

Leiden Journal of International Law

<http://journals.cambridge.org/LJL>

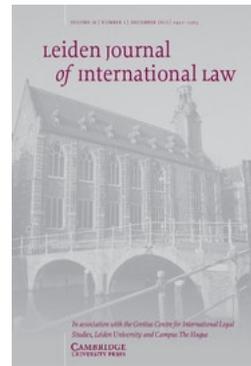
Additional services for *Leiden Journal of International Law*:

Email alerts: [Click here](#)

Subscriptions: [Click here](#)

Commercial reprints: [Click here](#)

Terms of use : [Click here](#)



Technological Agency in the Co-Constitution of Legal Expertise and the US Drone Program

ANNA LEANDER

Leiden Journal of International Law / Volume 26 / Issue 04 / December 2013, pp 811 - 831

DOI: 10.1017/S0922156513000423, Published online: 08 November 2013

Link to this article: http://journals.cambridge.org/abstract_S0922156513000423

How to cite this article:

ANNA LEANDER (2013). Technological Agency in the Co-Constitution of Legal Expertise and the US Drone Program. *Leiden Journal of International Law*, 26, pp 811-831 doi:10.1017/S0922156513000423

Request Permissions : [Click here](#)

Technological Agency in the Co-Constitution of Legal Expertise and the US Drone Program

ANNA LEANDER*

Abstract

On 30 September 2011, the US citizen Anwar al-Awlaki was killed in Yemen in what has become the most controversial incident of US ‘targeted killing’, or, as its critics would prefer, of the US practice of ‘extrajudicial executions’. This controversy over wording expresses a profound disagreement over the legal status of the US drone program. Target killing suggests that the drone program may be legally regulated. Extrajudicial execution suggests that it falls outside the realm of legality. This article does not seek to settle which terminology is the most appropriate. Instead it analyses the legal expertise struggling to do so and its implications. More specifically, it focuses on the processes through which drones constitute the legal expertise that constitutes the drone program as one of targeted killings and of extrajudicial executions; that is, on a process of co-constitution. Drawing theoretical inspiration from and combining new materialist approaches (especially as articulated by Bruno Latour) with the sociological approach of Pierre Bourdieu, the article shows that drones have ‘agency’ in the ‘field’ of legal expertise pertaining to the drone program. Drones are redrawing the boundaries of legal expertise both by making associations to new forms of expertise and by generating technological expert roles. They are also renegotiating what is valuable to expertise. Drones are making both transparency and secrecy core to expertise. However, and contrary to what is often claimed, this agency does not inescapably lead to the normalization of targeted killings. The article therefore concludes that acknowledging the agency of drones is important for understanding how legal expertise is formed but especially for underscoring the continued potential for controversy and politics.

Key words

drones; legal expertise; field analysis; technological agency; co-constitution

I. INTRODUCTION

In the poem ‘A Drone Scans the Wreckage’ Margaret Atwood allows her drone to speak in the first person.¹ Her drone not only tells us things: ‘I spy’ and ‘I must have

* Professor (MSO), Department of Management, Politics and Philosophy, Copenhagen Business School [ale.lpf@cbs.dk]. This article has grown out of discussions in the context of three meetings financed by the COST action ‘The Fragmentation and Constitutionalization of International Law’. The participants in two of these workshops were helpfully critical of earlier versions of the idea. Tanja Aalberts, Chris Brown, Stefano Guzzini, Ole Wæver, and three anonymous referees provided constructive comments on the final version.

¹ M. Atwood, ‘A Drone Scans the Wreckage’, *New Yorker*, 13 August 2012.

missed something'. It also asks questions: 'Did I do that?' 'Was I bad?' This is poetry. However, the tone and tendency to treat drones as persons (even if they are rarely endowed with the capacity to speak) is common. Soldiers surrender to drones, write thank you letters to them, and bury them with full military honours. Legal/military experts impute agency to drone technologies. Jack Beard,² for example, tells us that they 'are both enlarging the role of lawyers and accelerating a process in which restrictive interpretations of the law of war may be becoming the minimum acceptable standard in the rules for attacks that risk civilian damage and injury'.³ More generally, writing and commenting on the usage of drones is replete with talk about the extent to which drones challenge and change law. Like Beard's statement, this talk is probably mostly just shorthand formulations. At any rate it is devoid of explicit reflection or reference to an ontology granting material technologies, or material objects such as drones, an agential role. But what if the abundance of these shorthand references to things done by drones indicated that such an ontology might indeed be useful when thinking about drones in general and about their regulation in particular? What if the buzzing of drones did challenge and change law, not only figuratively, but in direct ways as writings on the material in the social world would lead us to think might be the case? What if Atwood's poem was pushing a point that is of analytical relevance for the analysis of politics? This is the prospect probed by this article.

The probing is undertaken in relation to the controversies surrounding the US 'drone program' and specifically the practice of relying on drones for targeted killings/extrajudicial executions. Over the past two decades, there has been a massive increase in the reliance on robots in warfare not only by the US but worldwide.⁴ The growing role of unmanned aerial vehicles (UAVs), nicknamed 'drones' (a male bee) because of their buzzing sound, is part of this general transformation of warfare. The UAVs are a mixed flock ranging from hummingbirds and parrots to Hawks and Predators with technological systems of varying levels of sophistication.⁵ It is the role of this motley flock and the technological systems they are embedded in (collectively referred to as 'drones' in this paper) in co-constitution of the legal expertise and the US drone program that is the focus of this article. The 'drone program' sometimes simply refers to the various efforts to manage and steer the drones.⁶ However, 'drone program' is just as often used (as it will be in this article) to refer to the use of

2 He is introduced as Professorial Lecturer, UCLA School of Law; former Associate Deputy General Counsel (International Affairs), Department of Defense. He was also assigned as a Lieutenant Colonel in the US Army Reserve to the International and Operational Law Division, Office of the Judge Advocate General, Department of the Army.

3 J. Beard, 'Law and War in the Virtual Era', (2009) 103 *American Journal of International Law* 3, at 422.

4 This covers a wide range (including air, naval, surface, and underground) of robots. For an overview see P. W. Singer, *Wired for War: The Robotics Revolution and Conflict in the 21st Century* (2009); E. Quintana, 'The Ethics and Legal Implications of Military Unmanned Vehicles', (2008) *RUSI Occasional Paper*; C. Cole, *The Drone Wars Briefing* (2012), www.dronewars.net (accessed 10 February 2013).

5 According to IISS data made publicly available by *The Guardian*, 11 countries use 56 types of UAVs as part of their military operations; www.guardian.co.uk/news/datablog/2012/aug/03/drone-stocks-by-country (accessed 8 February 2013).

6 As, for example, in B. Bennett, 'Director of Federal Drone-Program Targeted in Ethics Inquiry', *Los Angeles Times*, 5 December 2011.

drones for targeted killings/extrajudicial executions. Precise information about this program is patchy, scarce, and mainly based on leaks and informal statements. On this shaky basis, the program is nonetheless 'widely known' to have at least three subprograms run by the conventional armed forces, the Central Intelligence Agency (CIA), and the Joint Special Operations Command (JSOC).⁷ 'Hardly a month passes without claims that another al-Qaeda or Taliban leader has been taken out by drone-launched missiles.'⁸ Some of these strikes have generated enough commentary to fill a small library, as is the case with the killing of the US citizen Anwar al-Awlaki killed in Yemen on 30 September 2011. Two positions on the legal status of the drone program stand out: one epitomized by the UN Commission on Human Rights that appointed a special rapporteur (Philip Alston) to look into the 'extrajudicial, summary or arbitrary executions', and the second by the US political and defence establishment (to the extent it acknowledges 'the program') and scholars who prefer to talk about 'targeted killings'.⁹

Targeted killings or extrajudicial executions? Is killing by drones an acceptable action to be regulated or an inadmissible crime outside the realm of legality? Atwood's approach to drones is probed in this article by exploring how drones themselves weigh on the answers legal expertise gives to this pressing question. The argument is that the technological agency of drones is constituted as legal expertise in the context of the drone program that is in turn constituted by legal expertise both as a legally governable matter of 'targeted killing' and as a practice of 'extrajudicial executions' to be condemned and discontinued. The technological agency of drones is in other words involved in the co-constitutive processes linking legal expertise and the drone program.¹⁰ The analysis below shows this by insisting that drones (UAVs and their technological systems) have agency in the sense that of having 'performative' effects, or an 'actant' role. This 'technological agency' shapes the evolving 'field' of legal expertise (who counts as a legal expert and on what basis) surrounding the drone program. More specifically, the technological agency of drones redraws the boundaries of legal expertise by consolidating the presence of the specific legal expertise associated with intelligence services and with commercial contractors and by generating a form of technologically originated legal expertise. The technological agency of drones also shapes the basis of legal expertise. It makes transparency and secrecy pivotal. Contrary to what is often claimed, including recently in the pages of this journal,¹¹ the consequence is not an unambiguous consolidation of the 'targeted-killings' position among legal experts as a targeted-killing 'dispositif'

7 M. Mazzetti, 'The Drone Zone', *New York Times*, 8 July 2012.

8 'Flight of the Drones', *The Economist*, 8 October 2011.

9 P. Alston, 'Report of the Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions' (2010) *New York UN*, and W. McCormack, 'Targeted Killing at a Distance: Robotics and Self-Defense', (2012) 25 *Pacific McGeorge Global Business & Development Law Journal* 361; R. Murphy and J. Radsan, 'Due Process and Targeted Killing of Terrorists', (2009) 31 *Cardozo Law Review* 2, 405; A. J. Radsan and R. Murphy, 'The Evolution of Law and Policy for CIA Targeted Killing', (2012) 5 *Journal of National Security Law & Policy* 2, 439.

10 Co-constitution is used in the sense of this special issue as a two-sided process in which the regulation and its object create each other simultaneously (in this case legal expertise and the drones in the drone program).

11 S. Krasmann, 'Targeted Killing and Its Law: On a Mutually Constitutive Relationship', (2012) 25 *Leiden Journal of International Law* 665.

is formed. Rather, the agency of drones feeds into the controversy over the legal status of the drone program and intensifies it. The article therefore concludes by underscoring that understanding the role of technological agency (the actant role of drones) is important for grasping the continuing disagreements over the legal status of the drone program but especially for seeing the scope for politics. To make this argument, the article begins by introducing the theoretical anchoring and core conceptual building blocks of the analysis.

2. DRONES AS ACTANTS IN THE FIELD OF LEGAL EXPERTISE

To engage the argument about the agency of drones in relation to legal expertise it may be useful to de-dramatize; to underscore that agency here is not a science fiction account based on the anthropomorphic characteristics of drones. Rather, as the first section suggests, ontologies allowing for material agency are rather more conventional than it may sound or than some of the proponents of the term ‘actant’ might wish to acknowledge. Indeed, there is a long tradition of studying and thinking about technological (and material more generally) agency in terms of performative effects. Consequently, the idea that drones might shape ‘legal expertise’ (or authoritative knowledge about the law) should come as no surprise. The question is how. As the second section suggests, thinking in terms of ‘fields’ is one way of providing an answer. Field analysis draws attention both to the processes by which expertise is established and to specific mechanisms by which agency (including of drones) may refashion these processes.

2.1. The drone actant

The idea that that material objects such as drones may have actor-like qualities has a long pedigree. *Pace* Latour, it is not confined to ‘premodern’ thinking.¹² Rather, thinking about material agency has been alive and well not only in anthropology and feminist studies but also in the disciplines Latour is most harshly chastizing for forgetting it, namely sociology and philosophy.¹³ This said, there can be little doubt that the interest in material agency has seen a strong renewal in all areas of the social sciences as captured by the growing number of references to ‘post-humanism’, and ‘new materialism’ and by the impact left by Latour’s own work.¹⁴ Two recurring ideas drawn from the resulting debates are particularly important for approaching the agency of drones.

The first is that technologies are not merely passive tools in the hands of those who use them but have agency. As Latour puts it, technologies and things more generally ‘can authorize, make possible, encourage, make available, allow, suggest,

12 B. Latour, *We Have Never Been Modern* (1993).

13 See, for example, P. Bourdieu, *Raisons pratiques: Sur la théorie de l’action* (1994); M. Heidegger, ‘The Question Concerning Technology’, in D. Krell (ed.), *Basic Writings* (1993); and, for feminist theory, D. Haraway, *Witness@Second_Millennium.FemaleMan@Meets_Oncomouse*TM (1997).

14 K. Barad, *Meeting the Universe Half-Way: Quantum Physics and the Entanglement of Matter and Meaning* (2007); J. Bennett, *Vibrant Matter: A Political Ecology of Things* (2010); and D. Coole and S. Frost (eds.), *The New Materialisms: Ontology, Agency and Politics* (2010).

influence, hinder, prohibit and so on'.¹⁵ They have performative effects that escape human intention and control. This is the core contention in Latour and Woolgar's study of 'Laboratory Life', which argues that we need to understand 'hybrid' (social/material) relations if we want to understand science and its development.¹⁶ But technological agency is not only of relevance to the hard sciences. Kittler has shown that also language, music, art, and literature are created through evolving technological agency. He has, for example, demonstrated the role of the typewriter in co-creating literature.¹⁷ Analogously, in security studies, Aradau, following Barad, suggests that we need to study the material/social 'intra-actions' to grasp how the security of critical infrastructure has developed.¹⁸ In all these renderings of hybrid agency the technological is not simply an extension or mirror of human social practices. Even if a technology has an origin and was intended for a particular purpose, this does not confine it to that origin or that purpose. Just as discourses and ideas transform and diffuse, so do technologies. Technologies 'travel', 'translate', 'make associations', 'enrol', 'rhizomatically spread', and become 'boundary objects'.¹⁹ In the process the technologies may retain traces of their origins and excavating these may be important to understand their nature and consequences. However, their role and agency are not reducible to their origin any more than is the agency of a person. In that sense, scholarship focused on fetishes provides useful insights about material agency (such as that of drones). It recalls that the role of objects and their agency may have little to do with their origins, which are often forgotten, and everything to do with the way they have been woven into practices to the point where they become essential sources of authority and objects of veneration in their own right.²⁰

The second recurring idea is that technologies generate meaning. It is not only through discourses and social practices that meaning is reproduced but also through material agency.²¹ Indeed, technologies generate classifications, ways of seeing and ways of presenting. They are at the origin of (re)interpretations and representations of things. The microscope produces a representation of the world and the algorithm is at the origin of data classifications. Latour and Woolgar (as many others) draw on this to underscore the absolutely central place of instruments of observation and measurement in the 'construction of the scientific fact'.²² They insist that the material has a role which is 'symmetrical' to that of language and practices in the generation of meaning. Meaning then ceases to be an exclusively human-based

15 B. Latour, *Re-Assembling the Social: An Introduction to Actor-Network Theory* (2005), 104.

16 B. Latour and S. Woolgar, *Laboratory Life: The Social Construction of Scientific Facts* (1979).

17 G. Winthrop-Young and N. Gane, 'Friedrich Kittler: An Introduction', (2006) 23(7–8) *Theory, Culture & Society* 5.

18 C. Aradau, 'Security That Matters: Critical Infrastructure and Objects of Protection', (2010) 41(5) *Security Dialogue* 491, at 504.

19 For the concepts in the order cited, M. Callon, 'Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St Brieuc Bay', in J. Law (ed.), *Power, Action and Belief: A New Sociology of Knowledge?* (1986), 196; K. D. Haggerty and R. V. Ericson, 'The Surveillant Assemblage', (2000) 51(4) *British Journal of Sociology* 605; M. Power, *Organized Uncertainty: Designing a World of Risk Management* (2007), 27.

20 For example, B. Latour, *On the Modern Cult of the Factish Gods* (2010); or B. Schiermer, 'Quasi-Objects, Cult Objects and Fashion Objects', (2011) 28(1) *Theory, Culture & Society* 81.

21 F. Kittler, 'Thinking Colours and/or Machines', (2006) 23(7–8) *Theory, Culture & Society* 39.

22 See Latour and Woolgar, *supra* note 16, at 281 and Ch. 3.

notion and instead becomes something reproduced also by the material.²³ The material may hence be ‘performative’ in the sense of generating new subjectivities and imaginaries.

Nothing in the above suggests that material agency implies that things/machines are ‘human’ or that they are becoming more so. On the contrary, material agency should be understood on its own terms and in context. Latour therefore uses the term ‘actant’, borrowed from semiotics, to distinguish the technological agent from the human actor. Aradau (echoing Barad) insists on the term intra-action (to capture the hybrid material–human relation). Kittler is explicitly critical of the fact that ‘people are far too anthropomorphic when it comes to discussing technology’.²⁴ This point has bearing for the omnipresent argument that as long as drones do not act as humans there is no need to worry about them; they are ‘just’ weapons. Understanding material agency from the vantage point just introduced, as the performative effects of technology in a context, underscores that drones do not need to become humans to ‘do’ things any more than do Latour’s microscopes, Aradau’s critical infrastructure, or Kittler’s typewriters.²⁵

2.2. Drones in the field of legal expertise

If drones can be actants in the dual sense just suggested (of having agency and of generating meaning) it is reasonable to wonder how they may be intervening with the many practices that constitute them; that is, how drones are involved in co-constitutive processes. How, for example, do drones intervene with the legal expertise constituting the legal status of the US drone program? To look for an answer, it is useful to think in terms of field analysis. Field analysis has often been used to analyse co-constitutive processes, such as the ‘mysterious’ ones by which the minister creates the community s/he represents.²⁶ It usefully highlights first the contested character of legal expertise and second the mechanisms by which this expertise is likely to evolve.

A field is a social space held together by a stake at stake, such as the disagreement over what legal expertise is and who can (therefore) claim to be an expert.²⁷ The practices surrounding this stake at stake reproduce understandings of what is valuable – which resources (or capital) and what dispositions (or *habitus*) – and

23 As Barad puts it: ‘meaning is not a human-based notion; rather meaning is an ongoing performance of the world in its differential intelligibility’. See *supra* note 14, 335. In rougher words, meaning is not something that floats around out there but is constantly performed into through a (differential) mix of human and material interpretations (intelligibility). Of course this differential intelligibility has a history and a context. But the central point is the idea that meaning is itself a hybrid notion involving the material.

24 J. Armitage, ‘From Discourse Networks to Cultural Mathematics: An Interview with Friedrich A. Kittler’, (2006) 23(7–8) *Theory, Culture & Society* 17, at 29.

25 The contention that such intelligence is already used makes it even more intuitive to conceptualize drones as more than passive tools. See Consortium on Emerging Technologies, Military Operations, and National Security (CETMONS), ‘International Governance of Autonomous Military Robots’, (2011) 12 *The Columbia Science and Technology Law Review* 272, at 284.

26 P. Bourdieu, ‘The Mystery of Ministry: From Particular Wills to the General Will’, (2004) 10(4) *Constellations* 453.

27 Field is used following Bourdieu. For a chapter-length introduction to the field concept and further references: A. Leander, ‘*Habitus* and Field’, in R. Denmark (ed.), *Blackwell: International Studies Compendium Project* (2010), 3255.

hence a hierarchy based on ‘symbolic power and violence’.²⁸ The more natural and uncontroversial the hierarchy the more stable it is likely to be. If gendered or racial (dis)positions (or the legal expertise constituting the drone program as an object of legal regulation) are natural and uncontroversial, the hierarchies on which they rest will be more stable than if they are controversial and contested. The very existence of a field requires a degree of misrecognition (an *illusio*) of the extent to which the stake at stake (for example of legal expertise) is itself a historically situated construct imbued with power. Much field analysis has therefore been geared towards looking at the historical emergence and stabilization of fields, including the ‘juridical field’.²⁹ However, field analysis is not (contrary to what is often contended) a static theory of ‘domination’.³⁰ It is geared to diminish misrecognition and hence pave the way for contesting relations of symbolic power and violence.³¹ It does so by focusing both on the historical constitution of the field’s *illusio* and on its reproduction. The former focus directs attention towards the existence of processes of co-constitution in general (legal expertise and drones co-constituting each other). The latter moves on to questions about which (of the possible and hierarchically related) form a specific co-constitution takes. As such, field analysis remains open to the possibility that legal expertise and the drone program may not co-constitute each other so as to generate a ‘targeted-killing dispositive’ (Krasmann’s expression³²) in singular and hence may *not* be trapped in the kind of ‘legitimacy paradox’ discussed by de Goede and Sullivan in this issue. Rather, field analysis would see the precise nature of the co-constitutive relationship as defined by the hierarchical relations between the multiple and evolving legal expertise(s) and therefore as not only open but also potentially plural.

As a logical correlate of this emphasis on plurality, openness, and non-fixity, field analysis has an elaborate view of the mechanisms through which ‘fields’ and the struggles within them evolve and change. For the present analysis, change through agency is particularly central. The question is how the rhizomatic, boundary-object, association-making, travelling agency of drones refashions the field of legal expertise. On this account, two mechanisms of change appear particularly central. The first is changes to the boundaries of fields; altering the boundaries of who/what is included in a field also alters its dynamic and logic. Bourdieu’s account of the expansion of the state in France, which eventually comes to shape all spheres, including the most intimate ones of personal life, love, and death as epitomized by the *livret de famille* (the French family registry) and the military service, is a case in point. Through the agency of bureaucrats as well as through the agency of statistical registrations and the spread of administrative, bureaucratic, and legal technologies

28 Symbolic power is the power inherent in specific understandings and worldviews, symbolic violence is the harm it does which always necessarily rests on the complicity of ‘the victim’. P. Bourdieu, ed. *La misère du monde* (1993).

29 P. Bourdieu, ‘The Force of Law: Towards a Sociology of the Juridical Field’, (1987) 38 *Hastings Law Journal* 814.

30 A. Leander, ‘The Promises, Problems and Potentials of a Bourdieu Inspired Approach to International Relations’, (2011) 5(3) *International Political Sociology* 294.

31 L. Wacquant, ‘Pointers on Pierre Bourdieu and Democratic Politics’, in L. Wacquant (ed.), *Pierre Bourdieu and Democratic Politics: The Mystery of Ministry* (2005), 10.

32 See Krasmann, *supra* note 11, 665.

the state comes to retain a ‘monopoly on symbolic violence’ which is far more central than its monopolization of physical violence and taxation (usually emphasized). The monopoly on symbolic violence is core to the other monopolization processes.³³ The second mechanism is change within the field; that is, changes to the hierarchies of ‘resources’ (capital) and ‘dispositions’ (*habitus*). This type of mechanism is core to Bourdieu’s analysis of the emergence and subsequent changes in the literary field in France. New ideas about place and standing of literature promoted by (the agency) of authors such as Baudelaire and Flaubert generated a space for artistic literary production proper in the mid-nineteenth century.³⁴ Thinking analogously about how the agency of drones refashions legal expertise, in other words, leads to concentrating on how this agency redraws field boundaries and the hierarchies of valuation in the field. Of course, these processes are bound to be intertwined; reshuffling what is valued also changes who is an actor and vice versa, as also confirmed in Bourdieu’s analysis of the state and of the literary field. Separating the two core mechanisms is therefore entirely artificial. However, it is a useful heuristic move focusing attention on one mechanism at a time. It will be used in this way in the analysis below.

To sum up, the analysis below traces the actant role of drones in legal expertise with the help of the theoretical building blocks just introduced. It focuses on how the drones ‘act’ (have agency and generate meaning) in ways changing the field of legal expertise through the two mechanisms of change just outlined (change of field boundaries and change within fields). The argument, in other words, departs from the questions Michael Lynch considers fundamental to the study of expertise: ‘who’s in the field and what are they? ... and which fields [areas of expertise] are relevant?’³⁵ However, it moves on to also explore how the answers reshape the hierarchy of expertise(s) and hence how legal expertise and the drone program co-constitute each other.

3. DRONES REDRAWING THE BOUNDARIES OF LEGAL EXPERTISE

The debate over the legal status of the US drone program is carried out with reference to a number of distinct areas of law. Those most often figuring in the debate are international human rights law invoked by those who deem the drone program to be outside armed conflict, international humanitarian law invoked by those who see the program as part of an armed conflict, and international law invoked by those concerned with sovereignty. In addition to this, a number of legal areas pertaining to US law and, most notably, to the right to due process, regulation of the ‘Authorization to Use Military Force’, and the division of the competencies between armed forces and the intelligence services figure frequently in the discussion. Drones have refashioned this configuration by redrawing the boundaries of the field in two ways. First, they have associated legal expertise of a novel kind with the debates about

33 P. Bourdieu, *Sur l'état: Cours au Collège de France 1989–1992* (2012).

34 P. Bourdieu, *The Rules of Art: Genesis and Structure of the Literary Field* (1996).

35 M. Lynch and S. Cole, ‘Science and Technology Studies on Trial: Dilemmas of Expertise’, (2005) 35(2) *Social Studies of Science* 269, at 282. The question confronts a scholar who has published on fingerprint expertise in courts, who is himself called in as an expert on fingerprint expertise in courts.

the legality of the drone program and confirmed and consolidated their presence in the field. The associations made with legal experts from the intelligence services and commercial contractors will be used to illustrate this point. Second, drones have themselves become providers of a form of technologically generated legal expertise. The section concludes by underscoring that this dual change of the boundaries of legal expertise does not imply that drones have unambiguously bolstered the targeted-killing understanding of the drone program.

3.1. Drones making associations with legal experts

Drones play a role in pulling in and consolidating the role of legal expertise that has no obvious (or even currently accepted) place in the discussion about the targeted-killing/extrajudicial-execution status of the drone program. The possibly most obvious case in point is the way in which the agency of drones has been core to bringing a range of civil-society associations such as Dronewars in the UK (at the forefront of the discussion about the legal status of the drone program in Europe) or the American Civil Liberties Union (which played a core role in the Awlaki case³⁶) and made them engage as legal experts. However, the discussion below illustrates the argument with two other associations, namely those drones have made with the legal expertise of intelligence services and of commercial contractors. I focus on these partly because they are less obvious but also because they are 'harder cases' for the argument that drones and legal expertise co-constitute each other, in a way that reproduces an understanding of the drone program as a program of extrajudicial assassination and not only as one of targeted killing.

Drones have generated associations with the legal expertise related to (civilian) intelligence. Drones have not only given intelligence a far more central role but blurred the line separating it from the armed forces.³⁷ In fact, the blurring seems to have become so normalized that lawyers working in the respective institutions see little difficulty in crossing the boundaries. Hence, CIA director Panetta (presumably on the basis of the legal expertise of the agency) did not seem to find it problematic to publicly state that he had been in charge of Operation Neptune Spear killing Bin Laden (carried out by Navy SEALs).³⁸ Nor does the director of the National Counterterrorism Center seem to find it problematic to publicly state that it does not really matter whether an operation is carried out under the authority of the armed forces, the CIA, or the JSOC but that who is in charge should depend on what is legally most advantageous.³⁹ As this indicates, there may be a number of reasons to wish

36 Together with the Centre for Constitutional Rights, the ACLU filed a lawsuit in response to press reports that the United States had placed US citizen Anwar Al-Awlaki on a secret kill list, in August 2010 (*Al-Aulaqi v. Obama*). The lawsuit was dismissed with reference to the lack of legislation in the area. The two organizations followed up on the killing of Al-Awlaki in September 2011 with a second lawsuit that is still ongoing (*Al-Aulaqi v. Panetta*). More generally, the ACLU has also actively promoted public debate about the legality of the drone program through its web pages and numerous public appearances and statements related to the issue. For more information see www.aclu.org/national-security/targeted-killings.

37 A. Burt and A. Wagner, 'Blurred Lines: An Argument for a More Robust Legal Framework Governing the CIA Drone Program', (Fall 2012) 38 *Yale Journal of International Law Online* 1.

38 R. Chesney, 'Military-Intelligence Convergence and the Law of the Title 10/Title 50 Debate', (2012) 5 *Journal of National Security Law & Policy* 539, at 539.

39 *Ibid.*, at 629.

and push for the blurring of lines, including precisely the limiting of legal oversight and accountability. This said, ‘technological trends drive convergence’.⁴⁰ Drones change the relationship between intelligence gathering and military operations. Intelligence, surveillance, and reconnaissance have come to play a central role in directly supporting and organizing the operations of armed forces on the ground to the point where many suggest that they have restructured the way US armed forces are organized and work.⁴¹ By the same token they have increased the scope and relevance of the intelligence and paved the way for the current trend to form hybrid (military–civilian) teams and organizations. While this operational closeness has not wiped out differences or competition between these institutions, it has made them draw upon and cultivate the same kinds of legal expertise. It hence seems not only warranted but progressive to deplore the superficial training and relationship of (civilian) intelligence institutions to international humanitarian law and the law of armed conflict.⁴² Drones have, in other words, made associations that blur the lines between the military and the intelligence services in the US. Drones have brought the civilians into an area of military expertise and, in the process, constituted civilians as actors in the field of military legal expertise. They have hence shifted who can take part as an expert of what kind of law in the disagreement surrounding the legal status of the drone program, hence shifting the boundaries of this field.

Second, and similarly, drones have shifted the boundaries of the field of legal expertise by making associations bringing commercial contractors into it. Companies have a role in developing drones, in training those using them, and in providing maintenance and support.⁴³ This presence of companies is usually presented – by the companies as well as by observers – as a matter of technical competence and procurement with little or no relation to the more controversial deployment of drones.⁴⁴ However, this ‘technical’ presence brings contractors closer to the drone program than is usually acknowledged. Technology development in relation to drones is not something merely done in the lab, before technology is used. Rather the demand for drones has been such that they have been deployed ‘without lengthy testing procedures’ and that they are ‘developed and tested in use’.⁴⁵ The implication is that the commercial contractors remain involved in the drone program and

⁴⁰ Ibid, at 582.

⁴¹ Amongst many, L. K. Johnson, ‘Intelligence Analysis and Planning for Paramilitary Operations’, (2012) 5 *Journal of National Security Law & Policy* 481.

⁴² For the CIA see Center for Civilians in Conflict and the Human Rights Clinic at Columbia Law School (CCC), ‘The Civilian Impact of Drones: Unexamined Costs, Unanswered Questions’, *The Modern Issues in Conflict Series* (2012), 55; and for JSOC, see P. Chatterjee, ‘How Lawyers Sign off on Drone Attacks’, *The Guardian*, 15 June 2011.

⁴³ See J. Gertler, ‘U.S. Unmanned Aerial Systems’, (2012) *Congressional Research Service* R42136; for the UK case, see Ministry of Defence (MoD), ‘The UK Approach to Unmanned Aircraft Systems’, (2011) Maj. Gen. Timothy McHale *Joint Doctrine Note 2/11*. See also J. Meyer, ‘The Predator War’, *New Yorker*, 26 October 2009; R. Carroll, ‘Special Report: Remote Warfare’, *The Guardian*, 3 August 2011; or E. Ratliff, ‘SHOOT! Annals of Technology’, *New Yorker*, 23 February 2009.

⁴⁴ Indeed the readiness with which most observers, including the critically inclined, are willing to go along with the image governments and companies present and actively cultivate is surprising. For a rare exception see R. Gallagher, ‘Surveillance Drone Industry Plans PR Effort to Counter Negative Image’, *The Guardian*, 2 February 2012.

⁴⁵ See Gertler, *supra* note 43, 6.

that 'training' assumes a long-term, continuous character. 'Training' no longer takes the form of a course in which contractors communicate the necessary knowledge once and for all and then disappear. To this one should add that manning drones and training enough pilots has been a recurring problem that has been solved by engaging contractors to fill the gaps.⁴⁶ All in all, it is therefore not surprising to find that those responsible for flying drones think their operations would collapse without contractors and that they often are uncertain about the professional status (civilian or military) of a person responsible for a specific task.⁴⁷ In this situation, one would expect things to occasionally go wrong, thus forcing the legal expertise of these contractors into the heart of the drone program. This expectation is borne out, for example, in a 2010 story published by the *Washington Post* about a drone that mistakenly killed 'at least 15 civilian Afghans',⁴⁸ including women and children. The *Washington Post* informs its readers that the army officer investigating the incident 'was surprised' to find out that the woman responsible for misinterpreting the video feed worked for a company (SAIC).⁴⁹ This information (obtained under the Freedom of Information Act and echoed across the US press) sums up what is available about the incident. The SAIC incident may not have been linked to targeted killings/extrajudicial executions. There is no way of finding out. However, it confirms the closeness of contractors to the drone program. This closeness, in turn, entails unwritten or written rules specifying (including by limiting) the role of contractors in relation to military operations. These rules participate in forming the understanding of the legal status of the drone program and of contractors within it. How exactly is impossible to say, as this legal expertise is made invisible to the public.

For the argument here, what matters is its consolidation and presence. Drones have pulled in and consolidated the presence of legal expertise linked to commercial contracting just as they have with the legal expertise of civilian intelligence and issue-based NGOs. In that sense, the agency of drones contributed to the redrawing of the boundaries of legal expertise involved in constituting the legal status of the drone program.

3.2. Drones providing legal expertise

A second, rather more provocative, thought is that drones may shift the boundaries of the field of legal expertise by creating space for technological forms of legal expertise that originate from the drones themselves. However, this thought deserves serious consideration. Drones have come to occupy positions as experts partly by inadvertence and partly because they are placed there.

46 Office of Air Force Lessons Learned, *Focus Area: Enduring Airpower Lessons from OEF/OIF Small Unmanned Aircraft Systems* (2009) or *ibid.*, at 20.

47 *Washington Post*, 'Top Secret America', available at www.projects.washingtonpost.com/top-secret-america (accessed 18 August 2012).

48 D. S. Cloud, 'Civilian Contractors Playing Key Roles in U.S. Drone Operations', *Los Angeles Times*, 29 December 2011.

49 *Ibid.*

Drones have come to offer their legal expertise partly because the questions regarding who, in practical terms, ends up making legal evaluations when drones are involved have not received the attention they deserve. The official position in all countries using drones (and not only the US) is that there will always be a ‘human in the loop’, a person who must consult relevant legal expertise if s/he does not have it.⁵⁰ However, in practical terms the human in the loop may be so far removed that the legal evaluations end up resting with the drones. Who, for example, is responsible for the legal judgement and evaluation when drones misinterpret situations and action is taken on this basis as happened when two marines returning to their base were killed because their way of advancing was deemed threatening on the basis of images produced and classified by drones?⁵¹ Similarly, what happens when there is an interaction of codes or systems that works in unexpected ways, creating ‘emergent problems’ (problems rooted in the system as a whole)?⁵² It could be argued that responsibility rests with the person(s) who wrote the codes or planned the systems. Alternatively, it could be located with person(s) using them in ways or contexts they were not intended for. These people could then be held accountable for their insufficient mastery of relevant legal expertise or for their unwillingness to refer to such legal expertise. However, the loop is long and filled by very reasonable arguments for shuffling responsibility elsewhere and especially onto the technology itself. An illustration of what is involved is provided by the litigation between two companies where one, Integration Systems Inc. (IISi), alleged that the other, Netezza, had reverse engineered its software coding and sold it to the CIA for use with Predator drones where, according to IISi, it could not work because of systems incompatibility issues. A core worry (and motive for the litigation) as expressed by IISi’s chief technology officer was liability ‘in case that code kills people’.⁵³ Even if the phrasing ‘in case that code kills someone’ was used figuratively, it indicates the sense of the technology officer that the code’s incompatibilities would be acting on their own, escaping the control of its originators. Whether or not this would lead to the killing of people, it indicates the officer’s sense that codes increasingly become independent, and hence practically speaking responsible, potentially also for judgements that normally would involve legal expertise. This is neither because the chief technology officer, as the originator of the code, intended this, nor because those who reverse engineered the software or those who employed the drone intend to grant it this responsibility. Therefore none of these people would be likely to accept that they were responsible; instead judgements involving legal expertise would be located with the drone. This example shows that the shift displacing legal

50 See Quintana, *supra* note 4.

51 E. MacAskill Washington, ‘Afghanistan: Two US Marines Killed in Accidental Drone Attack’, *The Guardian*, 12 April 2011.

52 For examples and a detailed discussion of these issues, see CETMONS, *supra* note 25; N. Sharkey, ‘The Automation and Proliferation of Military Drones and the Protection of Civilians’, (2012) 9(4) *Journal of Law, Innovation and Technology* 299; R. Sparrow, ‘Building a Better WarBot: Ethical Issues in the Design of Unmanned Systems for Military Applications’, (2009) 15(2) *Science and Engineering Ethics* 169.

53 Quoted in CCC, *supra* note 42, at 44.

expertise to drones, or ‘a code’, as the chief technology officer puts it, is an outcome of the way technologies move and are used for multiple purposes. It has little relation to a reflected displacement of legal expertise from the human ‘in the loop’ to the technology and much to do with inadvertence.

Second, drones are also invited in a more reflective and conscious manner to provide legal expertise. The reason is the increasingly common argument that allowing the technology to make the judgement is better. One of the reasons used to justify the (already ongoing⁵⁴) use of automated weapon systems is that these systems can and do make judgements in situations where ‘the humans in the loop’ cannot make them, for example because of technical problems with signalling, because the required reaction time is too short, or because the information to be analysed is too massive and too complex (there is a ‘data crush’ and/or a ‘skills lag’).⁵⁵ It is hence suggested that not relying on the automated judgements would worsen the protection of civilians and increase collateral damage.⁵⁶ To this is added that, unlike people, technology systems are not emotionally engaged and hence do not react out of fear, anger, exhaustion, or despair. On the contrary, they can be programmed to be self-sacrificing.⁵⁷ The argument is often pushed further to suggest not only that it is appropriate to leave some important judgements to technology at present, but that even more should be left to them.⁵⁸ The hesitation to move down this route is correspondingly presented as resting on an emotionally and irrationally grounded fear of technologies taking over; a matter of ‘domestic and diplomatic sensitivities’ or, more banally, ‘misunderstandings’ that will diminish over time.⁵⁹ Certainly, the resistance against a greater autonomy seems to be receding. In the UK the idea of building the legal review process into the machines is already debated.⁶⁰ Similarly, the connotation that technology really ultimately knows best is frequently mobilized in current speak. For example, already in 2009, a

‘top military expert’ speaking anonymously in an interview explains that ‘there’s a whole taxonomy of targets . . . If a school, hospital, or mosque is within the likely blast radius of a missile, that too, is weighed by a computer algorithm before a lethal strike is authorized.’⁶¹

The emphasis put on the expertise contained in the algorithm may be a figure of speech, not a statement of how targeting decisions are made. However, even if it is,

54 For example, Gertler, *supra* note 43; MoD, *supra* note 43, para. 504; or C. Caryl, ‘Predators and Robots at War’, *New York Review of Books*, 29 September 2011.

55 See CCC, *supra* note 42, at 40.

56 L. R. Blank, ‘After “Top Gun”: How Drones Impact the Law of War’, (Spring 2012) 33 *University of Pennsylvania Journal of International Law* 675.

57 See CETMONS, *supra* note 25, at 273–9.

58 For characteristic listings of the advantages of drone technologies, see P. W. Singer, ‘Military Robots and the Laws of War’, (Winter 2009) *New Atlantis* 27, at 31–3; or CETMONS, *supra* note 25, at 279–80.

59 Respectively Chesney, *supra* note 38, at 583; and ‘veteran robot scientist Finkelstein’ quoted in Singer, *supra* note 58, 30.

60 According to MoD, *supra* note 43, at Para. 505: ‘a systems engineering approach will be the best model for developing the requirement and specification. Using such an approach, the legal framework for operating the platform would simply form a list of capability requirements that would sit alongside the usual technical and operational requirements’

61 See Meyer, *supra* note 43.

it is indicative of the willingness to rely on technologies for expertise on complex legal issues related to the targeted-killing program. This acceptance of drones as relatively independent providers of legal expertise is no less contested than is their role in hybridizing legal expertise.⁶² As has been intimated throughout the preceding discussion, there is no shortage of suggestions that their role is unwarranted, in need of regulation or even banning.

Disagreements over the boundaries of a field are integral to the struggles in any field. As just shown, drones intensify these disagreements. They make associations that constitute, consolidate, and strengthen the weight of civilian intelligence and commercial company-related legal expertise in the disagreements surrounding the drone program. They also alter the boundaries by offering up their own legal expertise. This dual move may appear as a recipe for bolstering the targeted-killing position which treats the drone program as falling within the realm of legality. However, this is not necessarily so. Not only is the presence of intelligence, commercial, and technological actants mobilized to bolster the extrajudicial-execution position treating the drone program as entirely outside legality by those who consider this presence itself as proof of the extrajudicial nature of the program. The extrajudicial-execution position may also be adopted from within the legal expertise tied to intelligence and commercial actors. In intelligence, there are recurring indications of dissent about the drone program as became clear (again) in the worry that Petraeus's successor might try to cut it.⁶³ Similarly, commercial actors may also adopt an extrajudicial-execution position on the drone program. It removes the suspicion that companies are involved in activities of dubious legal status. By the same token, an extra-legal position can consolidate the reputation of the drone industry, which has been tarnished by the controversies surrounding the drone program.⁶⁴ Finally, technological expertise may well be more readily received and integrated if paired with a clear extrajudicial-execution position. The way the agency of drones is redrawing the boundaries of the field of legal expertise, in other words, leaves considerable scope for controversy and politics. The associations they make and the expertise they provide do not unambiguously make the field slide toward a targeted-killing position, on the contrary. However, this may be of limited significance if drones weigh on the understandings of what is valuable in the field of legal expertise in ways that produce a systematic bias in favour of the extrajudicial-execution position. The next section therefore looks more closely at how the agency of drones has co-constituted the 'rules of the game' in the field.

62 N. Sharkey, 'Drone Race Will Ultimately Lead to a Sanitised Factory of Slaughter', *The Guardian*, 3 August 2012; and, for more elaborate versions of the argument, N. Sharkey, 'Saying "No!" to Lethal Autonomous Targeting', (2010) 9(4) *Journal of Military Ethics* at 299.

63 G. Miller, 'Obama's Pick for CIA Could Affect Drone Program', *Washington Post*, 24 November 2012.

64 The industry organization AVUSI is concerned with the 'negative' image of the industry. On 2 November 2012, it launched a 'Public Education Website to Highlight Benefits of Unmanned Systems'; see www.auvsi.org/AUVSI/AUVSINews/AssociationNews/#AUVSIFAAMission (accessed 19 December 2012).

4. DRONES RENEGOTIATING THE ‘RULES OF THE GAME’ OF LEGAL EXPERTISE

Drones have had an impact also on the rules of the game in the field of legal expertise, and more specifically on the struggle over what should be considered valuable; that is, the struggle over the hierarchies of resources (‘capital’) and dispositions (*habitus*) in the field. As this section outlines, drones have made both transparency and secrecy pivotal in the field, turning them into resources and making them part of dispositions. The increasing value of the transparency–secrecy duo for legal expertise is arguably inseparable from the broader trends that have placed this couple at the centre of contemporary governance more generally.⁶⁵ The drone program itself is an ‘open secret’. Its existence is neither firmly acknowledged nor squarely denied.⁶⁶ Information is leaked, provided indirectly, in informal settings or through rumours. ‘Wikileaks is more important than the freedom of information act’ to find out about it.⁶⁷ The frequent assertion that Pakistan has accepted the drone program on its territory, for example, turns out to be based on Wikileaks documents.⁶⁸ The claim here is that the agency of drones has reinforced and consolidated this centrality of the symbiotic transparency–secrecy couple in the field of legal expertise. It has done so by imposing a focus on transparency while at the same time steadying the role of secrecy. This renegotiation of the rules of the game has not weighed solely in the direction of the targeted-killing position on the drone program. On the contrary, the extrajudicial-execution position can also draw considerable advantage from this specific renegotiation of the rules of the game.

4.1. Drones imposing transparency

Drones have made transparency figure centrally in relation to the struggle over legal expertise in relation to the drone program for two reasons. The knowledge drones generate and the organizational processes they trigger have both turned transparency into an inescapable issue.

Legal expertise surrounding the targeted-killings–extrajudicial-executions program rests heavily on arguments referring back to the transparency ensured by the technological knowledge generated by drones. The legal expertise mobilized to defend the legality of the drone program constantly refers to the high quality of the knowledge provided by the drones. On their account, the information generated by the ‘unblinking eye’ of the drone is superior to that generated by the human eye, notably because the drone needs no sleep and therefore can generate

65 For an introduction and overview of the discussion see C. Birchall, ‘Introduction to “Secrecy and Transparency”’, (2011) 28(7–8) *Theory, Culture & Society* 7–8, 7, at 18.

66 The first public acknowledgement took place in a speech by Brennan at the Woodrow Wilson Centre and details about it remain unconfirmed. See G. Miller, ‘Brennan Speech Is First Obama Acknowledgment of Use of Armed Drones’, *Washington Post*, 30 April 2012.

67 Ben Wizner in ‘Ten Years after 9/11’, An International Conference Organized by the European Center for Constitutional and Human Rights, and Amnesty International, available at http://tenyears.eu/?page_id=106 (accessed 5 May 2012).

68 Living under Drones: Death, Injury, and Trauma to Civilians from US Drone Practices in Pakistan, Report by the International Human Rights and Conflict Resolution Clinic (Stanford Law School) and Global Justice Clinic (NYU School of Law), (2012), 106.

continuous massive flows of information. The drone can also perceive in detail, over distances, in conditions, and over time in ways that the no human eye possibly could. The drones make the otherwise complex and opaque picture of a faraway reality, possibly clouded by the ‘fog of war’, translucent and graspable to an extent normally impossible. For the same reason drones create the possibility of acting in this reality with ‘surgical’ precision.⁶⁹ The emphasis on the transparency provided by the technologically generated knowledge is taken to its extreme in the relation to the so-called ‘personality’ or ‘signature’ strikes where decisions to strike a target are founded on the analysis of the behaviour (personality or personal signature) of people.⁷⁰ Inversely, precisely because it plays such a central role in the argumentation, legal experts striving to demonstrate the extrajudicial status of the drone program are intent on demolishing this image of transparency. They hence recall that technologically generated knowledge may not be the main, let alone only, form of knowledge drawn upon. Instead they underscore the role played by conventional informants and point to the ‘multiple reports’ of cases where people have misinformed about their enemies with fatal consequences.⁷¹ More centrally, they also challenge the infallibility of technological knowledge. They recall and insist on the many recurring problems of technologically generated knowledge. Common issues in this regard include the difficulties involved in handling the complex and overwhelming amounts of information that lead to missing what is significant and misunderstanding that which is not missed. They will also point to the problems such as those created by ‘system incompatibilities’ (which blur images), by the ‘soda straw effect’ of drone knowledge (one can only see the area covered by the sensors which is as narrow as a ‘soda straw’), and by time-lag effects that may result in an inability to adjust to changes (such as the appearance of civilians close to a target or the disappearance of the target).⁷² The overall image the critics present of technologically generated knowledge is far removed from the one allowing for all-encompassing transparency. It is an image of partial, confused, and imperfect understanding; a reality that remains opaque. Rather than a transparent world, it is an inscrutable uncertain one, analogous to the one Wouter Werner finds in the Tallinn Manual in this issue. The energy that goes into constructing this image as well as its opposite of perfect transparency shows the extent to which transparency has become core to bolster legal expertise.

The centrality of transparency to legal expertise has been further accentuated by the organizational processes drones have generated. By contrast to conventional aircraft flown by a single person in often strained physical and emotional conditions, drones are operated by teams of people who can take turns and consult each other in relative comfort. Over 150 people are involved in flying Predators and Hawks. The

69 J. Brennan, ‘Speech on Targeted Strikes’, Woodrow Wilson Centre Speech, 1 May 2012.

70 CCC, *supra* note 42, at 12.

71 Living under Drones, *supra* note 68, at 39.

72 For an overview, see CCC, *supra* note 42. For an article-length discussion of the performative effects of the precision arguments as well as their problems, see M. Zehfuss, ‘Targeting: Precision and the Production of Ethics’, (2010) 17(3) *European Journal of International Relations* 543.

video feeds from drones are digital and can be stored.⁷³ The likelihood that knowledge can/will remain the preserve of one person or even a small group diminishes drastically. Legality itself has come to resemble a drone hovering over all drone-related activities, as a journalist puts it.⁷⁴ On this account, drones have increased the role of law in warfare. As one observer put it, drones have made 'laws, rules, and regulations pervade almost every aspect of the modern U.S. military institution ... war itself has evolved into a legal institution, lawyers have predictably become a common fixture in all of its dimensions'.⁷⁵ Reportedly lawyers are reviewing and approving the processes in the US drone program.⁷⁶ Those adopting a targeted/killing position on the drone program highlight this pervasive presence of law to argue the increasingly stringent standards, as well as an increased pressure to live up to these.⁷⁷ In their view, the organizational transparency generated by drones ensures not only that the drone programs are legal but that they are more legal than conventional forms of warfare. Inversely, those adopting an extrajudicial-execution position reverse the claims. According to them, far from generating transparency, the multiplicity of actors with their overlapping competencies, relying on ill-specified co-ordination, and hampered by institutional competition, generate opacity and confusion. Involving legal expertise merely accentuates this, as it is co-opted and instrumentally manipulated to mask mistakes and pre-empt legal accountability. A 'no blood, no foul' poster hanging in a site jointly operated by the CIA and JSOCs is taken as an iconic illustration of the relationship with law of the drone program.⁷⁸ On this account, far from generating transparency, the organizational transformations engendered by drones have undermined it.

Drones have, in sum, imposed transparency as a core resource and disposition for legal expertise pertaining to the drone program. They have done this through the forms of technological knowledge and the organizational process they generate and in a way that affects legal expertise whether articulated to defend or contest the targeted-killing position on the drone program. This might appear disconcerting to those who assume that transparency mainly weighs in favour of those contesting the secret services and the security establishment. The next section is bound to reinforce this sense of consternation. It argues that the technological agency of drones has made secrecy increasingly central, suggesting that implications for whether the drone program is constituted as one of targeted killings or of extrajudicial executions is analogously open.

73 See Gertler, *supra* note 43; D. Gregory, 'From a View to a Kill', (2011) 28(7–8) *Theory, Culture & Society* 188.

74 N. Paumgarten, 'Here's Looking at You: The World of Surveillance', *New Yorker*, 14 May 2012.

75 See Beard, *supra* note 3, at 418.

76 Chatterjee (*supra* note 42) claims that the al-Udeid air base in Qatar, for example, has four lawyers permanently available and quotes a former CIA counsel who claims to have 'reviewed' on average a death warrant a week.

77 Examples often cited include a purported expectation of no civilian casualties and zero collateral damage. The pressure felt by those aware that their actions will be recorded, and that mistakes may have legal consequences, is also frequently referred to. See e.g. Chesney, *supra* note 38.

78 See CCC, *supra* note 42, at 63.

4.2. Drones steadying secrecy

Along with transparency, drones have also made secrecy increasingly central to the rules of the game in the field of legal expertise. Transparency and secrecy consolidate and define each other. They have a symbiotic relationship as the one presupposes the other. In relation to the drone program, mobilizing secrecy is part and parcel of giving weight to virtues of transparency that the justification of legal expertise in relation to drones relies on.

Secrecy is one of the most potent ways of contesting the credibility of the legal expertise defending the legality of the drone program; it empties the arguments of their substance. Drones might have created a graspable and transparent world that can be acted upon with precision in ways enhancing legality. However, when no information is provided about the legal argumentation, the evidence gathered, or the legal procedures involved, such claims lose their credibility. There is just no way of verifying. It is therefore not surprising to find a critique of the way 'due process' is (not) provided in the drone program couched as a plea to 'lift secrecy' and 'clarify' the procedures and standards of evidence used.⁷⁹ In harsher terms, critics of the program, see secrecy as nothing more than a thin disguise for what is, at best, a wish to evade legal discussions. Hence, the proposal for a regulatory mechanism for the 'targeting of citizens' is presented as an attempt to counter the executive's wish to preserve the secrecy surrounding the drone program or its demand for a legal 'blank check' to cover its operations.⁸⁰ Finally, and most harshly, the extensive reliance on secrecy is sometimes couched as a thinly veiled cover-up which constitutes an infringement of existing law and/or the development of appropriate regulatory procedures and practices. Along these lines, Cole argues that:

the rule of law means little if the nation's highest officials can violate it in secret for more than five years, brag about it in public once they leave office, and face no consequences whatsoever.⁸¹

Cole concludes with no less than two full paragraphs of strictly legal questions that would require answers but can and do remain unanswered because of the reference to secrecy.⁸²

It would, however, be profoundly misleading to conclude that secrecy can only be mobilized to consolidate the authority of legal expertise contesting the targeted-killing position on the drone program. It is also pervasively mounted in its defence. A recurring argument is that the nature of the knowledge and the kind of processes generated by drones make secrecy warranted. Wise judgement about what to make publicly available is a necessity. Because drones make reality so transparent and

79 See Murphy and Radsan, *supra* note 9.

80 S. Adelsberg, 'Bouncing the Executive's Blank Check: Judicial Review and the Targeting of Citizens', (Summer 2012) 6 *Harvard Law & Policy Review* 438.

81 D. Cole, 'The Taint of Torture: The Roles of Law and Policy in Our Descent to the Dark Side', (2012) 49 *Houston Law Review* 53, at 62 and 66–7 respectively

82 *Ibid.* Cole's argument is primarily against the tendency to shift the terrain of discussion from the legal to the political and strategic – by suggesting that the targeted-killing program is inappropriate because of things like the resentment it creates or the vexed relations with international allies. As such, it constitutes an interesting defence of a strict interpretation of legal expertise (of the boundaries of the legal field, in the terminology of this paper).

governable, the knowledge provided by them must also be carefully guarded. Openness might undermine the efficiency of specific military/intelligence operations, including those tied to the drone program, for example by making it possible for those targeted to avert the strikes or mount counteractions. Moreover, it creates the risk that images are used by ‘terrorist groups and rogue states’ to provide ‘evidence of alleged law-of-war violations as part of a growing practice that some describe as “lawfare”’.⁸³ Not respecting secrecy might in fact become a source of danger in its own right. If more were known about the drone programs and the precise and detailed information gathered by the drones, it might jeopardize the operations and expose those involved, as well as civilians. Even more strongly, secrecy is mobilized as a source of expertise in its own right. Referring to secrecy is a way of affirming superior judgement about what can reasonably be made accessible; it is too complex, too sensitive for the uninitiated. Only insiders can judge. Hence, technological complexity is frequently used to dismantle arguments to an extent where a legal scholar feels compelled to protest that ‘there is nothing to be fascinated by; they [the drones] are only weapons’.⁸⁴ This way of drawing on secrecy to affirm expertise parallels the way religious authority is established. Only the initiated can and should have access to knowledge and perhaps even the initiated may not fully understand it. It also dovetails nicely with a long tradition of political thought stressing that *arcana imperii* (secrets of empire) are essential for good government. Even if that tradition is currently unfashionable, its connotations of good governance can be and are mobilized when information is authoritatively presented as too sensitive to be made public.⁸⁵ Secrecy can, in sum, also be mobilized as a weighty argument to reaffirm a targeted-killing position on the drone program.

To sum up, drones have co-constituted secrecy and transparency as essential resources and dispositions in the field of legal expertise. The technological knowledge and organizational processes generated by drones make it important for legal experts to mobilize and rearticulate secrecy and transparency. This holds for experts on both sides of the targeted-killing–extrajudicial-execution divide. The secrecy–transparency couple does not clearly favour one side over the other and is effectively mobilized by both positions. Who will be able to do this most effectively remains an open question.

5. CONCLUSION

Drones are not mere passive objects of the expert legal debate surrounding the issue of whether the controversial US drone program that killed Anwar al-Awlaki, amongst many others, is a matter of targeted killings or extrajudicial executions. The ‘agency’ of drones shapes who and what is considered a legal expert as well as the hierarchies among these. Drones have increased the range of legal experts

83 See Beard, *supra* note 3, at 424; also Johnson, *supra* note 41.

84 Chris Rogers (former editor of the *Harvard Human Right Journal*, amongst others) in ‘Ten Years after 9/11’, *supra* note 67.

85 E. Horn, ‘Logics of Political Secrecy’, (2011) 28(7–8) *Theory, Culture & Society* 103.

and forms of expertise involved both by making ‘associations’ and by offering their own legal expertise. Drones have similarly consolidated the pivotal place of secrecy and transparency in the (dis)positions of legal experts. This ‘agency’ of drones is of course not independent of the context that created them and lends them meaning and authority. It is relational. But in this, the ‘agency’ of drones is symmetrical to that of people. Even if drones do obviously not share personal attributes such as talent and feelings, technological systems evolve and develop in action. In the process they become increasingly differentiated, again reintroducing a measure of symmetry. However, ultimately trying to nail down analogies between performative technological and purposeful human agency is not the point here. Rather, this article has strived to pave the way for an acknowledgement and improved conceptualization of, and hence capacity to deal with, technological agency *sui generis* (or perhaps more adequately *sui generum* as there is no reason that it is more singular than human agency). Focusing too much on analogies may be counterproductive, especially if it distracts attention from the fact that the significant question is how technological and human agencies are intertwined in hybrid processes such as those co-constituting legal expertise and the drone program.

This insistence on the agency of drones in field of legal expertise and hence in the co-constitutive process linking legal expertise and the drone program has significant theoretical and practical implications. The focus on technological agency moves attention away from the linguistic and textual focus of most studies of how legal regimes emerge and make things (in)visible. Instead it directs attention to the role of practices, and material ones specifically. The focus on fields highlights that legal expertise is always contested and therefore also contestable. People with ‘strategies’ based on dispositions struggle over it from ‘positions’ based on resources, and so do (more unconventionally) technologies. Focusing on this is a way of ensuring that the analysis does not miss contradictions, changes, tensions, and fissures and that, consequently, the opportunities and potential they contain are not foregone.⁸⁶ This leads straight to the practical implications. Insisting on the agency of drones underscores that when considering the possible futures of legal expertise regarding the drone program, it is important to realize that this expertise is shaped not only by the struggles among lawyers, but also by the technology itself, and significantly so. As such, technology (as other significant actors) must be included in the numerous suggestions and current calls for regulation.⁸⁷ This is the sense of Latour’s call for a ‘parliament of things’ which could usefully include drones, especially when the drone program is debated.⁸⁸

A focus on the significance of ‘actants’ in co-constitution cannot lead to conclusions about whether or not the kind of transformation of expertise they generate

86 These insights about the politics of technological agency are general. The analysis of ‘actants’ in ‘fields’ could be transported elsewhere, including to the study of other older military technologies. Comparisons along these lines would no doubt yield an enriched understanding both of the politics of technological agency in general and of the specificity of the agency of drones in particular. However, such comparisons will have to await further research.

87 For an overview of these calls see CETMONS, *supra* note 25.

88 B. Latour, ‘Turning around Politics’, (2007) 37(5) *Social Studies of Science* 811.

is appropriate. What it can do is say something about how the expertise looks. By showing that drones have made legal expertise pertaining to civilian intelligence and corporations more central and that they have made transparency and secrecy foundational for the legal expertise this article has shown how drones have transformed the debates over the legal status of the US drone program. It has also shown that this transformation does not uniformly bolster those who take the targeted-killing position, but can be (and is) mobilized also on the extrajudicial-execution side. 'Targeted killing' has not been able to 'assert itself as a security dispositif that displaces and relocates political notions underlying and defining international law'.⁸⁹ The drone program continues to be also extrajudicial execution. By insisting on this, the present article not only offers a grip on the role of technological agency in the emergence and development of contested legal expertise surrounding the drone program but also avoids closing down the discussion about the potential plurality of roles technological agency may play in reproducing that divide in the future.

89 See Krasmann, *supra* note 11, at 666.