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Scripts of Security: Between Contingency and Obduracy

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Abstract

The special issue on Scripts of Security proposes to advance interdisciplinary exchanges between Science and Technology Studies and Critical Security Studies. While performativity, enactment, and intra-action have opened important questions about the messiness of security practices and the contingency of their effects, there has been less attention to the obduracy of institutionalized agency and how continuities and asymmetries of power are reproduced, challenged, and maintained. This Special Issue proposes to revisit and rework the notion of script and the related analytical toolkit to make sense of both contingency and obduracy in the technopolitics of security. The contributions gathered here make three interventions in order to account for contemporary challenges posed by the increasing securitization of diverse sociotechnical practices. Firstly, they update, integrate, and reconfigure the notion of script and its associated toolbox to account for the specificities of security practices. Secondly, the articles revisit critical analyses of security in light of the notion of script. Finally, they show how such an updated notion of script can hold together accounts

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of contingency and obduracy and not jettison one at the expense of the other.

Keywords
scripts, securitization, contingency, performativity, obduracy, security studies

Introduction

As security has come to infuse more and more transnational practices, it has also increasingly become an object of interdisciplinary attention. From its traditional framing through categories of war and peace in international relations, security as a contested concept and practice has redefined a new field of Critical Security Studies (CSS) and has also captured the attention of Science and Technology Studies (STS) scholars. In STS, this expansion can be traced through the shift in focus between the different editions of the *Handbook of Science and Technology Studies* (Jasanoff et al. 1995; Hackett et al. 2008; Felt et al. 2017). In the first and third editions, security discussions focused on military technologies (Rappert, Balmer, and Stone 2008; Smit 1995). In the handbook's fourth edition, a chapter dedicated to "Knowledge and Security" expanded its concerns to the making of security through enemy construction, knowledge and nonknowledge production, and citizen surveillance (Vogel et al. 2016).

As scholarly debates started to attend to the sociotechnologies of security, the invitation for more engagement between STS and CSS has been taken up in the literature on (in)security production. In recent years, an expanding dialogue between STS and CSS has interrogated the materiality of security artifacts (Amicelle, Aradau, and Jeandesboz 2015; Bourne, Johnson, and Lisle 2015; Pallister-Wilkins 2016), questioned identification techniques for (in)security governance (Suchman 2016; 2020; Suchman, Follis, and Weber 2017), detailed the sociotechnical production of otherness (Pelizza 2019), and investigated how data infrastructures shape legal expertise and regulatory dynamics (Aradau and Blanke 2018; Bellanova and De Goede 2020).

This interdisciplinary scholarship has explored (in)securitization practices and the technopolitics of security. It has drawn on conceptual tools that questioned security as a taken-for-granted and desirable practice. It has attended to how security is made through devices, infrastructures,

logistics, data, and algorithms. These analyses share a theoretical commitment to situatedness and performativity, which allows them to disturb boundaries between inside and outside, social and technical, and human and nonhuman. CSS scholars have moved from performative speech acts and debates about perlocutionary effects toward articulations of enactment (Mol 2002) and intra-action (Barad 2003). STS scholars Steve Woolgar and Javier Lezaun (2013, 324) have situated performativity and enactment in a continuum spanning weak to strong skepticism toward essentialism: "social shaping, aggregating, affording, providing for, constructing, apprehending, performing, accomplishing, bringing into being, constituting and enacting." While there are nuanced differences between these concepts, what we can call a performative approach at the intersection of CSS and STS has fostered dynamic understandings of the sociotechnical enactments of (in)security and militarism.

Although a performative approach has opened important questions about the messiness and contingency of security practices, there has been less attention to the obduracy of institutionalized agency and how asymmetries of power are reproduced, challenged, and maintained. Sociotechnical practices of securitization can influence conditions that are usually considered immutable. Everyday relationships between organizations can be renegotiated when new standard operational procedures are imposed. Inter-agency relations can be implemented along unequal lines when distinct agencies act as producers and users of sociotechnical (in)security. The balance between governmental and business actors can be altered by vendor lock-ins (Pelizza 2021). How can a performative approach to practices of (in)security complement accounts that emphasize contingency with descriptions of the rearrangement of less mutable boundaries? Addressing this question, as this Special Issue of *Science, Technology, & Human Values* (*ST&HV*) proposes, does not mean we want to jettison messiness. Instead, we propose to work with analytical vocabularies that can attend to both contingency and obduracy as outcomes of sociotechnical agency.

In the social sciences, attempts to elaborate a mediated theory of action prominently feature—among others—Giddens's structuration theory (Giddens 1984), the concept of *habitus* (Bourdieu 1977), and even Dewey's notion of habit (Dewey 1922). STS were further confronted with this foundational issue when Karin Knorr Cetina and Aaron Cicourel (1981) invited contributions from Callon and Latour to their edited book on the integration of micro- and macro-sociologies. A few years later, actor-network theory (ANT) introduced the notion of "script" to account for how sociotechnical practices are made durable through material artifacts. In their original

formulation (Akrich 1992; Akrich and Latour 1992; Latour 1992), scripts are instructions for action embedded into artifacts by designers. They crystallize assumptions about the skills and interests of ideal users. Scripts exert power by *prescribing* intended practices. Actual users can adhere by *subscribing* to the script or they can resist it through contingent *de-inscriptions* (also known as *dis-inscriptions*). Finally, *de-scription* grounds the possibility of questioning the location of knowledge and critique by translating embedded scripts into texts. We suggest that recovering this early and neglected idea can help account for the continuum between contingency and obduracy in artifacts, practices, and infrastructures of (in)security production. It can help us trace securitizing power dynamics, whether they materialize in a transient oral statement at a border encounter or in colonial legacies stabilized in water infrastructures.

This Special Issue reworks the notion of script and its related analytical toolkit to make sense of both contingency and obduracy in the technopolitics of security. This requires a double move to rework scripts in light of the specificity of security and to revisit critical analyses of security in light of the notion of script. We invited contributors to revisit scripts specifically as an orientation toward manifold interventions in the present. Revisiting scripts is not a nostalgic move toward the past: it should be seen as a genealogical intervention to pluralize histories of thought and critical engagement. Despite the conceptual influence of performativity on the study of (in)security production, there has been less attention to the specificities of security practices and how they differ from other sociotechnical practices. Security practices foster hierarchies of self and other, often backed by institutions and entrenched in binaries of normal/abnormal, friend/enemy, criminal/law-abiding citizens, false/genuine asylum-seekers, and so on. Security transforms difference into dangerous otherness or suspect alterity.

Therefore, when it comes to sociotechnical practices of (in)security production, the notion of script is in need of integration and update. We need, for example, to account for how intended users and intended security subjects are enacted. We need to understand scripts embedded in artifacts as well as scripts materialized in lasting infrastructures. We need to rethink the power of prescription when security technologies are both proliferating and dispersing. We need to revise the notion of script in the compositions and recompositions of data that become security inscriptions. We need to reconsider the notions of de-inscription and intentionality when the possibilities of resistance are restricted by design or when disruption is the ultimate goal. Finally, we need to update scripts to

discuss emergent, aesthetic boundaries, and account for the historical obduracies of enduring colonial and military scripts.

Although STS and ANT have gained wide resonance in CSS, the script approach has fallen off the radar of these exchanges. CSS has engaged with STS vocabularies that appear more resonant with materiality, such as assemblage, configuration, infrastructure, or controversy. It might be that scripts seem less malleable and changeable and, therefore, less able to account for contingencies—from failure to glitches, from friction to resistance. Or scripts might have been too connected with textuality. Whatever the reasons, we contend that despite their formalization, scripts can be nuanced tools for tracking power relations in security assemblages. As instructions for action are made durable, scripts can crystallize social relations, reproduce asymmetries, and maintain power differentials. De-scription in this light constitutes a critical practice to expose power dynamics that tend to sink into material configurations. Moreover, the possibility of contestation offered by de-inscriptions can account for contingent appropriations, subversion, and reinterpretations of sociotechnical (in)security.

This Special Issue hopes to reignite the debate at the intersection of STS and CSS by revisiting those earlier notions that contributed to a performative understanding of sociotechnical practices of securitization, while accounting for the stabilization and maintenance of institutionalized agency, agential boundaries, and the continuities and asymmetries of power. Equally importantly, it revisits early STS formulations to account for contemporary challenges posed by the increasing securitization of diverse sociotechnical practices.

Contingency and Obduracy in Scripts of Security

The focus on performativity has been key to engagements with sociotechnologies of (in)security in STS and CSS. As philosopher of technology Andrew Feenberg (2017, 651) has put it, the supposed "coherence of technical explanations" masked the "inherent contingency and complexity of technical artifacts." If the continuum of performativity stretches from "weak" shaping to "strong" enactment, contingency also stretches from complexity through fragility and failure to improvisation, bricolage, and mess. As a philosophical question, contingency is "inherent" to humans and objects. For research on (in)security production, contingency is analyzed as an effect of practices. Law (2004, 13) highlights this practical aspect as the "more or less messy set of practical contingencies." Adey and Anderson

(2012, 113) inject a cautionary note for CSS, asking scholars to account for "the contingencies of the apparatus of security—that is, how apparatuses form, endure and change as the elements that compose them are (re)deployed." Attention to contingency avoids the pretense and promise of coherence, efficiency, and stability in security apparatuses and practices. It also entails a methodological injunction, namely that "we turn our focus from explaining away uncertainty in the interpretation of action to identifying the resources by which the inevitable uncertainty is managed" (Suchman 2007, 86).

These implications of contingency have informed research on the technopolitics of security, its dispersed practices, human–nonhuman assemblages, and their fragilities. In so doing, however, the scholarship at the intersection of STS and CSS has paid less heed to what endures and perdures and how it does so. Obduracy is both what endures and what is hardened, entailing both durability and duress. The prefix "ob" is indicative of what is durable and what intensifies in its durability. Obduracy refers to what is resistant and intractable (Oxford English Dictionary 2023). For example, anthropologist Ann Laura Stoler (2016, 20) has invoked the etymology of duress to understand imperial formations, colonial histories, and their effects on the present, which combine tenacity, durability, and duration.

The notion of script can extend to both ends of the continuum of contingency and obduracy. It problematizes the coherence of design and use, and the relation between designers/engineers and users, as it can enable "careful attention to the contingencies of design and use" (Suchman 2007, 192). The notion of script renders a vision of the world and captures an image of the users, situations, and actions that unfold through the use of an object or an artifact (Akrich 1992; Akrich and Latour 1992). Predetermination becomes prescription and proscription in the vocabulary of scripts. What is crucial is that predetermination does not amount to an account of actual determination. Rather, contingencies are inserted between design and use through a number of prefixes that qualify scripts and the aim to inscribe a "vision of the world" in an artifact. Prescription and proscription name these envisaged inscriptions of competencies and actions. Subscription and de-inscription introduce an agential distance from the script and its inscription. Users can either align their actions with existing prescriptions/proscriptions or in some way refuse, resist, or otherwise deviate from these through de-inscriptions. While scripts open up to the uncertainty of actions and complex uses of technology for some, for others, scripts reduce the complexity of situations.

The formulation of scripts is indebted to ANT's appreciation of pragmatism and its suspicion toward inertia as a force shaping social relations, even in the absence of action. As Latour (2005) forcefully argued, while the sociology of the social explains stability with inertia, for the sociology of association, inertia cannot be taken for granted. Institutions, social actors, and organizations are not endowed with some inertia but need to be constantly sustained by group-making efforts. If they are not performed, they stop existing. Durability and stability can thus be explained by reference to technologies, objects, or artifacts that crystallize change. The early notion of script can be seen as imbued with this pragmatist understanding of agency, and here we propose to see it as an attempt at explaining contingency and obduracy not as ontological oppositions but as a function of translation into more or less durable artifacts. A script translated into an oral imperative (e.g., "be cautious!") is not the same as when translated into a road sign, even though both translations enact the driver as potentially reckless. The famous quote that "technology is society made durable" (Latour 1990) offers a powerful summary here.

And yet, what does this understanding mean for the technopolitics of security? Suchman (2023, 1) has recently suggested that:

> stability in the case of institutions . . . is an effect of reiterative practices through which infrastructures are sedimented and resources differentially distributed. That means both that institutions need to be enacted as such each time again, *and* that their reiteration takes place within social and material orderings that systematically privilege some actors and discriminate against others.

Our proposed formulation of "scripts of security" approaches scripts as levers that can (if translated into relatively durable artifacts and infrastructures) reduce the amount of contingent reiterations needed to enact security. Speaking about scripts of security alerts us to how sociotechnical orderings make differential distributions of resources durable and, in so doing, enact institutions as agents of othering. Of course, the possibility of de-inscription always allows for contingency, diversion, and resistance.

Updating Scripts and Critical Interventions

Scripts and their analytical variations help map how agency and power play out in security practices. Like other sociotechnical practices, security practices are entanglements of contingency and obduracy. Although multiple

and contingent, the enactments of security are limited in their heterogeneity. As CSS scholars have shown, security practices produce hierarchization, subordination, and even dehumanization. Security practices enact dangerous, abnormal, or suspect "others." They mobilize knowledge and devices to neutralize, eliminate, or otherwise discipline alterity. In "processing alterity" (Pelizza 2019), security practices enact others through (in)securitization at multiple scales (Bigo 2014; Huysmans 2006; Aradau and Perret 2022). As Nelson (2024) powerfully puts it in her article on de-inscribing security in the context of the Tres Rios hydroelectric plant in Guatemala, "Cold War and National Security torque with the asymmetries of class and race."

In light of these security dynamics, we argue that the notion of script needs some reworking. Firstly, security practices differ from other sociotechnical practices in that their more or less vested goal is to produce identities to be protected from potentially dangerous or risky others. "More or less" is crucial here, as the issue of intentionality has remained ambivalent in the script approach, while the discourse of securitization has often been characterized by normativity. Contributions to this Special Issue may not solve this ambivalence, but they bring it to the fore. They showcase a continuum between explicit intentionality in subverting the script (Mathew 2024) to a lack of intentionality therein (Pelizza and Van Rossem 2023). At one end of the continuum, disruption is the ultimate goal. On the other end, as possibilities of resistance are made invisible and unfeasible by design, de-inscription is rarely intentional.

Secondly, the ubiquity of alterity in security practices problematizes the "user" as a universal figure. As Suchman (2007) points out, the notion of the user can be criticized, as it "singularizes what is actually a multiplicity and fails to differentiate actors with very different relations to a given artifact" (p. 188). This problematization can open new inquiries into the technopolitics of security. Who are the actual users of security technologies? How can many different types of users be devised? When border and security professionals discuss the use and users of their technologies, migrants are not generally envisioned as potential "users." For instance, eu-LISA, the agency that manages the European Union's (EU) border and migration management databases, envisages only member states and border guards as users and end users of these systems.

Nevertheless, migrants as users are not completely absent. EU documents also speak about fear of migrants eschewing biometrics or otherwise disrupting their use (see FRA 2018). In that sense, although not explicitly discussed as users, we can say that migrants are inscribed as users. This dual

role of potentially suspect others opens different avenues for critical intervention, particularly understanding forms of agency entangled with use practices. As Aradau and Perret (2022) have shown, migrants are always under the suspicion that they "fake" to disenroll from the scripts of security. What Pelizza and van Rossem call "scripts of alterity" inscribe migrants as a particular kind of user, more akin to an impostor or trickster than a bona fide user. Thus, we ask about the kinds of users that scripts of security inscribe.

Furthermore, Perret and Aradau (2023) propose that scripts might include the possibility of de-inscription for some (more influential) users but not for others. Migrants, for example, are compelled to subscribe to the technologies and infrastructures of bordering, even as they are suspected of wanting to de-inscribing from these. This is not the case for EU agencies, for whom de-inscription is not proscribed but allowed. In his analysis of the use and misuse of population registers in Italy for the purposes of monitoring, Gargiulo (2024) highlights an even stronger dissymmetry in "the primacy of de-inscription over subscription" for local authorities. The differentiation of users according to variations of alterity takes its starkest form in Mathew's (2024) argument that cybersecurity needs to account for users-as-attackers and users-as-defenders. Not only are the adversaries that Mathew analyzes uncertain, but they challenge practices of use and what it means to be a user of a technology or a system.

Practices of use and user agency also invite CSS scholars to analyze variations of agency beyond resistance. De-inscribing, subscribing, re-inscribing, and ascribing indicate that agency can take many forms, which can only be mapped empirically in technopolitical entanglements. For example, satellite surveillance can be reinscribed as a device of accountability, as Alarm Phone has done in the Mediterranean through a hotline that answers migrants' distress calls and channels them to responsible authorities. Technopolitical reinscription supplements practices of resistance but is not equivalent to them. Conversely, suspects and adversaries are also users (or misusers) of technology and infrastructures.

The articles gathered here also suggest that we need to revise scripts to account for infrastructural dynamics. While the formulation of scripts has usually seen them as embedded in individual artifacts, recent critical analyses of security practices have foregrounded their entanglement with broader infrastructures, both digital and nondigital (Bellanova and De Goede 2020; Klimburg-Witjes and Trauttmansdorff 2023). As infrastructures have broad reach in time and space (see Star and Ruhleder 1996), following scripts as they materialize in infrastructures that last across

orders and travel across boundaries means refocusing on obduracy and on how established institutional boundaries can be maintained vis-à-vis "vectorial" infrastructural dynamics (Pelizza 2016). This is most clearly revealed in the posthumous article by Diane Nelson in this Special Issue. Reconstructing a decade-long project for water infrastructuring in Guatemala, her article accounts for historical obduracies supported by long-term nationalist, colonial, and military scripts.

Revisiting the Technopolitics of (In)security

The specificities of security practices—othering, enemy production, "alterity processing"—raise a range of questions about the notion of script, while the script approach invites us to revisit key interventions in CSS.

Firstly, security practices are, by definition, expected to enact subjects, while scripts enact intended users. As we have seen, security subjects are rarely considered users of the security apparatuses that enact them. This can be traced back to an original distance between critical political theory and STS. Political theory has traditionally considered agency predicated on humans, with the material as a backdrop for political engagement (Marres 2012) or a capitalist form of rationality opposing democracy and human flourishing (Marcuse 1964). Therefore, in critical political theory, users are often seen as instrumentalized actors, dispossessed of political values and interests. While STS have consistently elaborated diverse understandings of users, CSS scholars have engaged with processes of subjectification and the enactment of subjectivity rather than practices of use and users.

The Special Issue contributors address this difference in diverse ways. Austin and Leander 2024 propose to frame users' relationship with a commercial home security solution beyond cognitive needs, along aesthetic and affective dimensions traditionally less investigated in STS. By so doing, they argue for going back to the theatrical and artistic origins of scripts in order to trace the affective and aesthetic factors, which "operate through resonance (rather than reason)." Gargiulo identifies municipal civil servants in charge of running civil registers as users and shows how different ideas of security are produced by their subscribing to or de-inscribing from the legal scripts. Pelizza and Van Rossem, and Perret and Aradau problematize who can be considered as users at borders. Both articles contend that (street-level) bureaucrats and people on the move alike are users who interact with and are affected by data infrastructures. Conceiving of security subjects as users marks their involvement in a sociotechnical infrastructure and restitutes an important material dimension to subjectification.

Secondly, the notion of scripts invites us to revisit questions of materiality in CSS. Scripts have been rarely invoked in analyses of (in)security production. As Akrich and Latour have shown, scripts are transversal to distinctions between language and materiality, social and technical, human and nonhuman, and open and secret. Therefore, scripts are one of the ways in which the entanglements of the social and technical gain analytical purchase. In CSS, engagements with sociomateriality and sociotechnologies have tended to privilege the material enactments of (in)security. Scripts, however, help us recalibrate enactments of (in)security as *simultaneously* social and technical, linguistic, and material. This recalibration is most explicitly formulated in Gargiulo's article, which proposes to foreground the socio-legal dimensions of performativity in response to the prevalence of analyses that privilege socio-material dimensions of performativity. Population registers are simultaneously socio-material and socio-legal; they are infrastructures *and* documents at the same time. Austin and Leander emphasize scripts' aesthetic and affective dimensions by going to their roots in theater and the arts. For them, the aesthetic brings together the embodied, the sensorial, and the affective. Through scripts, the aesthetic, legal, and affective elements are brought back and connected into analyses of security technologies and materialities.

Finally, scripts ask us to revisit the continuum between contingency and obduracy. STS and CSS scholarship have intersected around similar dilemmas of contingency and durability or obduracy. On the one hand, the technopolitics of security is imbued with failure, glitches, trouble, emergence, and resistance. On the other, security practices and institutions evince durability, whether through the stability of institutions or the obduracy of power relations. But how do we hold contingency and obduracy together? Scripts have been criticized for assuming too much stability at the expense of instability and contingency. We argue that revisiting scripts allows us to account for the reduction of contingency in security practices. Therefore, several of the articles gathered here hold together stability and instability, contingency, and obduracy. For example, Austin and Leander provocatively argue that "the obdurate maintenance of global structures is the product of design practices attuned to the contingency of the contextual and orientated around aesthetic rather than semiotic engagement with the world." Perret and Aradau show that obduracies of power are reiterated not only through prescriptions and proscriptions but equally through "circumscriptions of data and ascriptions of expertise." Nelson reconfigures understandings of obduracy from the sturdiness and stickiness of colonial and state scripts to the obduracy of de-inscriptions by the Maya who refuse

"genocidal prescriptions and subscriptions." They do so, Nelson argues, not because of some romantic imagination of nature but because of a history of design and sociotechnical inscriptions, as their "ancestors 'designed' and inscribed millenarian technical objects, like language, calendrics, organizational forms, ceremony, and multiple practices of attending to relations with the more than human, that carry other scripts through time."

This Special Issue of *ST&HV* on the *Scripts of Security* can be read as an exercise in recasting the dilemma of power and agency in the technopolitics of (in)security. Through scripts, we can reconfigure the continuum of performativity, which has inspired both STS and CSS, as a continuum between contingency and obduracy. Contributions show that, just as scripts need to be updated in light of the specificities of security, analyses of (in)security are also nuanced through a script approach.

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