

Article



Everyday secrecy: Oral history and the social life of a top-secret weapons research establishment during the Cold War

Security Dialogue 2020, Vol. 51(1) 60–76 © The Author(s) 2019 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/0967010619887850 journals.sagepub.com/home/sdi





Abstract

Despite the welcome turn within security studies towards a more material- and practice-oriented understanding of state secrecy, the ways in which security actors experience, practise and negotiate secrecy in their everyday work lives has been rather overlooked. To counter this neglect the article calls for attention to everyday secrecy. Focusing on a former top-secret weapons research facility in the UK called Orford Ness, it uses oral history to give an account of ex-employees' memories, experiences and practices concerning secrecy. Such a focus reveals that subjects make sense of procedures and rules of secrecy in ways that are sometimes surprising and unexpected. Ultimately this perspective emphasizes that secrecy is not just what governments and organizations prescribe and proscribe; it is also shaped by subjects who negotiate these rules. Everyday secrecy matters: as a perspective it shows that secrecy is not simply imposed by states and organizations from 'above'; it is also made from 'below', albeit very asymmetrically.

Keywords

Everyday life, memory, nuclear weapons research, Orford Ness, secrecy, security

Introduction

State secrecy has been something of a blank spot in much critical security research. A glance at impressive state-of-the-art handbooks in this area reveals few index entries, let alone chapters, devoted to secrecy (Aradau et al., 2015; Basaran, 2017; Salter and Mutlu, 2013). By contrast, a vibrant genre of intelligence studies exists where reference to the secret is commonplace. No end of widely read books promise their audience 'inside' knowledge about this or that 'secret' war, programme, agency, etc. (e.g. West, 1999). However, in these popular works, no matter how fascinating the tales they tell, attention has focused more on the revelation of particular *secrets* than the sociological study of *secrecy*. Few deem secrecy a field of power relations that merits theoretical scrutiny in its own right.

This picture is beginning to change. Building on some of the fundamental insights generated by early sociological (Simmel, 1906) and social-psychological (Goffman, 1959) analyses of concealment, security researchers are moving beyond the study of this or that secret, and beginning to focus on secrecy, understood as the social processes of keeping and revealing secrets (Costas and Grey, 2016: 7). In the past few years we have seen an exciting wave of security research exploring secrecy (De Goede and Wesseling, 2017; Kearns, 2017; Neocleous, 2003; Paglen, 2010; Anaïs and Walby, 2015; Grondin and Shah, 2016), or 'adjacent concepts' (Costas and Grey, 2016: 2) like in/visibility (Van Veeren, 2017), ignorance (Rappert, 2012), conspiracy and nonknowledge (Aradau, 2017) and also the methodological challenges of researching 'closed' worlds (De Goede et al., 2020). I call this work 'new secrecy research' to distinguish it from the more conventional focus on revealing and exposing security secrets, or assessing the strategic merits of secrecy. Not the least of its contributions is to disaggregate state secrecy, treating it less as a coherent totality or homogeneous thing and more in terms of a whole range of practices, identities, technologies and mediators which have, in different ways, been constitutive of certain secrecy effects. New secrecy research is also important because it unsettles the standard binaries and moralities (e.g. secrecy vs. publicity, good vs. bad) through which secrecy is conventionally understood.

While new secrecy research offers important advances in the way we understand the politics and power relations of concealment, it still tends to approach secrecy in what one could call a major key. Secrecy remains grand in much of this literature either because it is encountered in the context of dramatic events (e.g. scandals, conspiracies and leaks), or in relation to big structures like the state and the interstate system (e.g. Balzacq and Puybareau, 2018). While sympathetic and indebted to the orientation of new secrecy research, this article calls for scholarly engagement with what I call 'everyday secrecy'. In making this move I build on recent lines in security research that foreground the everyday, and that argue for sensitivity towards the minor, the dispersed, the mundane, the little things (Crawford and Hutchinson, 2016; Rowley and Weldes, 2012; Huysmans, 2011). At the same time, and most pertinently, I build on a small but significant body of work across disciplines like anthropology (Gusterson, 1996, 1997; Masco, 2006), organization studies (Grey, 2012; Costas and Grey, 2016), science and technology studies (Hilgartner, 2012) and social history (Smith, 2015; Freeman, 2015), where scholars examine how the secrecy of securitized places and institutions is lived, practised and negotiated, how it shapes everyday experiences of work, how it affects identities, and how it interacts with relations of gender, class, race and other axes of power.

With a focus on everyday secrecy we become more attuned to the ordinary rather than the extraordinary aspects of secrecy; the 'daily practices of secrecy' (Gusterson, 1996: 75–82) and not just the exceptional; the gestures, expressions and practices which actors use to manage information in their everyday interactions as much as, and in conjunction with, the formal systems by which it is organized (Costas and Grey, 2016; Hilgartner, 2012). There are good reasons why secrecy research has tended towards the major, the extraordinary and the exceptional. My point is certainly not to dismiss that focus so much as widen and complicate it by calling for engagement with the minor and the everyday.

I am interested in everyday secrecy in a very specific context: within a top-secret, securitized environment. While there is a considerable literature on secrecy within personal, familial and community relations (e.g. Sedgwick, 2008; Poletti, 2011), studies of the cultural life of secret organizations are, for obvious reasons, 'extremely rare' (Grey, 2012: 261). As Gusterson (1997: 115) has put it: 'How does an anthropologist study such institutions as weapons laboratories and corporations? In most cases participant-observation will be highly problematic, if not impossible, though some have succeeded in undertaking it.' The answer he offers is to de-emphasize participant observation in favour of 'polymorphous engagement'. This means 'interacting with informants across a

number of dispersed sites, not just in local communities, and sometimes in virtual form; and it means collecting data eclectically from a disparate array of sources in many different ways' (1997: 116). The richness of his study of the cultural life of the Lawrence Livermore weapons laboratory at the end of the Cold War is testament to the productiveness of such methods.

Whereas anthropologists of security and secrecy like Gusterson and Masco have tended to focus on active security organization and programmes, I turn to the past. Following the lead of recent scholarship that documents the social history and experience of top-secret code-breaking institutions like Bletchley Park (Grey, 2012; Smith, 2015), Arlington Hall (Mundy, 2018) and even secret cities like Oak Ridge (Freeman, 2015), I ask what we can learn about everyday secrecy from historical cases and through oral history. By looking at programmes and places that are now de-activated and at least partially declassified, we can obviate some of problems of access and confidentiality which researching contemporary security organizations poses. Oral history is a valuable tool for researching everyday secrecy. As I explain below, it affords us access to a level of experience and informal practice that is not documented and only faintly visible in declassified official archives.

My case is Orford Ness, a former secret weapons testing, military research and surveillance establishment located in rural Suffolk on the east coast of Britain. My findings stem from an ongoing research project examining historical and contemporary secrecies at and through this site (Walters and Luscombe, 2017, 2020). Orford Ness takes its name from its peculiar geographical location: a long (16km), vegetated shingle spit joined to the mainland by a narrow neck of land. At the start of World War I this remote peninsula began to be colonized by the military who were to turn 'the island' (as it is known locally) into what the Official Secrets act designated as a 'prohibited place' (Heazell, 2010: 23). When the UK's Atomic Weapons Research Establishment expanded rapidly in the 1950s, it had Aldermaston as its main site, but Orford Ness soon became an important setting within its global geography of weapons testing. To the military planner remoteness and seclusion was an asset. For 70 years cutting-edge work on aerial gunnery and aerial photography, bomb ballistics, some of the first work on radar (as well as 'over-the-horizon' radar in the late 1960s), high-speed photography and the environmental testing of several generations of atomic bombs were all carried out at Orford Ness.²

In 1993, after the military establishment had decommissioned and abandoned it, the remnants of the site were acquired by Britain's largest conservation organization, the National Trust (NT) (Wainwright, 2009: 136). The NT took a keen interest in Orford Ness because it has a unique environmental profile: it is the 'largest vegetated shingle spit in Europe' which features 'rare and highly specialised flora' (Wainwright, 2009: 134–135). The NT's second reason for acquiring the site was more controversial, at least at the time. The site housed a series of decaying concrete bunkers, observation towers and huge laboratories. If the medieval age was memorialized by castles – many of which the NT now manages – then Orford Ness would do something comparable for the Cold War, a conflict which otherwise had left relatively few visible traces in the British landscape. The NT now opens parts of the ruins of Orford Ness to a visiting public for approximately 90 days per year. Today it is credited as 'the only former atomic weapons testing site that may be freely visited' (Cocroft and Alexander, 2009: 62).

The NT has taken a variety of measures to document memories and recollections from former employees, many of whom have returned to Orford Ness as visitors. These recollections are an important if imperfect source of public information. Given the scarcity of official documentation about the atomic weapons experiments conducted at Orford (Cocroft and Alexander, 2009: 58), and given that much information remains classified or lost, Wilson (2006: 32) suggests that to date '[t]he majority of what is known to the National Trust guardians about the Cold War history [of the site] has been garnered through oral testimony from ex-employees'. In the course of doing

fieldwork at the site I was fortunate to be given access to some of this material: a set of recordings with more than 40 former employees carried out mostly between 2013 and 2017 by one NT volunteer. The recordings are interviews which cover many topics including the technical and social nature of employees' work, the social life at the site, and how the individual came to work at Orford Ness. In many of the recordings the interviewees also speak at some length about secrecy and security at Orford Ness. In this article I use these oral testimonies as the subject matter for a set of reflections on everyday secrecy.

What is the specific promise of a focus on everyday secrecy? In reviewing several decades of sociological interest on the theme of everyday life, Sztompka (2008: 9-10) observes that this orientation foregrounds themes of localized relationships with others, repetition and routine, habitual action, embodiment, place and emotions. In forging connections between secrecy research and the everyday I want to bring these kinds of objects and concerns into the way we understand covert practices, places and projects. Building on sociologically and anthropologically attuned reflections on the social and psychological work of secrecy (Simmel, 1906; Goffman, 1959; Taussig, 1999; Hilgartner, 2012; Sedgwick, 2008; Costas and Grey, 2016), I argue that there is more to secrecy than the official practices, rules and technologies that new secrecy research has rightly emphasized. There is also the very human, very ordinary, and often only partially conscious ways in which people of varying backgrounds interact with practices, institutions and one another. A fuller account of secrecy requires us to examine how people in their everyday activities negotiate the sayable and the unsayable, the knowable and the unknowable, the visible and the invisible, and how they make sense of those negotiations. Michael Taussig calls this the 'labor of the negative' (1999: 6), a term that stresses that the various silences, denials, obfuscations and opacities we associate with secrecy are never simple absences but sustained by a complex work of social production. Ultimately a focus on everyday secrecy emphasizes that secrecy is not just what governments and organizations prescribe but also what those implicated in its rules, practices and places do with it. Everyday secrecy matters: as a focus it shows that secrecy is not simply imposed by states and organizations but made, albeit very unequally and asymmetrically, from above and below.

The rest of the article is organized into three sections. First, I offer a set of arguments as to how a focus on the everyday offers key insights and advances for secrecy and security research. Second, I discuss the promise and challenge of using oral history as a method of researching everyday secrecy. Third, I present some preliminary findings under two thematic headings: 'signing the act' and 'need to know'.

Although the main aim of the article is to advance secrecy research, it can also be read as a contribution to knowledge about its case, Orford Ness. Most scholarly writing about Orford Ness examines it from the point of view of aesthetics of military ruins and violent landscapes (Wilson, 2006; Davis, 2006), less so in terms of the social history of Orford Ness during its active life (but see Heazell, 2010 and Kinsey, 1981). The archive of sound recordings of former workers has yet to be used systematically by scholars. This article represents a first step in that direction.

Everyday secrecy

What is the promise of a focus on everyday secrecy? First, a concern with the everyday captures the differential ways in which secrecy is experienced. In particular it promises insight into the ways in which relations of gender, profession, sexuality, race and class might modulate experiences of secrecy (Smith, 2015; Grey, 2012; Sedgwick, 2008). The experience of secrecy for a senior male engineer within a weapons laboratory will be quite different from that of a female cleaner within the same complex. In security studies secrecy is often imagined in terms of spatial metaphors like

the veil and the backstage. The morphology of these terms implies a kind of binary division into insiders and outsiders. While such binaries might have an intuitive appeal, studies of everyday secrecy suggest they are not at all adequate. Studies of secret organizations reveal they are, in Grey's words, structured by both secrecy from the outside world but also an 'internal secrecy' (2012: 126). The latter has everything to do with the 'need-to-know' basis on which classified military work was organized after WWII. It meant that virtually no one saw the bigger picture. For example, the 'need-to-know' logic finds material and symbolic expression in systems of graduated security clearance, which are manifested in bodily ways through the rule that workers must wear differently coloured badges, each colour signifying a different level of security clearance. Such practices shape identity and experience within secret organizations. Gusterson (1996) notes of his case, the Lawrence Livermore laboratory, how this 'enormous and complex system for categorizing people and information' serves to make the laboratory into 'an enormous grid of tabooed spaces and tabooed topics' (p. 70). Possessing high-level clearance contributes to feelings of 'distinction and privilege' which help to compensate for the kind of sacrifices many people make to work under such securitized conditions (p. 88). At the same time those with only the lowest levels of security clearance feel 'set apart' and sometimes humiliated by little routine practices, such as the fact of needing to be escorted whenever they move in securitized areas (p. 72). In this way, a focus on everyday secrecy promises to advance understanding about geographies of secrecy revealing not just how space is engineered to produce secrecy and mediate visibility on the scale of great territories, but also how geographies of secrecy are experienced on intimate and embodied scales (Paglen, 2010; Mountz, 2015).

At Orford Ness a similar system of classification, zones, badges and 'need to know' structured most aspects of daily life. Interviewees report feelings of intrigue and suspicion about what was going on in other laboratories and areas of the site. They speak of how they would meet for lunch in the canteen or for sports activities: for some this was a chance to find out what their colleagues were up to, while for others it was a matter of never 'talk[ing] shop' [Luke].³ Space was experienced not only in terms of restricted areas but also of 'levels' which signified degrees of authority and awareness about work on the site. As one technician put it when asked if anti-ballistic missile treaties had any impact on his work: 'That wasn't something that sort of came down to our levels.' Decisions about his work were 'all done upstairs' [Samuel]. And workers speak of the little rituals that shaped the day. For example, 'as the cleaner came in everybody had to turn the sheets. . . upside down. And you walked with the cleaner, and if he wanted to go to the loo you went there with him' [Stanley].

Second, a focus on the everyday raises questions not just of diverse social experiences but practice and agency (Crawford and Hutchinson, 2016). When secrecy is theorized on the scale of states, or with metaphors of cloaking, it all too readily appears as a *fait accompli*. Likewise, if we look only at the formal rules which define a regime of secrecy it will appear 'more seamless and totalizing' than in practice given that the rules 'may be enforced ambiguously and complied with erratically' (Gusterson, 1996: 79). In contrast a focus on everyday secrecy highlights the way people negotiate rules and regulations. There are hence significant overlaps here with what Costas and Grey (2016: 8) have called 'informal secrecy'. If formal secrecy pertains to the world of official rules, procedures and directives, informal secrecy speaks to the kinds of tactics which actors use to negotiate daily life under conditions of secrecy. Often it takes verbal rather than textual forms, and involves gestures, facial expressions and other ways in which actors performatively and expressively manage information. A wink. A gesture like closing the office door before speaking. Or, perhaps a stock expression: 'you didn't hear this from me'.

We already saw, with the mention of gossip in the canteen, that informal secrecy was a feature of life at Orford Ness. However, my research reveals how these subjective negotiations and

performances of the sayable and the unsayable have a remarkable persistence over time. It is not uncommon in the interview tapes to hear veterans use expressions like 'I probably shouldn't tell you this' or refer to statements they made 'off the tape'. Secrecy remains an active part of the way they talk about their time at Orford Ness, attesting perhaps to its power to shape subjectivity.

Third, we learn more about mood, feeling and emotion when we approach secrecy from the angle of the everyday. A focus on the everyday invites a certain de-dramatization of secrecy which I see as a necessary counterweight to the way secrecy so often appears in popular and political culture. Scholars note that publics are fascinated with the secret activities of the state, and the exposure of secrets plays a powerful role in the dynamics of public politics (Melley, 2012). In this arena secrecy is often associated with feelings of suspicion, scandal, immorality, danger and intrigue. These emotions are a part of everyday life under secrecy, but they are not all. Secrecy can also involve play, humour and a range of emotions that are far less dramatic or awesome. It is this ordinary and rather banal play of feelings that I want to highlight in drawing attention to everyday secrecy: not because its association with conspiracy, malice and ill intentions is incorrect but because it is rather one-sided and limiting. If concealment and disclosure were only about the bad, if it were lacking in 'charms' (Simmel, 1906: 464), pleasures and 'little nothings' (Huysmans, 2011), concealment would surely be much harder for any organization to accomplish, and employees to live with.

This juxtaposition of secrecy as something malicious and secrecy as rather prosaic (and sometimes amusing) comes out in the Orford Ness interviews. In the contemporary mediascape Orford Ness is typically aestheticized in ways that do express the mood of secrecy as sinister and foreboding. The ruins of Orford Ness have today become a kind of Mecca for documentarians, photographers, poets, writers, conspiracy enthusiasts and assorted bunkerologists (Bennett, 2013; Wilson, 2006). In photographs, blog posts, documentaries and other media, Orford Ness is often depicted as a desolate, mysterious place. The NT itself took a not dissimilar view: its management plan took active steps to preserve what it deemed 'the feeling of mystery and secrecy with which much of Orford Ness is imbued' (Wainwright, 2009: 138). A rather more mixed mood is conveyed by the interviewees. Perhaps this is not surprising: in their recollections it features not as a mysterious ruin but the vibrant research establishment it once was. Many describe their time there as some of the happiest and most exciting years of their life. They recall friendships, a lively social scene and the excitement of cutting-edge research. Many do speak of the way secrecy featured in their lives, some express frustration that the 'need to know' kept them in the dark about their work, and some, as I noted above, continue to acknowledge norms of caution and even silence about their work. Nevertheless, when they discuss secrecy it is often in terms of practical, routine measures – identity checks, procedures, the classification of documents, etc. Moreover, they offer anecdotes in which the secret, far from being mysterious or sinister, is often banal, perhaps irritating, and sometimes ridiculous. In this way a focus on the everyday invites a certain de-dramatization of secrecy.

Finally, a perspective of the everyday offers a fine-grained appreciation for the materiality of secrecy, and often in quirky, unexpected ways. As such this perspective has much to offer, as well as learn from, the wider material 'turn' in international relations and security studies. Perhaps memory has a special affinity for objects and artefacts. Or perhaps it is just easier to narrate a complex experience by way of anecdotes and material referents. Whatever the cognitive mechanisms at play, interviewees had no end of tales they could tell about concrete things.⁴ To take just one example, Jenny, a woman who worked for 10 years as a scientific assistant and film analyst at Orford Ness, reflected somewhat apologetically that as a worker she didn't think too much about secrecy, despite the sensitive nature of the work she was doing. It was 'a fuss about nothing, which is a dreadful thing to say!'

'The only time I worried about things being secret is when we would come across documents – or produced documents actually – that said "top secret atomic" and especially the ones that said "UK eyes only", 'cause when the Americans came, you even had to lock up the stamp that says "UK eyes only".'

The remark is wonderful not just for the insight regarding the secrecy of a humble little tool of secrecy. It is also the way in which this little classification tool, and the routine of concealment which surrounded it, gave expression to much larger forces and contradictory relationships – in this case the play of trust and distrust, collaboration and competition, that characterized the Anglo-American 'special relationship' within the field of atomic weapons policy (Arnold and Pyne, 2001).

Everyday secrecy, method and place

Besides advancing a theme of everyday secrecy, a second contribution of this article is to explore, albeit more briefly, what oral history might bring to methods of secrecy and security research. Widely practised across the social sciences (Leavy, 2011: 5; Thompson, 2000), oral history uses interview methods to engage ordinary people directly about dimensions of their existence that have not typically been present in the written, official record. Oral history's privileged resource is memory. Indeed, it seems fair to regard it as a method of producing memory. The potential for oral history for security and secrecy research is, in fact, twofold. Not only can it give expression to the voices and experiences of ordinary people whose lives have often been overlooked by traditional security and intelligence studies, and whose experiences have left little trace in official archives. Oral history also has the potential to generate new information in areas where practices and norms of official secrecy have made public information scarce. Yet, oral history also has limitations which have been widely noted by historians. As Grey (2012: 27) has emphasized in relation to his own use of oral testimony with veterans of Bletchley Park, memory is prone to distortion as well as nostalgia. These effects only become more pronounced with the passing of time. Many of the interviews with the Orford Ness veterans are punctuated with hesitancy and uncertainty. 'I seem to remember, but as I say it was so long ago. . . I could've been wrong' [Anna; see below].

It is useful to distinguish two models of oral history. In the first, which I call the *direct* model, it is the oral historian who conducts or directs the interviews. An obvious strength of this model is that the practitioner will conduct interviews in accordance with the specific aims and ethos of the research project. A second model is archive-based (Thompson, 2000: 9); I call it the *indirect* model. Here the scholar uses an oral history archive, typically comprising sound recordings, generated by other researchers and/or institutions. The disadvantage is that the user was involved neither in the design of the questions nor the direct experience of the interviews. But one advantage is that if the archive is large it gives the researcher access to a range of subjects that might not otherwise have been contemplated. It also gives the researcher access to subjects who may no longer be alive.

The approach I have taken follows this second, indirect model. The taped interviews with former workers and military personnel at Orford Ness on which I have based this research into every-day secrecy were conducted by David Warren. Now in his mid-70s, David was employed at Orford Ness as a scientific assistant from 1959 to 1963, a period that included working on Britain's experimental medium-range ballistic missile, Blue Streak. After leaving Orford he pursued a career in industrial engineering. Upon retiring, David became a volunteer 'ranger' at the Orford Ness site, working for the National Trust. He displays a deep passion for the place, its history (he describes himself as a 'volunteer researcher' of Orford Ness) and its secrets, which is reflected in the depth of his involvement. At the behest of the NT, between 2013 and 2017 David conducted a set of interviews with former employees at Orford Ness, a project which yielded 44 audio recordings and another 17 written ones.

David stressed to me that he is largely self-taught when it comes to social research techniques. As a result he modestly described his data as 'fallible'. He picked up some guidelines from a researcher who had conducted an earlier set of interviews. He also learnt on the job. His techniques for recruiting interviewees included an employee list which he received from the NT, working membership lists of other military research sites, posting notices online and snow-balling. All interviewees signed a disclaimer agreement granting the NT the right to publicly use their interviews. David stressed the significance of time to me, conveying a sense of urgency. Since most security research ended at Orford in the early 1970s, the last cohorts to work there are now in their mid 70s or older. The window of opportunity is closing. At least one of his contacts had died before he got a chance to interview her, and several more have died since being interviewed.

David described his working method to me: it was an approach he had found particularly effective in getting participants to discuss their experience of Orford Ness in some detail. Key to the method was to 'get them on the island', give them a tour of the place as it exists today, then get them to chat, either at the site or, if they lived nearby, in their homes. Visiting the site was really important to enhance the interview experience. First, it established a 'a sense of occasion', a feeling of good will, which engendered a commitment to talk. Most people appreciated the opportunity. But the visit to the site was also important as a 'memory jog'. Visiting the site would challenge ailing memories, both eliciting a reassessment of things recalled, but also sometimes sparking new memories, fond recollections, questions and topics for conversation. Site visits had still another significance for David. They were also about building a community of interest and momentum that will, he hopes, foster support for future research into Orford Ness's military past.

There is a more general point to be made here about the significance of place for memory, and thus the role place can serve in oral history. As David's working method suggests, the fact that Orford Ness still exists as a partially accessible place, albeit in a ruined but managed state, clearly matters. It means the site is available as a zone of memory production, collection and curation⁶; or as Dickinson et al. (2010: 4), surveying the relations between public memory and place, have put it: a 'memory apparatus'.

There are two further ways in which place matters for researching everyday secrecy through oral history. First, a focus on place affords a kind of social cross-section. As a moderately sized scientific, military and intelligence station that operated for more than 70 years, Orford Ness employed at various times a great diversity of people in myriad roles. Some worked there for mere weeks (for example as electricians or builders on specific projects) while others were stationed for more than a decade, perhaps as scientific researchers or electrical engineers. Furthermore, this was by no means an exclusively male environment. Women were employed in considerable numbers, not only in clerical and support roles but doing complex analytical work on bomb ballistics and flight observation.

Second, place matters because it accumulates traces of multiple pasts. Orford Ness was not a single-purpose site. Instead, perhaps because its peculiar geography promised 'privacy' (Heazell, 2010: 201) and proximity, it would host a whole series of security and defence functions over many decades of active service. Davis has described it as a kind of 'palimpsest' (2006: 47): one can uncover there many layers of military and security history. All of this means that the oral history archive generated by the former Orford Ness employees traverses diverse security functions, jobs, genders and generations. It offers a uniquely transversal line along which to follow everyday secrecy.

Finally, if the mobilization of place can make a positive difference to the quality of oral history, so can the identity of the interviewer. From the audio files it is evident that David's past as a worker at and an enthusiast for Orford Ness is beneficial. It means that in addition to the trust it earns him, he can bring his own experiences into the interview, sometimes gently challenging the

interviewee's recollection, sometimes confirming and extending it. To our earlier discussion of the trade-offs at stake in the direct versus the indirect model of oral history we can add one more point. The indirect model may well be advantageous when the interviewer possesses strong historical ties to the community in question and therefore offers the potential to generate richer data than an outsider might.

But we should also note that interviewer's positionality matters in other ways. If class, gender and other hierarchical power relations modulate the subject's experience of secrecy then surely they also diffract the ways in which memories about distant experiences of everyday secrecy will be produced through the interview process. There is a moment in one of the interviews that illustrates this point particularly well. David is interviewing Anna, who worked as a secretary to one of the senior managers at Orford Ness, a job that entailed a lot of typing for the scientists. When asked exactly what she was typing she replies 'all the telemetry'. Curious as to what that entailed, David pushes her on this. Perhaps as an experienced engineer, he is fascinated with the technical details, but Anna is rather vague about it. This is hardly surprising: many years have passed and much has happened in between. Then she says this: 'My eyes saw what I had to do and my fingers typed it but I might be thinking about what I was going to cook for dinner that night. . . My body took over what I had to do while my mind was doing something different.' Not only is she conveying how she managed and embodied her relationship to highly secret work, as well as an impressive capacity for multitasking. It seems as though she is also steering the conversation, in this case invoking the daily, gendered task of preparing the family meal as a way to manage the inquiry into 'telemetry'. This little interchange reminds us, I think, that whatever we understand by everyday secrecy, gender and other social relations effectively shape how it is experienced, remembered and forgotten.

Everyday secrecy at Orford Ness: Two vignettes

In this final section I illustrate in more concrete terms the promise of oral history to illuminate two aspects of everyday secrecy. At the same time, I explore ways in which the angle of the everyday complicates and challenges the way secrecy is conventionally understood in security research. First, I consider the way in which people experience the rituals and protocols of acquiring security clearance, and whether this represents a kind of induction into the sensitive world of weapons research. Second, I look at how workers made sense of, and navigated the 'need to know' basis on which work and knowledge at Orford Ness (as within other top secret facilities) was typically organized.

'Signing the act'

David Warren vividly remembers how he had to undergo security clearance as a prelude to working at Orford Ness. As he explained to me: the significance of what you were embarking upon was made clear when MI5 interviewed various members of your family. 'The marker is already put down that you are going to a special place.' In his case his 'induction' included a short course and a stay in residence he took at Aldermaston, the main site of the Atomic Weapons Research Establishment. The clearance and the induction process was significant: it conferred a sense of 'self-satisfaction', making you feel 'special'.

Mainstream security studies tends to regard secrecy rather narrowly as concealment of knowledge for strategic purposes. With notable exceptions (e.g. Herman, 1996), it has paid less attention to some of its social aspects, such as the way it can foster an everyday sense of privilege in people who are 'in the know', while binding them into security organizations, and intensifying their commitment to those organizations in terms of such codes as 'honour' and 'loyalty' (Ellsberg, 2010).

At the same time, it would be a mistake to assume that practices of security clearance, and the ritual which the British government calls 'signing the act', is straightforward in its effects. This becomes clear when we listen to the way former workers describe their own relationship to security clearance. It transpires that some had only a vague sense of being cleared, and what this entailed! It also transpires that clearance meant quite different things to different people.

David asked his correspondents about their own memories of being vetted, and if they recalled 'signing the [Official Secrets] act'. As he put it to Kevin, who worked as a radio transmitter technician at Orford from 1970 to 1973,

'Did secrecy/security impact on your selection or during your life on Orford Ness?'

'Oh yes, we signed the Official Secrets Act.'

'So were you and your family checked to achieve that?'

'I don't recall any checks on our family.'

A little later in the interview David would try to prompt Kevin, returning to the theme of security clearance and its potential scope.

'It's interesting that one of the guys I met, his clearance was delayed because his granny had been a governess for a Russian princess, so they had to reassure themselves that wasn't an issue. So you had some sort of clearance before your time at RCA? So you signed the Official Secrets Act – on a daily basis, on a shift-by-shift basis, did you get touched by security?'

'No, only the checking of passes on the door going into the building.'

Many of the interviewees described how it felt to undergo security clearance. Some of their responses resonate with the unease Shils expressed, writing in the 1950s (1956: 202; cited in Gusterson, 1996: 73). Shils feared that security clearance had become an open-ended practice which threatened an almost 'unbounded' investigation into the subject's personal life, biography, acquaintances and so on (see also Masco, 2006: 263–288). Some veterans at Orford Ness recall an extensive and sometimes intrusive process that included unannounced visits to their homes from the security services to interview their parents. But for others, the extent to which they had been checked out was something of a mystery. For example, Clive worked at Orford Ness from 1969 to 1972 doing electrical installation on Cobra Mist, a highly experimental Anglo-American 'over-the-horizon' radar system. Had he or his workforce been checked?

'There was, I mean, no, not really, we didn't even have ID cards as such. We must have been cleared through some system I would imagine.'

A similar element of mystery is evident with Cedric, who did electrical work on two of the laboratories where the atomic bombs were stress tested. 'Yes, I had to have security clearance. I never knew what it was. 'Cause I used to go into the labs and things like that. I was cleared, but nobody ever told me what I was cleared to.'

Helen started work at Orford Ness in 1958 at the age of 16. She worked as a clerical assistant. Growing up she had wanted to be an artist but took the job on the Ness because at the time only men were hired as artists. Her recollection of the security clearance process emphasized how long it took, and that her family were happy she was going into a 'good job'.

'Well, they. . . I know they came to the house and asked all sorts of questions and they go all into your family and your father and your mother and what do they do. I can't really remember that much but I know it took a long time because I was anxious to start work, that I'd left school and I had to wait and I know that **** and ****** [administrative officers at Orford Ness] were anxious to get me to come to work here because they were so busy. . . I know **** came to see me at my house several times and said "don't give up, we're still clearing you".'

One interviewee, Richard, noted that he never underwent security clearance, a fact that was, in his eyes, not without repercussions for his family life. Richard had been the site manager for the construction of Cobra Mist, contracted from a major engineering firm to work for the Ministry of Works. When David asked him if he had been subject to a clearance process, he remarked:

'Nope. No, my wife was very cross about that, because she thought it would be a good excuse not to have to shift up from. . .'

```
'Oh, I see.'
```

'...' cause she had a brother who lived in Moscow and it sounded. .. like the bee's knees! An English spy, working, you know. ..'

That Richard's wife [no name was given in the interview] might have wished for a security clearance process that her husband would fail on account of her Russian connections could be read in several ways. I noted earlier that class is a social relation which mediates experiences of secrecy. One might infer a particular sense of middle-class privilege in Richard's remarks: not wanting to move from a comfortable house for a new job, but also a certain insouciance with regard to the prospect of the security services probing potentially suspicious family ties. Or, was it a matter of glossing an awkward event with the comfort that the passing of time brings? Such are the ambiguities which inevitably come with the territory of oral history, a territory where our access to the past is unavoidably modulated by the social dynamics of the interview and the imperfections of memory.

'Need to know'

We have come to regard 'need to know' as an almost inevitable feature of the social organization of scientific, military and intelligence work under secrecy. This strict control of information and 'compartmentalization' of research was also a feature of life at Aldermaston which was the hub of Britain's atomic weapons research programme. However, as Arnold and Pyne observe (2001: 80; cf. Jungk, 1958: 115–123), this was not always and everywhere the case. Hence, at Los Alamos, nuclear research had taken a somewhat different form under Robert Oppenheimer. He had encouraged 'discussion and the exchange of ideas inside the wire'. Yet there were historical as well as political circumstances that led to the intensification of 'need to know' at places like Orford Ness and Aldermaston. After the 'atom spy' cases of Nunn, Fuchs and MacLean and the defection of Pontecurvo, British officials became 'intensely anxious about American distrust of British security' (Arnold and Pyne, 2001: 80).

This impression that the Americans took a somewhat different approach to secrecy, and harboured suspicions that the British were not rigorous enough, is captured in one particular story. It has been retold many times to visitors touring the site to the point that it has become part of the public memory of Orford Ness. It concerns a missing fence (Cocroft and Alexander, 2009: 56). Here a version of it is told to David by Nathan who worked at Orford Ness from 1961 to 1964 as a

draughtsman. His work included drawing the fixtures which attached the nuclear weapons to the vibration apparatus that was testing them.

'It's a lovely tale. I would guess it was early 1963. We were going to test the Polaris American missile here. The Americans turned up and were horrified to find there was no security fence [around the site]. Right? So a security fence was very quickly put up. The civil engineer went out with contractors and put a post up there, post up there, the fence between. I think altogether the fence was somewhere about 8 miles long. And then they realized that on the site plan the security fence hadn't been put in. So we came into the security office, Mr ***** said to me: "[Nathan], you're the youngest, out you go, measure up where the security fence is".'

It is tempting to think of the fence as the quintessential technology of any secret space. Yet here we learn it did not always exist. We learn also that when the fence was belatedly placed around this particularly sensitive part of Britain's atomic weapons testing infrastructure it was put up much like a garden fence: not measured or planned in advance, just hammered into the ground. It is not clear whether this satisfied American concerns over secrecy and security at Orford Ness but it does illuminate an ad hoc and performative dimension to practices of secrecy. The Americans wanted to see a fence and so the British provided one!

A fence is a very visible, tangible and often intimidating signifier of secrecy. So are the signs which were posted on such fences to warn away trespassers: 'This is a prohibited place within the meaning of the official Secrets Act. Unauthorised persons entering this area may be arrested and prosecuted.' Yet to focus only on fences, coloured badges or the armed police who guarded certain areas and buildings would be to make the everyday production of secrecy seem too spatial, too physical. Alongside the regulation of the circulation of bodies, files and other materials in space and time, there are the less tangible practices that make up 'need to know'. Here I have in mind the ways in which subjects come to police themselves, knowing what to ask and what not to ask, what to know and what not to know (Taussig, 1999).

Stories have circulated, 'probably apocryphal', that when people were recruited to work at Bletchley Park they were shown a pistol and warned that security breaches would result in the recruit being shot (Costas and Grey, 2016: 73)! There were, of course, subtler ways in which recruits were schooled in the norms and practices of secrecy, as Smith has shown (2015: 91–96). How did workers at Orford know what they should keep to themselves? How were these boundaries effected? David said it began with undergoing security clearance which 'put down a marker'. He didn't recall specific instructions about what not to say so much as the general mood one intuited. In his day-to-day work it was not spelt out but simply 'inherent' that you couldn't and didn't try to go into laboratories and other places that had nothing to do with your work.

Many interviewees recall that they knew not to talk about their work, whether with other colleagues in the canteen, and certainly not with family or outsiders 'off' the island. Some understood this as a strict code: 'You were actually told that this was top secret in those days and if you were caught, you'd be for it. You'd be for the high jump' [Carl].

No doubt the fear of punishment did loom in the background for many workers for transgressing the protocols of secrecy. Yet 'need to know' is not black and white. The boundaries as to what one can say, know, ask about, etc. are not always clear. This ambiguity is part of the psychological burden of working under extreme secrecy (Gusterson, 1996: 79). Boundaries are not always written down; sometimes they are communicated largely through informal practices. Sometimes it is nothing more than a glance or a strategic silence. Here is an anecdote relayed by Kevin who worked as a radio receiving technician at Orford Ness.

'I had a communication receiver [at my home] at the time – WW2 AR88 – I used to listen to short-wave transmissions, amateur radio particularly, and I could pick up this staccato woodpecker pulsing and knew

that was coming from Orford Ness. I remember going back into work one morning and meeting one of the American engineers – I can't remember his name. I said: "I've been hearing this noise on the short-wave bands and I think it's coming from this transmitter". And he sort of looked at me and said: "oh really?" He didn't say much more. You might say it was "no comment".'

For Kevin working in an environment where you were not supposed to know or ask about the bigger picture was a form of alienation. 'You felt detached.'

This kind of alienation had already been identified as a problem at Los Alamos. For example, scientists working in the computing department were found to be losing interest in their work since they had so little grasp of its purpose. It is reported that the standard of their work improved significantly once one young theoretical physicist was granted permission to give the others more information about the Manhattan Project to which they were contributing (Jungk, 1958: 115).

If secrecy entails boundaries which are felt and performed as much as signposted, and sometimes communicated by a silence or gesture and nothing more, it also involves the temptation and the curiosity those boundaries set up. On the one hand 'need to know' creates a regime in which anyone operating in a low- to mid-level technical capacity is working in a considerable amount of darkness: you know very little about the purpose of your work, its wider context, its success or failure. Ron describes his own situation and how he sought to learn more. From 1948 to 1953 he was employed manufacturing parts.

'[T]here were about six of us in what was called the engineering machine department, and we used to manufacture to drawings that we were given. We didn't really ever get any information on what was going on or what it was used for. We just did as we were told.'

Ron did not do entirely as he was told. He wanted to know more about the context of his work.

'[W]e had a rough idea of what was going on, you know, because if we were specifically doing something that we knew was in a particular area, we'd try and suss out the guy during the lunch break, go and have a chat with him and go and find out exactly what was going on.'

Perhaps we can say that at Orford Ness the boundaries created by 'need to know' were not entirely watertight. If 'need to know' generated alienation it also elicited informal ways of countering such alienation, ways that also, no doubt, produced a perverse feeling of satisfaction and even empowerment – to use a very contemporary term – in some of their subjects.

Concluding remarks

New secrecy research moves us beyond a focus on policies and laws and engages secrecy regimes and the play of concealment and disclosure at the level of socio-technical practices (De Goede and Wesseling, 2017). This article argues that this move is important for generating a more complex understanding of the politics and power relations of concealment, but it can fruitfully be complemented by a concern with the everyday ways in which secrecy is lived, negotiated, practised and subverted by those entangled in its forms and norms. Making this move is difficult since official secrecy inhibits research into the day-to-day activities of the very subjects, places and topics that it touches. This article has argued that oral history when brought to bear on the recent past offers a fruitful opening in the face of such limitations. Exploring aspects of the oral history of Orford Ness it has shown that concealment is not just a matter of official rules, practices and technologies but the ways in which people negotiate the boundaries of the sayable and the knowable. It has also shown that there are multiple moods and affects which invest the secret, and that attunement to the prosaic,

the ordinary and the pleasurable as much as the conspiratorial and the mysterious helps us understand how workers in security organizations come to tolerate and sometimes even enjoy the secret.

Acknowledgements

I thank Elspeth van Veeren, Debbie Lisle and three anonymous reviewers for their constructive comments on an earlier version of this article. I am hugely indebted to David Warren for sharing his interviews with me, not to mention his own experience at Orford Ness as a veteran and as a National Trust volunteer ranger. I am also grateful to Grant Lohoar, until recently Senior Manager at Orford Ness, for generously facilitating the wider research project on which this article draws. Sarah Wade-West did a wonderful job transcribing the interview recordings. I thank the National Trust for permission to quote from the interviews.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was supported by a grant from the Research Initiatives Fund, Office of the Vice-President (Research and International), Carleton University.

ORCID iD

William Walters https://orcid.org/0000-0002-2492-1504

Notes

- 1. Orford Ness is what Flyvbjerg (2006: 229–230) would call an 'extreme case'. Such cases are 'atypical' and chosen by researchers not because they faithfully reflect general tendencies and dynamics but precisely because they reveal certain things in an exaggerated fashion. Flyvbjerg suggests that Foucault's use of the panopticon illustrates an extreme case (2006: 229). They can be likened to a cartoon of a politician or celebrity which accentuates specific features of a subject's face, making them more graspable. At Orford Ness we get to observe general features of secret organizations (e.g. the logic of 'need to know') in a stark and thus more intelligible manner.
- 2. The official line is that weapons tested at Orford Ness did not include any fissile material (Wainwright, 2009: 137; but see Cocroft and Alexander, 2009: 22).
- 3. All interviewees' names have been anonymized to respect their privacy, except for that of David Warren. See 'Interviews cited' for details of each interview. Except for the interview between the author and David Warren, NT holds the rights to the interviews used in this article.
- 4. Among these concrete things is concrete itself! One of the anecdotes Grant Lohoar, long-serving site manager of Orford Ness, offered to the group tour we took with him (13 July 2014) concerned the significant deterioration of the laboratories that are the most iconic feature of the site. According to several contractors their concrete was mixed using sea water to avoid the cost and disruption of transporting natural water to the site (cf. Davis, 2006: 32). The high saline content has caused 'concrete cancer', accelerating the rate at which these buildings have decayed.
- These earlier interviews were conducted by Roger Barrett in the early 2000s. They are archived in the sound recordings of the British Library.
- 6. The recollections of former employees inform the interpretation and visitor information which the NT provides at Orford Ness. For example, excerpts from some of Warren's interviews have been incorporated into a new multimedia display which the NT houses in the former NAAFI building on the site.
- 7. The NT had many of these signs when it took over the site. It had to remove and store them because visitors were stealing them. Simmel's peculiar 'charm' of secrecy again: the desire to possess the sign!

References

Anaïs S and Walby K (2015) Secrecy, publicity, and the bomb: Nuclear publics and objects of the Nevada Test Site, 1951–1992. *Cultural Studies* 30(6): 949–968.

Aradau C (2017) Assembling (non) knowledge: Security, law, and surveillance in a digital world. *International Political Sociology* 11(4): 327–342.

Aradau C, Huysmans J, Neal A and Voelkner N (eds) (2015) *Critical Security Methods: New Frameworks for Analysis.* New York: Routledge.

Arnold L and Pyne K (2001) Britain and the H-bomb. New York: St. Martin's Press.

Balzacq T and Puybareau B (2018) The economy of secrecy: Security, information control, and EU-US relations. *West European Politics* 41(4): 890–913.

Basaran T (2017) International Political Sociology: Transversal Lines. New York: Routledge.

Bennett L (2013) Concrete multivalence: Practising representation in bunkerology. *Environment and Planning D: Society and Space* 31(3): 502–521.

Cocroft W and Alexander M (2009) *Atomic Weapons Research Establishment, Orford Ness, Suffolk*, Survey report. Swindon: English Heritage.

Costas J and Grey C (2016) Secrecy at Work: The Hidden Architecture of Organizational Life. Stanford, CA: Stanford University Press.

Crawford A and Hutchinson S (2016) Mapping the contours of 'Everyday Security': Time, space and emotion. *British Journal of Criminology* 56(6): 1184–1202.

Davis R (2006) Military landscapes: Scientific ruins and Cold War monuments at Orford Ness. MPhil Thesis, Cambridge University.

De Goede M and Wesseling M (2017) Secrecy and security in transatlantic terrorism finance tracking. *Journal of European Integration* 39(3): 253–269.

De Goede M, Bosma E and Pallister-Wilkins P (eds) (2020) Secrecy and Methods in Security Research: A Guide to Qualitative Fieldwork. New York: Routledge.

Dickinson G, Blair C and Ott BL (eds) (2010) *Places of Public Memory: The Rhetoric of Museums and Memorials*. Tuscaloosa: University of Alabama Press.

Ellsberg D (2010) Secrecy and national security whistleblowing. Social Research 77(3): 773–804.

Flyvbjerg B (2006) Five misunderstandings about case-study research. Qualitative Inquiry 12(2): 219–245.

Freeman LA (2015) Longing for the Bomb: Oak Ridge and Atomic Nostalgia. Chapel Hill: The University of North Carolina Press.

Goffman E (1959) The Presentation of Self in Everyday Life. New York: Doubleday.

Grey C (2012) Decoding Organization: Bletchley Park, Codebreaking and Organization Studies. Cambridge: Cambridge University Press.

Grondin D and Shah N (2016) Secrets. In: Salter MB (ed.) *Making Things International, 2. Catalysts and Reactions*. Minneapolis: University of Minnesota Press, 92–105.

Gusterson H (1996) *Nuclear Rites: A Weapons Laboratory at the End of the Cold War*. Berkeley, California: University of California Press.

Gusterson H (1997) Studying up revisited. PoLAR: Political and Legal Anthropological Review 20(1): 114–119.

Heazell P (2010) Most Secret: The Hidden History of Orford Ness. Stroud: History Press.

Herman M (1996) Intelligence Power in Peace and War. Cambridge: Cambridge University Press.

Hilgartner S (2012) Selective flows of knowledge in technoscientific interaction: Information control in genome research. *British Society for the History of Science* 45(2): 267–280.

Huysmans J (2011) What's in an act? On security speech acts and little security nothings. *Security Dialogue* 42: 371–383.

Jungk R (1958) Brighter Than a Thousand Suns: A Personal History of the Atomic Scientists. New York: Harcourt Brace.

Kearns O (2017) Secrecy and absence in the residue of covert drone strikes. Political Geography 57(1): 13–23.

Kinsey G (1981) Orford Ness – Secret Site: A History of the Establishment 1915–1980. Suffolk: Dalton Press.

Leavy P (2011) Oral History: Understanding Qualitative Research. New York: Oxford University Press.

Masco J (2006) The Nuclear Borderlands: The Manhattan Project in Post-Cold War New Mexico. Princeton, NJ: Princeton University Press.

Melley T (2012) The Covert Sphere: Secrecy, Fiction, and the National Security State. Ithaca: Cornell University Press.

Mountz A (2015) In/visibility and the securitization of migration: Shaping publics through border enforcement on islands. *Cultural Politics* 11(2): 184–200.

Mundy L (2018) The women codebreakers who unmasked Soviet spies. *Smithsonian Magazine*, September. Available at: https://www.smithsonianmag.com/history/women-code-breakers-unmasked-soviet-spies-180970034/ (accessed 20 October 2019).

Neocleous M (2003) Imagining the State. Philadelphia, PA: Open University Press.

Paglen T (2010) Goatsucker: Toward a spatial theory of state secrecy. Environment and Planning D: Society and Space 28(5): 759–771.

Poletti A (2011) Intimate economies: PostSecret and the affect of confession. Biography 34(1): 25–36.

Rappert B (2012) States of ignorance: The making and remaking of death tolls. Economy & Society 41: 42-63.

Rowley C and Weldes J (2012) The evolution of international security studies and the everyday: Suggestions from the Buffyverse. *Security Dialogue* 43(6): 513–530.

Salter M and Mutlu C (eds) (2013) Research Methods in Critical Security Studies: An Introduction. New York: Routledge.

Sedgwick EK (2008) Epistemology of the Closet. Berkeley, California: University of California Press.

Shils E (1956) The Torment of Secrecy: The Background and Consequences of American Security Policies. Glencoe, IL: Free Press.

Simmel G (1906) The sociology of secrecy and of secret societies. *American Journal of Sociology* 11(4): 441–498.

Smith C (2015) The Hidden History of Bletchley Park: A Social and Organizational History, 1939–1945. New York: Palgrave Macmillan.

Sztompka P (2008) The focus on everyday life: A new turn in sociology. European Review 16(1): 1-15.

Taussig M (1999) Defacement: Public Secrecy and the Labor of the Negative. Stanford, CA: Stanford University Press.

Thompson P (2000) The Voice of the Past: Oral History. New York: Oxford University Press.

Van Veeren E (2017) Invisibilities. In: Bleiker R (ed.) Visual Global Politics. New York: Routledge, 196–200.

Wainwright A (2009) Orford Ness – a landscape in conflict. In: Forbes N, Page R and Guillermo P (eds) Europe's Deadly Century: Perspectives on 20th Century Conflict Heritage. Swindon: English Heritage, 134–142.

Walters W and Luscombe A (2017) Hannah Arendt and the art of secrecy; or, the fog of Cobra Mist. *International Political Sociology* 11(1): 5–20.

Walters W and Luscombe A (2020) Postsecrecy and place: Secrecy research amidst the ruins of an atomic weapons research facility. In: De Goede M, Bosma E and Pallister-Wilkins P (eds) Secrecy and Methods in Security Research: A Guide to Qualitative Fieldwork. New York: Routledge, 63–78.

West N (1999) Venona: The Greatest Secret of the Cold War. New York: HarperCollins.

Wilson L (2006) Notes on a 'record of fear': On the threshold of the audible. *Leonardo Music Journal* 16: 28–33.

Interviews cited

- Luke was a Royal Air Force navigator who dropped bombs at and around Orford Ness in 1953. Interviewed at Orford Ness by David Warren, 10 September 2014.
- 2. Samuel worked as a transmitter technician on Cobra Mist at Orford Ness, 1972–1973. Interviewed by David Warren by telephone, 27 January 2017.
- 3. Stanley worked as a signal processing technician at Cobra Mist, 1970–1973. Interviewed by David Warren by telephone, 1 February 2017.
- 4. Jenny was a scientific assistant and data plotter at Orford Ness, 1957–1968. Interviewed by David Warren at Orford Ness, 21 August 2013.
- David Warren was a scientific assistant at Orford Ness, 1959–1963, then volunteer ranger with the National Trust at Orford Ness, and independent researcher. Interviewed by William Walters, Ipswich, 2 July 2017.

- 6. Anna was a secretary to a senior manager at Orford Ness, 1956–1957. Interviewed by David Warren at Orford Ness, 16 August 2016.
- 7. Kevin was a technician at Cobra Mist, 1970–1973. Interviewed by David Warren, Suffolk, 2 November 2016.
- Clive was an electrician and senior foreman at Cobra Mist, 1969–1972. Interviewed by David Warren, Suffolk, 9 December 2016.
- 9. Cedric worked as an electrician on several of the weapons-testing laboratories during the mid-1950s. Interviewed by David Warren at Orford Ness, 31 October 2016.
- 10. Helen worked as a clerical assistant at Orford Ness, 1958–1961. Interviewed by David Warren at Orford Ness, 11 August 2015.
- 11. Richard was a site manager for the construction of Cobra Mist. Interviewed by David Warren, Suffolk, 3 November 2016.
- 12. Nathan worked as a draughtsman at Orford Ness, 1961–1964. Interviewed by David Warren at Orford Ness, 11 July 2014.
- Carl was a construction manager on several of the weapons-testing laboratories at Orford Ness in 1955. Interviewed by David Warren, Suffolk, 8 October 2013.
- Ron was a toolmaker at Orford Ness, 1948–1953. Interviewed by David Warren, Suffolk, 22 May 2014.

William Walters teaches political sociology at Carleton University, Ottawa, Canada, where he holds an FPA Research Excellence Chair. He has published widely on themes of security, citizenship, deportation and the history of governmentality. He is completing a book provisionally titled *State Secrecy and Security: Rethinking the Covert Imaginary* as well as a co-authored book called *Viapolitics*. Email: william.walters@carleton.ca.