such as images of "evil" and "war," that highlight the necessity of resolute action and supersede concerns for rational decision making.[43] Other authors have pointed out that politicians seek to depoliticize their actions by shifting action toward expert circles in security agencies, technology companies, and government-sponsored research institutions who work on the basis of their specialized expertise and operate largely beyond public attention and scrutiny.[44] These strategies certainly capture important dynamics of the politics of counterterrorism. However, the discussion above revealed that expectations of rational, evidence-based policy are deeply entrenched in modern societies and that imminent threat images cannot fully deactivate them. Thus, politicians always must convince their audiences that a specific measure can be expected to "work" and offer concrete gains in security. Waldron, for example, states that "fear is only half a reason for modifying civil liberties" and politicians also need to make the case that a measure "will actually make a difference."[45] In a similar vein, Wolfendale stresses that "if radical countermeasures are to be accepted, there must be some evidence that they are actually effective in staying the threat of terrorism."[46] Hence, politicians face a clear demand to offer credible arguments for the effectiveness of the adopted measures.

Rationalizing decisions through claims of effectiveness appears to be a logical strategy for policymakers to deal with this problem. When they cannot rely on established knowledge but still want to demonstrate that they "do something" about the problem and to give the impression of rational decision making, politicians regularly replace the concern for functional problem solving with symbolic politics signaling compliance with standards of rationality through visible talk and action. Previous research revealed that the response to terrorist attacks often does not follow an image of rational decision making carefully weighing available options with regard to their problem-solving capacity, but rather follows political and organizational logics of actors concerned with their own legitimation and political survival.[47] Especially when it comes to wicked problems defying reliable knowledge, politicians tend to rely more on public symbols and rituals that reassure anxious publics about the problem-solving capacities of their government than on tangible outcomes.[48] It is tantalizing for politicians to present decisions in a way that might be subsumed under some standard of modern rationality in hindsight in order to ensure a basic degree of legitimacy. Effectiveness and efficiency claims are central components of this ingrained belief in rationality. Political organizations and their leaders, thus, have strong incentives to focus on procedures and rhetoric that serve this belief. This way, they signal their adherence to institutionalized "myths" of rational organization and decision making to their environment[49] and adopt strategies of rationalization that present their actions as being in line with standards of "reason, rationality and intelligence."[50] Claiming counterterrorism effectiveness then becomes a largely symbolic enterprise aiming for political support and seeking to legitimize decisions arising out of various political dynamics and interests.

Constructions of effectiveness backed up by claims to authoritative knowledge are an especially powerful strategy of generating legitimacy. Ironically, knowledge is highly valued by modern societies and enjoys special authority at a time when academic evidence and expertise are more fragile and contestable than ever before. Due to this special status, expert-based representations of knowledge about risks and effective countermeasures serve as a specific "mode of justification" as they built on a distinct esteem for rational, technical facts.[51] In the counterterrorism field, Rebecca Sanders, for example, observed a strategy of "legal rationalisation" whereby U.S. counterterrorism officials and government lawyers publicly testified that controversial measures like "enhanced interrogation" and "extraordinary rendition" were indeed in line with national and international law—or a specific interpretation thereof—with the aim "to maintain legitimacy, avoid accountability, and establish immunity."[52] One can expect effectiveness claims to perform a similar function as proponents of a counterterrorism measure need to line out not only why it is legal, but also why it will actually attain the goals it sets out to achieve. For example, national and international bodies have produced numerous effectiveness assessments of measures attempting to counter terrorist financing. Apparently, these institutions are under "strong political pressures to demonstrate that policies are rational."[53] Knowledge claims about effectiveness, thus, are all but apolitical or natural. They rather represent a political choice that can be contested.

Times of Rationalization: Post-9/11 Counterterrorism and the Growing Demand for Justification

Rationalization based on constructions of effectiveness has gained importance as a political strategy with growing challenges raised toward post-9/11 counterterrorism measures that demanded convincing public justifications. During periods of perceived emergency and legislative exception in the aftermath of major attacks, there is often an atmosphere of political goodwill allowing elites to push through far-reaching proposals in accelerated decision-making processes without having to fear in-depth public debates about the efficacy of proposed steps. However, the belief in rational decision making remains active even during times of crisis. Rationalizations based on references to the effectiveness of specific measures, thus, remain a component of the counterterrorist discourse at all times. The U.S. Congress adopted the USA PATRIOT Act during a legislative procedure of unprecedented speed in October 2001. However, the U.S. Department of Justice in July 2002 had to answer 50 questions from the House of Representatives and stressed that the new powers had "enabled the government . . . to respond more efficiently and effectively to the intelligence and terrorist threat against us."[54] It is telling that it had to reply to these questions only after the adoption of the measure and in response to a formal Congressional request. However, this episode illustrates that the government quickly had to construct a basic narrative of effectiveness to ensure acceptance for its measures, however spurious its evidence might have been in the end.

Demands for rational justification increased further when the immediate sense of post-9/11 emergency began to fade. There has recently been a palpable move toward "normal politics."[55] This has allowed previously marginalized actors in legislatures, courts, academia, or civil society to cut through the dominance of sovereign executive powers to at least some degree and to call for the presentation of new evidence about the actual effects of policies adopted after 9/11. In this changing environment, effectiveness became "a case of legitimacy and credibility" for politicians and government officials.[56] In response, the U.S. government, for example, offered a more extensive assessment of

"successes and challenges" in the fight against terrorism by providing broad "before and after 9/11" comparisons and highlighting a whole range of specifiable achievements.[57] In 2010, the European Commission also sought to accentuate its "main achievements" in the fight against terrorism.[58] Beyond such broad policy documents, we have also witnessed the emergence of a small, but growing number of official evaluations. This encompasses general reviews of national counterterrorism policies, such as in the Netherlands, as well as specific evaluations of individual measures, such as of the EU's data retention directive.[59] These documents, however, typically limit themselves to assessments of the frequency with which a measure was used. In some cases, they also list individual cases in which a measure was assumed to have had contributed to the discovery of a plot. Yet, they do not elaborate why exactly it was essential and whether the same effect could have been achieved through other measures. Our previous discussion suggests that these evaluations served mostly as a symbolic rationalization after the fact by governmental actors seeking *ex post* justifications for decisions of whose effects they cannot have much knowledge. However, it is important that politicians apparently feel a growing need to address political challenges through such justifications.

Claiming Effectiveness: The Rationalization of Biometric Passports

This section looks at the case of biometric passports in order to illustrate how politicians rationalize counterterrorism measures through constructions of effectiveness. The rise of biometrics has been part of a broader move towards preventive techniques of risk management and intensified border policing, which was not invented, but accelerated and amplified by 9/11 and its aftermath.[60] Numerous governments, including the U.S. and EU member states, have advocated and introduced biometric passports in the name of the fight against terrorism. Observers have not only debated the legal appropriateness and technical reliability of biometrics, but also engaged the question of whether it does anything to constrain terrorist behavior.[61] This article does not primarily scrutinize the different answers to this question in terms of their empirical validity. Rather, the very difficulty of determining the counterterrorism effectiveness of biometric passports makes this an interesting case. Hence, the article wonders how political actors have constructed the effectiveness of biometric passports in post-9/11 counterterrorist discourses in light of the lack of established knowledge about the measure's counterterrorist effects. The existing literature in security studies and criminology sheds light on important dynamics of control, surveillance and securitization in the field of biometrics.[62] However, the discussion above leads us to expect that politicians in any event need to make the case that this specific instrument makes an effective contribution to the goal of fighting terrorism even if it was adopted under conditions of uncertainty and may follow various other logics and agendas. This study, therefore, contributes to the debate on biometrics by analyzing the rationalization of biometric passports based on claims of effectiveness as a special feature of this measure's discursive justification.

This examination focuses on debates in the U.S. and the EU in order to get a broad picture of justifications using claims of effectiveness in two different legal, cultural, and political spaces, which both took a leading role in the fight against terrorism. It surveys the respective post-9/11 counterterrorist discourses, searching for explicit references to the effectiveness of biometric passports as a counterterrorist tool. Based on a wide range of sources (public statements of politicians and representatives of security agencies in the media, in parliamentary hearings and reports) it documents the most visible and common discursive patterns with at least one respective example. The article does not feature an

exhaustive discourse analysis of the general debate on biometric passports. Moreover, the emphasis here is less on the identification of case-specific differences between the U.S. and the EU than on the analysis of common patterns in the use of effectiveness claims as a first step to highlight and understand their role. The analysis focuses on effectiveness claims by supporters in the political elite, who have the responsibility and power to justify the introduction of new counterterrorist measures.

In an inductive manner, the analysis discerned three basic patterns of effectiveness claims in the discourse on biometric passports: (1) one casting biometrics as a functioning technology with the proven ability to enhance security, (2) one inferring effectiveness from specific assumptions about the need for foreign terrorists to travel clandestinely and hide their identity, and (3) one based on illustrative real-world cases and ostensible narratives of success.

Proven Functionality and Enhanced Security

One recurrent pattern extractable from the sources was the construction of the effectiveness of biometric passports in terms of their character as a functioning state-of-the-art technology that contributes to enhanced levels of security by impeding identity fraud, especially but not only in relation to terrorist attacks. The most basic and most common manifestation of this kind of effectiveness argument came in the form of superficial statements claiming "improved security" without any detailed elaborations. Supporters presented biometric passports as per se helpful in fighting terrorism because they are part of a technologically advanced screening system. They simply equated biometric information with "more security" and, thereby, enhanced "effectiveness." The European Commission's initial proposal for a regulation on biometric passports, for example, stressed that it expected the instrument to "contribute towards internal security and combating terrorism."[63]

However, our survey also found statements deducing the effectiveness of biometric passports more explicitly from their technical ability to verify personal identities unequivocally and based on neutral indicators. Many justifications built on a general sense that these technologies can be expected to "work." The U.S. Homeland Security Strategy, for example, drew on historical analogies and asserted that "just as science and technology have helped us defeat past enemies overseas, so too will they help us defeat the efforts of terrorists to attack our homeland and disrupt our way of life."[64] Another element of the measure's rationalization was its presentation as a technological solution unmatched in its performance and reliability. In 2006, Gordon Brown, then the United Kingdom's Treasury Chancellor of the Exchequer, characterized biometrics as "most up to date and the most secure means to protect our identity from being stolen."[65] This view also became apparent in a statement by FBI Deputy Director Mike Kirkpatrick who concluded that "[t]he only way to trace a terrorist is through biometrics."[66] U.K. Home Secretary David Blunkett expressed a high trust in biometric technology, even alleging that it "will make identity theft and multiple identity impossible—not nearly impossible, impossible."[67]

These claims were backed up by expert statements from scientific organizations and private enterprises, which—keeping in mind our discussion above—should be expected to add additional authority. A report from the National Science and Technology Council,[68] for example, submitted that biometric identification provides security agencies with a technology that is "unique, reliable, convenient and virtually impossible to forge." In a white paper issued only two weeks after 9/11, biometrics company Visionics[69] underlined that the "technology has reached sufficient levels of maturity and scalability" and can now

be used as a "a key ingredient in the development of a more effective international security framework." In October 2001, Paul Collier, the executive director of the Biometrics Foundation, testified before Congress that biometrics is "an effective tool in our mission to combat terrorism" and had given proof of its functionality in other areas serving as a "real world proving ground."[70]

Such claims of effectiveness relate directly to modern societies' esteem for rationality and technology. They mirror a widespread "technopositivism" that places great trust in "objective, rational, cutting-edge technologies" and therefore can be expected to enjoy a special sense of authority.[71] Casting biometric passports as a "scientific, neutral and 'smart' solution" working on the basis of established technology and comprehensive databases made its use for the verification of personal identities seem natural and "beyond question."[72] Supporters of biometrics, hence, seemed to imply that "the certainty of the answers, the exclusion of doubt and the perceived infallibility of the technological systems, are a vital part of their effectiveness."[73] Up to now, a "known terrorist" has not been arrested after presenting his biometric passport at a state's border, but as long as the ability of more sophisticated technologies to identify more people categorized as "risky" with a higher degree of certainty is treated as a counterterrorist success as such, the system may indeed be deemed effective. The singling out of mere suspects on various bases, however, does not tell us whether this procedure does anything to prevent terrorist attacks. Representations of biometric passports put this aside and instead simply equated technological "sophistication" with effectiveness. However, what matters for officials is whether citizens and voters buy into these arguments.

Foreign Threat, Clandestine Travel, and Border Control

In addition to arguments describing it as a generally functioning technology, supporters also cast biometrics as an effective counterterrorist tool by linking it to expected patterns of terrorist behavior in order to let a direct counterterrorist effect appear plausible. Proponents of biometrics always advanced the technology with reference to different problems, including illegal migration or human trafficking, but particularly in the immediate aftermath of 9/11 the link to terrorism became prominent. A second observable discursive pattern, consequentially, derived the effectiveness of biometric passports from specific assumptions about terrorists' origin and their behavior. Especially participants in the U.S. discourse sold 9/11 as evidence of the country's vulnerability in times of globalization. These voices presented the hijackers' access to the country as a symbol for the failures and inadequacies of the country's national security architecture and as the first in a series of missed opportunities to stop the terrorists, a problem that now had to be fixed.[74]

Many statements issued by supporters of biometric passports described terrorism as a foreign threat infiltrating a country's borders and emphasized the need for terrorists to travel clandestinely using forged identification documents. The 9/11 Commission concluded that "for terrorists, travel documents are as important as weapons" and therefore "targeting terrorist travel is at least as powerful a weapon against terrorists as targeting their money."[75] During a Congressional hearing in April 2005 Representative Charles Sensenbrenner, the principal author of the *Enhanced Border Security and Visa Entry Reform Act* of 2002, stressed that the hijackers of 9/11 were all foreigners that had officially entered the United States prior to the attacks. He apparently took the link to counterterrorism for granted and rebuffed possible concerns by the statement that "the need for including the passport and visa requirement was not in dispute then [in 2002], and should not be in dispute now."[76] This way, the technological advancements of biometric

passports referred to above could be linked to patterns of terrorist behavior by casting it as a necessary and adequate step to keep pace with criminals and terrorists. In making this link, politicians could refer to knowledge claims about terrorist behavior that were prominent in many academic and administrative expert circles. Whether true or not, these claims signal the symbolic adherence to standards of evidence-based policy.

Beyond that, identified statements were generally vague. Many proponents pointed to a specific combined function of biometric identification, namely that including biometric features in personal documents impedes counterfeiting and therefore known suspects must use valid passports to enter a foreign country and can be singled out right at the border. In a 2005 Congressional hearing, Elaine Dezenski, U.S. Acting Assistant Secretary and Director for Border and Transportation Security in the Department of Homeland Security (DHS), stated: "properly used, biometrics have been shown to be highly effective in verifying identity. Without question, biometrics will strengthen U.S. border security by ensuring that the person carrying a U.S. passport is the person to whom the passport was issued."[77] The EU counterterrorism strategy simply pointed out: "We need to enhance protection of our external borders to make it harder for known or suspected terrorists to enter or operate within the EU. Improvements in technology for both the capture and exchange of passenger data, and the inclusion of biometric information in identity and travel documents, will increase the effectiveness of our border controls and provide greater assurance to our citizens."[78] Some supporters lined out the possibility that biometric data found in Afghanistan and Iraq or discovered terrorist sitess elsewhere can be used to identify terrorist suspects when they enter a specific country and that this might discourage terrorists from crossing international borders. On this basis, U.S. Homeland Security Secretary Michael Chertoff argued that biometric identification "creates a powerful deterrent for anybody who has ever spent time sitting in a training camp and training or building a bomb in a safe house or carrying out a terrorist mission on a battlefield."[79] Yet, such a deterrent effect is extremely difficult to prove.

Specific Cases and Narratives of "Success"

A measure's ability to contribute to security in tangible real-world cases of counterterrorism provides a particularly powerful proof for its effectiveness. Respective narratives of success are a useful argument for policymakers and security officials, as visible, for example, in recent debates about the contribution of NSA bulk surveillance to the disclosure of plots and the prevention of attacks. This holds true especially when they can benefit in some way from authoritative statistics and numbers. They can be expected to be particularly valued because "in a Western, science-and-technology-oriented society, many feel that if a problem can be quantified, it can be solved."[80]

During the initial debate on the introduction of biometric passports, the proponents illustrated the measure's necessity through case-based retrospective reasoning about the potential future effects of an intervention using biometric passports. During a Congressional hearing right after 9/11, Democratic Senator Dianne Feinstein gave an example of such thinking:

> For example, in the case of at least two of the hijackers, authorities had pictures of them as suspects prior to the attack and airport cameras actually photographed them but because these cameras did not use facial biometric systems, security was not alerted and the hijackers remained free to carry out their bloody plans. ... We also know that a number of the hijackers easily

> secured false ID cards, cards that they used to disguise their identities. If we had biometric devices in place these attempts may well—we cannot say for sure, but had a chance of being stopped.[81]

This construction was not only speculative but also essentially grounded on factoids and far-fetched analogies. None of the hijackers actually hid their identity, so biometric devices would not have helped to detect their "real" identity. Two of the hijackers Feinstein spoke about, Abdul Azziz Alomari and Ahmed Saleh Alghamdi, secured ID cards using false Virginia residency certifications. These indicated that they had residences in Falls Church, VA and disguised the fact that they resided in motels elsewhere. In order to get the certifications needed to obtain Virginia ID cards Alomari and Alghamdi bribed the secretary of a lawyer via an intermediary.[82] This fraudulent acquisition of documents, therefore, was not intended to disguise their identities, but their whereabouts and, more important, biometrics could not have prevented it in any way. In another case, the DHS pointed to stolen passports found with two suspected terrorists having assassinated a commander of the Northern Alliance in Afghanistan prior to 9/11 and to the theft of 708 blank passports, which were eventually "activated" by 21 people to enter the United States. It interpreted this as evidence for terrorists' general access to fake identities and the potential need to check their identification documents, although these 21 people had no terrorist ties.[83]

A few statements issued after the US-VISIT program had begun collecting biometrics from international visitors at all international air, sea, and land border ports of entry tried to back up the effectiveness of biometric passports through evidence for the measure's tangible contributions. These statements, however, tended to be hazy or even outright misleading. During a Congressional hearing, Frank Moss, the U.S. Deputy Assistant Secretary of State for Passport Services, boasted about a "significant increase" in the number of passport investigations (2,400) and arrests (400) for the fiscal year 2005 that had ostensibly been made possible by biometric passports. Yet, although repeating the phrase that "travel documents today are as valuable to terrorists as weapons" he did not qualify how far these cases relate to the threat of terrorism.[84] In another instance, DHS Under Secretary Rand Beers cited the cases of a Turkish man who used a false identity and was refused employment at a U.S. nuclear power plant and of two suspects featured on a U.S. terrorist watchlist who were denied asylum in Australia after a cross-check with US-VISIT.[85] However, the person involved in the first case had no proven terrorist connections at all and in the last case there was no evidence for any intention to commit an attack in the country they were entering.

One might reason that the use of such artificial examples is indicative of a lack of actual real-world cases providing unambiguous evidence for the measure's counterterrorist effectiveness. On the one hand, this is no surprise during the initial debate as proponents of the introduction of biometric passports at this stage could not hark back to a long-lasting experience with such travel documents. In order to make a convincing case that biometrics will be effective in the future, they had to speculate about prospective terrorist behavior and potential effects of biometric passports. Several years after the introduction of biometric passports, however, proponents still are not able to present a case where a known terrorist has been caught because he or she was identified via a biometric passport.[86] There have been many refusals at U.S. and EU borders as well as refutations of visa applications. However, to date there is no available data documenting the reasons for refusals at borders or of visa applications that could shed light on the role of biometrics.[87] Moreover,

neither the U.S. nor the EU have thoroughly evaluated or demonstrated the effectiveness of biometric passports in the fight against terrorism. Consequentially, the kind of reasoning described above has not changed significantly up to now and remains as speculative as ever before.

Constructing Biometric Effectiveness: Between Rhetorical Coercion and Rational Justification

The case study on biometric passports underlined that politicians presented effectiveness-based rationalizations of a measure on whose effectiveness they cannot have had much knowledge and that was adopted during a period of high public expectations that politicians "do something" about the terrorist risk. The survey of the discourse showed how statements portrayed biometric passports as an effective counterterrorist tool because they offer a technological solution with proven functionality and the ability to prevent attacks, address the pertinent problem of clandestine terrorist travel and insufficient border protection, and deal with tangible real-world cases. All three of these patterns relate to modern standards of rationality, although they back them up in specific ways: by referring to a widespread esteem for technological solutions, prominent knowledge claims about terrorist behavior or the power of statistics. The analysis also confirmed that effectiveness considerations have been part of the debate from the beginning, but are becoming increasingly prominent and systematic through more recent reports and inquiries.

However, a surprisingly high number of claims of effectiveness within these patterns were rather brief, without detailed elaborations and sometimes based on far-fetched analogies. Moreover, none of the statements provided concrete evidence for how biometrics should help to catch or repel "9-11-style" perpetrators, which are carrying valid passports but are not known or suspected to be terrorists. One may argue that proponents of biometric passports constructed their case based on deliberate simplifications, flawed evidence, or outright misrepresentations to sell the policy to targeted audiences. For actors in government and industry supporting biometrics for various political, institutional, or economic interests, effectiveness claims, therefore, may not be much more than a "marketing strategy" capitalizing on the broader "panic campaign" following 9/11.[88] From this perspective, they were a case of "rhetorical coercion."[89]

Yet, our theoretical discussion suggests that the issue runs deeper than mundane run-of-the-mill political rhetoric and the manipulation of evidence by actors who actually know better. Rather, it is about the symbolic construction of effectiveness as a rational justification in the very absence of reliable knowledge. Under conditions of uncertainty, proponents of biometric passports' effectiveness constructed the measures' effectiveness in order to keep up a legitimating impression of rational decision making. Supporters of biometrics spoke "as if" they had knowledge of the effects of introducing that measure and bringing it into use. Claiming effectiveness for biometrics, therefore, constitutes a distinct political strategy for a policy field characterized by a pronounced pressure to act as well as by sweeping uncertainty.

It is noteworthy that constructions of effectiveness—in the case at hand—did not translate into one coherent and hermetic linear narrative immune to any challenges. Counterterrorist discourse is "not monolithic" and "there are always contestations and sites of resistance."[90] Even if supporters dominated the official discourse and the public seemed to buy into many of their basic arguments, many experts and observers in academia or civil rights groups continued to bring forward their criticism and question the measure's legality, functionality, and effectiveness.[91] All arguments by supporters, nevertheless,

suggested that using biometrics would facilitate some control of the terrorist risk. Building on existing narratives about terrorism as a risk requiring a resolute response, they, hence, added and presented a distinct narrative of effectiveness stressing the concrete problem-solving effects of the measure. This narrative did not receive unequivocal endorsements by all audiences but it gained salience in the counterterrorist discourse. From a political perspective, such a rationalization serves politicians and security officials well because it allows them to signal their adherence to prevailing standards of modern rationality, sound reasoning, and evidence-based policy. The challenge for critical scholarship is to unveil the political and symbolic nature of this kind of justification and the fragile basis on which it rests.

Conclusion

This examination's point of departure was the observation that politicians, despite a prevalent lack of reliable knowledge, regularly justify the adoption of invasive counterterrorism measures with reference to the measures' effectiveness. The article argued that they use constructions of effectiveness resonating well with prevalent expectations of rational problem solving, sound deliberation, and evidence-based policy in order to offer a rationalization of counterterrorism measures adopted under conditions of uncertainty and nonknowledge. The analysis highlighted the symbolic role of effectiveness claims in the politics of counterterrorism. It illustrated the relevance of its arguments through a case study on the justification of biometric passports as an effective counterterrorist tool. As discussed above, many of the arguments put forward in favor of biometrics' effectiveness were brief and indirect and did not feature sophisticated elaborations, thereby mirroring the pertinent shortcomings and gaps in academic studies of counterterrorism effectiveness. It is difficult to determine when these constructions succeed and to estimate their concrete impact on the acceptance of counterterrorism measures. Yet, effectiveness claims are not trivial. The very fact that political actors draw on them in the absence of reliable knowledge but still present them as authoritative assessments of a measure's efficacy and adequacy makes them a distinct, powerful, and hard to challenge part of the larger counterterrorist discourse in modern societies.

These findings have direct ramifications for scholarly and political approaches to counterterrorism. This study does not suggest that studying counterterrorism effectiveness as such is futile. Yet, it serves as a reminder for students of counterterrorism effectiveness to acknowledge the margins and ambiguities of available knowledge and reflect on the social and political consequences of their results. For critical research on the discursive dimension of the fight against terrorism, this implies the need to take into account processes of rational justification based on effectiveness, adding to existing scholarship on the enabling of certain policies through threat constructions and securitization moves. Scholarly interventions seeking to challenge contemporary counterterrorist practice and discourse need to address this aspect and denaturalize effectiveness claims by revealing their inherently fragile knowledge base.

The article offers neither definite findings on the actual effectiveness of biometric passports and other counterterrorism measures nor readymade recommendations regarding preferable measures promising better results. Rather, it suggests that in the face of scarce knowledge and controversial consequences political decision makers should follow an imperative of self-restraint and openly communicate dilemmas and uncertainties that no evidence-based approach can ultimately overcome. When academic and professional knowledge fail to provide the basis for the determination of a measure's

effectiveness the necessary agreement in democratic societies can only emerge from an open and transparent political debate. Politicians as well as citizens cannot outsource this debate to academic studies and expert evaluation. Societies need to deliberate the terrorist risks they want to tackle and the means and costs they regard as reasonable, appropriate, and bearable, without presupposing an automatic priority for security in the case of doubt.

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Notes

1. Dan Roberts, "Spying Program Can Prevent another Boston, Says FBI Chief," *The Guardian*, 14 June 2013, p. 28.

2. Cynthia Lum, Leslie W. Kennedy, and Alison Sherley, "Are Counter-Terrorism Strategies Effective? The Results of the Campbell Systematic Review on Counter-Terrorism Literature," *Journal of Experimental Criminology* 2(4) (2006), pp. 489–516; Eric van Um and Daniela Pisoiu, "Assessing Effectiveness in Counterterrorism Policy," in Hendrik Hegemann, Regina Heller and Martin Kahl, eds., *Studying Effectiveness' in International Relations: A Guide for Students and Scholars* (Opladen et al.: Barbara Budrich, 2013), pp. 255–279.

3. Daniel Byman, "Measuring the War on Terrorism: A First Appraisal," *Current History* 102 (668) (2003), pp. 411–416; Harlan Ullman, "Is the US Winning or Losing the Global War on Terror and How Do We Know?," *Australian Journal of International Affairs* 60(1) (2006), pp. 29–41.

4. American Civil Liberties Union, *Reclaiming Patriotism: A Call to Reconsider the Patriot Act*, March 2009. Available at https://www.aclu.org/sites/default/files/pdfs/safefree/patriot_report_20090310.pdf (accessed 2 June 2014); Cynthia Lum and Leslie W. Kennedy, "Evidence-Based Counterterrorism Policy," in Cynthia Lum and Leslie W. Kennedy, eds., *Evidence-Based Counterterrorism Policy* (New York: Springer, 2012), pp. 3–9.

5. See, for example, European Commission, *The EU Counterterrorism Policy: Main Achievements and Future Challenges,* 20 July 2010, COM2010(386) final; Government of the Netherlands, *Counterterrorism Measures in the Netherlands in the First Decade of the 21st Century: On the Cause, Application, Assessment and Amendment of Counterterrorism Measures in the Netherlands, 2001–2010*, 28 January 2011. Available at http://english.nctv.nl/publications-products/reports/index.aspx?q=o&p5=rapport&p7=2000-06-21&select=4 (accessed 2 June 2014).

6. Alexander Spencer, *The Problems of Evaluating Counter-Terrorism*, UNISCI Discussion Papers, 12, October 2006. Available at http://epub.ub.uni-muenchen.de/13771/1/UNISCISpencer12.pdf (accessed 2 June 2014); Raphael Perl, *Combating Terrorism: The Challenge of Measuring Effectiveness*, CRS Report for Congress, 12 March 2007. Available at http://www.fas.org/sgp/crs/terror/RL33160.pdf (accessed 2 June 2014); Alex P. Schmid and Rashmi Singh, "Measuring Success and Failure in Terrorism and Counter-Terrorism: US Government Metrics of the Global War on Terror," in Alex P. Schmid and Garry F. Hindle, eds., *After the War on Terror: Regional and Multilateral Perspectives on Counter-Terrorism Strategy* (London: RUSI Books, 2012), pp. 33–61; Teun van Dongen, *Break it Down: An Alternative Approach to Measuring Effectiveness in Counterterrorism* (Berlin: Economics of Security, 2009); John Horgan and Kurt Braddock, "Rehabilitating the Terrorists? Challenges in Assessing the Effectiveness of De-radicalization Programs," *Terrorism and Political Violence* 22(2) (2010), pp. 267–291; Michael Stohl, "Winners and Losers in the War on Terror: The Problem of Metrics," in Rafael Reuveny and William R. Thompson, eds., *Coping with Terrorism: Origins, Escalation, Counterstrategies, and Responses* (Albany: SUNY Press, 2010), pp. 349–367; Lasse Lindekilde, "Value for Money? Problems of Impact Assessment of Counter-Radicalisation Policies on End-Target Groups: The Case of Denmark," *European Journal on Criminal Policy and Research* 18(4) (2012), pp. 385–402.

7. Arjun Chowdhury and Ronald R. Krebs, "Talking about Terror: Counterterrorist Campaigns and the Logic of Representation," *European Journal of International Relations* 16(1)

(2010), pp. 125–150; Beatrice de Graaf, *Evaluating Counterterrorism Performance: A Comparative Study* (London: Routledge, 2011).

8. Richard Jackson, *Writing the War on Terrorism: Language, Politics and Counter-terrorism* (Manchester: Manchester University Press, 2005); Ronald R. Krebs and Jennifer K. Lobasz, "Fixing the Meaning of 9/11: Hegemony, Coercion, and the Road to War in Iraq," *Security Studies* 16(3) (2007), pp. 409–451.

9. Louise Amoore and Marieke de Goede, "Governance, Risk and Dataveillance in the War on Terror," *Crime, Law & Social Change* 43(2–3) (2005), pp. 149–173; Claudia Aradau and Rens van Munster, "Governing Terrorism through Risk: Taking Precautions, (Un)Knowing the Future," *European Journal of International Relations* 13(1) (2007), pp. 89–115.

10. Hendrik Hegemann, Regina Heller and Martin Kahl, eds., *Studying "Effectiveness" in International Relations: A Guide for Students and Scholars* (Opladen: Barbara Budrich, 2013).

11. Murray Edelman, *The Symbolic Uses of Politics* (Urbana-Champaign: University of Illinois Press, 1964); Christina Boswell, "Knowledge, Legitimation and the Politics of Risk: The Function of Research in Public Debates on Migration," *Political Studies* 57(1) (2009), pp. 165–186.

12. John Meyer and Brian Rowan, "Institutionalized Organizations: Formal Structures as Myth and Ceremony," *American Journal of Sociology* 83(2) (1977), pp. 340–363; Martha S. Feldman and John G. March, "Information in Organizations as Signal and Symbol," *Administrative Science Quarterly* 26(2) (1981), pp. 171–186.

13. John Mueller and Mark G. Stewart, "The Terrorism Delusion: America's Overwrought Response to September 11," *International Security* 37(1) (2012), pp. 81–110.

14. Lum and Kennedy, "Evidence-based Counterterrorism Policy," p. 4.

15. Ian Sanderson, "Evaluation, Policy Learning and Evidence-Based Policy Making," *Public Administration* 80(1) (2002), p. 2.

16. See, for example, Yonah Alexander, ed., *Counterterrorism Strategies: Successes and Failures of Six Nations* (Washington, DC: Potomac Books, 2006); Paul K. Davis and Kim Cragin, eds., *Social Science for Counterterrorism: Putting the Pieces Together* (Santa Monica: RAND Corporation, 2009).

17. Walter Enders and Todd Sandler, "The Effectiveness of Antiterrorism Policies. A Vector-Autoregression-Intervention Analysis," *The American Political Science Review* 87(4) (1994), pp. 829–844; Walter Enders and Todd Sandler, *The Political Economy of Terrorism* (Cambridge: Cambridge University Press, 2006), chapter 4.

18. Edward H. Kaplan, Alex Mintz, Shaul Mishal, and Claudio Samban, "What Happened to Suicide Bombings in Israel? Insights from a Terror-Stock-Model," *Studies in Conflict and Terrorism* 28(3) (2005), pp. 225–235.

19. Alex P. Schmid, "50 Un- and Under-Researched Topics in the Field of (Counter-)Terrorism Studies," *Perspectives on Terrorism* 5(1) (2011), pp. 76–78.

20. For the problems of studying effectiveness in international relations see Arild Underdal and Oran Young, eds., *Regime Consequences: Methodological Challenges and Research Strategies* (Dordrecht: Kluwer, 2004); Hegemann et al., "Studying Effectiveness."

21. Audrey K. Cronin, "Behind the Curve: Globalization and International Terrorism," *International Security* 27(3) (2002/2003), p. 30.

22. Van Dongen, "Break it Down."

23. Van Um and Pisoiu, "Assessing Effectiveness," pp. 256–257; Michael Brzoska, "Consequences of Assessments of Effectiveness for Counterterrorist Financing Policy," *Administration & Society* (Online First) (2014), p. 3, doi: 10.1177/0095399714532272.

24. Schmid and Singh, "Measuring Success," p. 40.

25. Perl, "Combating Terrorism," p. 10.

26. Brzoska, "Consequences of Assessments of Effectiveness."

27. Patrick H. O'Neil, "Complexity and Counterterrorism: Thinking about Biometrics," *Studies in Conflict & Terrorism* 28(6) (2005), pp. 547–566.

28. Spencer, "Evaluating Counter-Terrorism."

29. Van Dongen, "Break it Down," p. 8.

30. Horgan and Braddock, "Rehabilitating the Terrorists?"; Lindekilde, "Value for Money?"

31. Alois Stutzer and Michael Zehnder, "Is Camera Surveillance an Effective Measure of Counterterrorism?," *Defence and Peace Economics* 24(1) (2013), pp. 1–14.

32. Erik J. Dahl, "The Plots that Failed: Intelligence Lessons Learned from Unsuccessful Terrorist Attacks against the United States," *Studies in Conflict and Terrorism* 34(8) (2011), pp. 621–648.

33. Christopher Daase and Oliver Kessler, "Knowns and Unknowns in the 'War on Terror': Uncertainty and the Political Construction of Danger," *Security Dialogue* 38(4) (2007), pp. 411–434.

34. Ulrich Beck, *World Risk Society* (Cambridge: Polity, 1999), p. 78.

35. Bruce Schneier, *Beyond Fear: Thinking Sensibly about Security in an Uncertain World* (New York: Copernicus, 2003), p. 13.

36. Spencer, "Evaluating Counter-Terrorism."

37. Jessica Stern and Jonathan B. Wiener, "Precaution against Terrorism," *Journal of Risk Research* 9(4) (2006), pp. 393–447; Aradau and van Munster, "Governing Terrorism through Risk."

38. Marieke de Goede*, European Security Culture: Preemption and Precaution in European Security*. Inaugural Lecture. University of Amsterdam. 27 May 2011. Available at http://www.oratiereeks.nl/upload/pdf/PDF-1587De_Goede.pdf (accessed 15 October 2014).

39. Sanderson, "Evidence-based Policy-Making," p. 1.

40. Max Weber, *Religion und Gesellschaft: Gesammelte Ausfätze zur Religionssoziologie* [Religion and Society: Collected Essays on the Sociology of Religion] (Frankfurt: Zweitausendeins, 2006), p. 11.

41. Meyer and Rowan, "Institutionalized Organizations."

42. Frank Furedi, "Invitation to Terror," p. 49.

43. Jackson, "Writing the War on Terrorism"; Krebs and Lobasz, "Fixing the Meaning of 9/11."

44. Didier Bigo, "Globalized (In)Security: The Field and the Ban-Opticon," in Didier Bigo and Anastasia Tsoukala, eds., *Terror, Insecurity and Liberty: Illiberal Practices of Liberal Regimes after 9/11* (London: Routledge, 2008), pp. 10–48.

45. Jeremy Waldron, "Security and Liberty: The Image of Balance," *The Journal of Political Philosophy* 11(2) (2003), p. 209.

46. Jessica Wolfendale, "Security, Terrorism and the Threat of Counterterrorism," *Studies in Conflict and Terrorism* 29(7) (2006), pp. 753–770.

47. H. D. Munroe, "The October Crisis Revisited: Counterterrorism as Strategic Choice, Political Result and Organizational Practice," *Terrorism and Political Violence* 21(2) (2009), pp. 288–305; Arie Perliger, "How Democracies Respond to Terrorism: Regime Characteristics, Symbolic Power and Counterterrorism," *Security Studies* 21(3) (2012), pp. 490–528.

48. Edelmann, "Symbolic Uses of Politics."

49. Meyer and Rowan, "Institutionalized Organizations."

50. Feldman and March, "Information in Organizations," p. 180.

51. Boswell, "Knowledge, Legitimation and the Politics of Risk."

52. Rebecca Sanders, "(Im)Plausible Legality: The Rationalisation of Human Rights Abuses in the American 'Global War on Terror,'" *International Journal of Human Rights* 15(4) (2011), pp. 614.

53. Brzoska, "Consequences of Assessments of Effectiveness," p. 5.

54. Department of Justice, *Questions Submitted by the House Judiciary Committeeto the Attorney General on USA PATRIOT Act implementation,* 26 July 2002. Available at http://www.fas.org/irp/news/2002/10/doj101702.html (accessed 2 June 2014).

55. Andrew W. Neal, "'Events Dear Boy, Events': Terrorism and Security from the Perspective of Politics," *Critical Studies on Terrorism* 5(1) (2012), pp. 107–120.

56. De Graaf, "Evaluating Counterterrorism Performance," p. 5.

57. White House, *9/11 Five Years Later: Successes and Challenges*, September 2006. Available at http://www.state.gov/documents/organization/72027.pdf (accessed 2 June 2014).

58. European Commission, "The EU Counterterrorism Policy."

59. Government of the Netherlands, "Counterterrorism Measures in the Netherlands"; European Commission, *Evaluation Report on the Data Retention Directive*. COM(2011) 225 final, 18 April 2011.

60. Amoore and de Goede, "Governance, Risk and Dataveillance."

61. O'Neil, "Complexity and Counterterrorism."

62. Elia Zureik and Karen Hindle, "Governance, Security and Technology: The Case of Biometrics," *Studies in Political Economy* 73 (2004), pp. 113–173; Katja Franko Aas, "'The Body Does Not Lie': Identity, Risk and Trust in Technoculture," *Crime Media Culture* 2(2) (2006), pp. 143–158; Louise Amoore, "Biometric Borders: Governing Mobilities in the War on Terror," *Political Geography* 25(3) (2006), pp. 336–351; David Lyon, "Biometrics, Identification and Surveillance," *Bioethics* 22(9) (2008), pp. 499–508.

63. European Commission, *Proposal for a Council Regulation Amending Regulation (EC) 1683/95 Laying Down a Uniform Format for Visas: Proposal for a Council Regulation Amending Regulation (EC) 1030/2002 Laying down a Uniform Format for Residence Permits for Third-Country Nationals*, 24 September 2003, COM(2003) 558 final, p. 3.

64. Office of Homeland Security, *National Strategy for Homeland Security*, July 2002. Available at http://permanent.access.gpo.gov/lps20641/nat_strat_hls.pdf (accessed 3 June 2014), p. 51.

65. Gordon Brown, *Speech at the Royal United Services Institute*, 14 February 2006. Available at http://www.queaso.be/2006/02/brown-backs-biometrics/ (accessed 3 June 2014).

66. Owen Bowcott, "Biometics: Helping the Fight against Terror, Hindering the Hope for Privacy," *The Guardian,* 18 June 2004, p. 3.

67. *The Economist*, "Biometrics: Too Flaky to Trust," *The Economist*, 4 December 2003. Available at http://www.economist.com/node/2266290 (accessed 3 June 2014).

68. National Science and Technology Council, "Biometrics in Government Post-9/11: Advancing Science, Enhancing Operations," August 2008. Available at http://www.fas.org/irp/eprint/biometrics.pdf (accessed 3 June 2014), p. 29.

69. Visionics, *Protecting Civilization from the Faces of Terror: A Primer on the Role Facial Recognition Technology Can Play in Enhancing Airport Security*, 24 September 2001. Available at http://www.securitymanagement.com/archive/library/Visionics_counter1101.pdf (accessed 3 June 2014), p. 2.

70. Paul Collier, *The Role of the Technology in Preventing the Entry of Terrorists into the United States,* Statement During a Hearing Before the Subcommittee on Technology, Terrorism, and Government Information of the Committee on the Judiciary, 12 October 2001. Available at http://www.gpo.gov/fdsys/pkg/CHRG-107shrg81248/pdf/CHRG-107shrg81248.pdf (accessed 3 June 2014), p. 89.

71. O'Neil, "Complexity and Counterterrorism," p. 559.

72. Amoore and de Goede, "Governance, Risk and Dataveillance," p. 165.

73. Aas, "Identity, Risk and Trust," p. 151.

74. Mark Salter, "Passports, Mobility and Security: How Smart Can the Border Be?," *International Studies Perspective* 5(1) (2004), p. 75.

75. National Commission on Terrorist Attacks upon the United States, *The 9/11 Commission Report*, 26 July 2004. Available at http://www.9-11commission.gov/report/911Report.pdf (accessed 3 June 2014), pp. 384–385.

76. Charles Sensenbrenner, *October 2005 Statutory Deadline for Visa Waiver Program Countries to Produce Secure Passports: Why it Matters to Homeland Security*, Hearing before the Subcommittee on Immigration, Border Security, and Claims of the Committee on the Judiciary, 21 April 2005. Available at http://www.gpo.gov/fdsys/pkg/CHRG-109hhrg20711/pdf/CHRG-109hhrg20711.pdf (accessed 3 June 2014), p. 47.

77. Elaine Dezenski, *Ensuring the Security of America's Borders Through the Use of Biometric Passports and other Identity Documents*, Hearing before the Subcommittee on Economic Security, Infrastructure Protection and Cybersecurity of the Committee on Homeland Security, 22 June 2005. Available at http://www.gpo.gov/fdsys/pkg/CHRG-109hhrg26515/html/CHRG-109hhrg26515.htm (accessed 3 June 2014).

78. Council of the European Union, *The European Union Counterterrorism Strategy*, 30 November 2005, 14469/4/05, p. 10.

79. Adam Liptak, "Adding to Security but Multiplying the Fears," *New York Times*, 26 February 2007, p. 14.

80. Perl, "Combating Terrorism," p. 10.

81. Dianne Feinstein, *Biometric Identifiers and the Modern Face of Terror: New Technologies in the Global War on Terrorism*, Hearing Before the Subcommittee on Technology, Terrorism, and Government Information of the Committee on the Judiciary, 14 November 2001. Available at http://www.gpo.gov/fdsys/pkg/CHRG-107shrg81678/pdf/CHRG-107shrg81678.pdf (accessed 3 June 2014), pp. 1–2.

82. The US District Court for the Eastern District of Virginia, *The United States of America v. Kenys A. Galicia, Indictment, October 2001 Term—at Alexandria*. Available at http://news.findlaw.com/hdocs/docs/terrorism/usgalicia1001indt.pdf (accessed 4 December 2014).

83. Department of Homeland Security, *A Review of the Use of Stolen Passports from Visa Waiver Countries to Enter the United States, December 2004.* Available at http://www.oig.dhs.gov/assets/Mgmt/OIG_05-07_Dec04.pdf (accessed 3 June 2014), p. 22.

84. Frank Moss, *Ensuring the Security of America's Borders Through the Use of Biometric Passports and Other Identity Documents*, Hearing before the Subcommittee on Economic Security, Infrastructure Protection and Cybersecurity of the Committee on Homeland Security, 22 June 2005. Available at http://www.gpo.gov/fdsys/pkg/CHRG-109hhrg26515/html/CHRG-109hhrg26515.htm (accessed 3 June 2014).

85. Rand Beers, *Preventing Terrorist Travel*. Hearing before the Committee on Homeland Security and Governmental Affairs. 13 July 2011. Available at http://www.hsgac.senate.gov/hearings/ten-years-after-9/11-preventing-terrorist-travel (accessed 3 June 2014).

86. National Science and Technology Council, *The National Biometrics Challenge,* September 2011. Available at http://www.biometrics.gov/Documents/BiometricsChallenge2011_protected.pdf (accessed 3 June 2014), pp. 15–17; Department of Homeland Security, *Preventing Terrorism Results*. Available at http://www.dhs.gov/topic/preventing-terrorism-results (accessed 3 June 2014).

87. Sarah Leonard, "The Use and Effectiveness of Migration Controls as a Counter-Terrorism Instrument in the European Union," *Central European Journal of International and Security Studies* 4(1) (2010), pp. 32–50.

88. Zureik and Hindle, "Governance, Security, and Technology," p. 121.

89. Krebs and Lobasz, "Fixing the Meaning of 9/11," p. 421.

90. Jackson, "Writing the War on Terrorism," pp. 19–20.

91. See, for example, Lyon, "Biometrics, Identification, and Surveillance."