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**THE BLACKOUT
IN BRITAIN
AND
GERMANY,
1939–1945**

Marc Wiggam



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For Inger-Lise, Axel, and Kasper

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Auntie Brenda put me up for a few nights on one of my research trips to the north. She told me a story from just after the war, of how as a little girl she'd run home, terrified of her shadow cast by the streetlights that were now switched on again. This book is dedicated to her.

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ABBREVIATIONS

ARP	Air Raid Precautions
BA Berlin	Bundesarchiv Berlin (Federal Archives, Berlin)
BA-MA	Bundes Militärarchiv Freiburg (Federal Military Archives, Freiburg)
BAYHSTA	Bayerische Staatsarchiv (Bavarian State Archives)
BBC	British Broadcasting Corporation
BRO	Bristol Records Office
IR	Infrared
IWM	Imperial War Museum
MO	Mass Observation
MOA	Mass Observation Archive
NAS	National Archive of Scotland
NSKK	Nationalsozialistisches Kraftfahrkorps (National Socialist Motor Corps)
NSV	Nationalsozialistische Volkswohlfahrt (National Socialist People's Welfare)
RAF	Royal Air Force
RDI	Reichsverband der Deutschen Industrie (Association of German Industry)
RLB	Reichsluftschutzbund (National Air Raid Protection League)
SA	Sturmabteilung
SD	Sicherheitsdienst (SS Security Service)
SS	Schutzstaffel
SPD	Sozialdemokratische Partei Deutschlands (German Social Democratic Party)
TNA	The National Archives

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CHAPTER 1

Introduction

The Blackout During the Second World War Wiggam establishes a case for the first single-volume study of the blackout since the end of World War II. He contends that the blackout allows us to compare Britain and Germany during the war despite their political and social systems. Wiggam also draws attention to the transnational phenomena of technological change in comparative analysis.

Keywords Civil defense • Blackout • Air raid precautions
Comparative history

On September 1, 1939 the lights were extinguished across the cities, towns, and villages of Britain and Germany, a darkness fell that neither country would emerge from until the end of the war six years later. Since 1933, Germany was seeing an unprecedented mobilization of civilians into a permanent readiness for war and, most notably, the potential devastation of an air war. Across the country bombs on plinths advertised air defense exhibitions and branches of the local air raid precaution (ARP) organization.¹ Those strange pillars of the air age, which stood as though they were an instant from striking the ground, were evidence of a profound shift in the German public's knowledge of space and of its militarization. British preparations for ARPs during the interwar years were far less evident, and with a domestic political climate that was unfavorable for the militarization that ARP implied it had a low profile before the

Munich crisis.² Yet despite those differences, both countries would maintain the most complete blackouts in Europe. It would continue every day of the war in every house and office block, every factory and shipyard, and on every vehicle on land and water. The impact of the blackout on both countries was profound, and this book is an attempt to describe how it was planned and organized, as well as its effect on civilian life.

PURPOSES AND ARGUMENT

The blackout has a low profile in the historiography of the war, where it has tended to be marginalized in operational histories or the story of life on the home front. This book contends that the blackout was something more than a system of passive civil defense, and that it was an integral part of mobilizing and legitimizing the British and German wartime discourses of community, fairness, and morality. It derived from the universal logic of the blackout, best articulated by scientist and commentator J. B. S. Haldane in 1938: "If I lose my respirator or go onto the roof during an air raid I only endanger my own life. But if I leave a light shining through an uncovered skylight I endanger the King in Buckingham Palace and the Prime Minister in Downing Street."³ That blackout ethic was one of the principle ways in which the rights of the individual were restrained for the protection of the wider community and the nation in both countries. Bunkers, flak batteries, and decoy sites were defenses that could be constructed from raw materials, however, the blackout needed to be created through the public's agreement, and where that was not forthcoming, through the workings of the state and the law. It was a form of social control, mobilizing the public into an awareness of existential danger, and in its language and ethic it featured a community of citizens cooperating in their own defense. Rose contends that nationhood, as an 'abstraction that produces the pull of unity,' was a consequence not of automatic processes, but of 'ideological work,' framed by the cultural and social context that generated them.⁴ This book maintains that the blackout played an important but little remarked upon role in maintaining the ideological discourses that constructed the idea of a unified home front. It operated as a type of structural propaganda, performing the 'ideological work' of framing the relationship of individuals to the nation and each other, and a manifestation of wartime priorities which everyone was affected by and which everyone had to adhere to. This is particularly important when considering that although the

blackout restrictions were mostly universal, the experience of bombing was not. Some cities were bombed heavily for days, then left in ruins—and peace—for the remainder of the war. Others were the sustained focus of bombing attacks for longer periods of the war. There were also areas of both countries where bombing was a distant reality, and which the blackout helped tie to those where the threat was greatest. In every case, the blackout was a fundamental part of the wartime ‘national community’ in both countries.

This monograph is a short and focused discussion about the blackout, and while it refers to both the operational and social history of the bombing war, and the development of bombing and ARP between the wars, it does not dwell on them.⁵ Expertise on the bombing war in Britain and Germany, and in Europe more generally, has grown markedly during the last few decades, but as yet there has been no single study of the blackout since the conclusion of the war. Whenever it has been mentioned, it has generally been in the context of home front life, or in reference to wider defense preparations. The most detailed treatment of the blackout remains the now aging studies of civil defense preparations in Britain and Germany—Terence O’Brien’s *Civil Defence* (1955) and Erich Hampe’s *Der Zivile Luftschutz im Zweiten Weltkrieg* (1963).⁶ That low profile has led to some misconceptions about its development and purpose. In his contribution on the European blackout in the *Oxford Companion to World War II*, Michael Foot stated that “no one seems to have consulted the air authorities about whether the blackout was really necessary.”⁷ However, this monograph demonstrates that that was entirely false.

Most comparative research on wartime nations has focused on the fascist and communist regimes which, as totalitarian systems, are seen to have more in common with each other than with liberal democracies.⁸ Consequently, the home fronts of Britain and Germany are generally written about in isolation from each other. While histories of both foreground the importance of the ideas of local or national community, the absence of any comparator in those studies has left doubt regarding the effect of transnational processes such as technological change, and whether common ground exists in public and state responses to wartime phenomena.⁹ Responding to a review of *Half the Battle: Civilian Morale in Britain During the Second World War*, Robert Mackay pondered whether a comparative approach to examining the British and German home fronts “might produce an explanation owing more to

reflections on the nature of *homo sapiens* than on *homo Britannicus* or *homo Germanicus*.”¹⁰ Jürgen Kocka asserts that comparison “sharpens the historian’s sense for possibilities,” helping to “relativize one’s own record in the light of others,” a corrective for national histories that sometimes become too bound up in their own uniqueness.¹¹ Bernd Lemke and Dietmar Süß have both engaged this issue, Lemke studying the development of interwar civil defense as an expression of a state’s political constitution, and Süß in a panoramic study of the effect of the aerial war on the British and German home fronts.¹² Süß’s book places particular emphasis on using comparison to relativize the stability of states, crisis management, and the social practices that resulted from bombing. Comparing does not mean obscuring the fact that the flow of the bombing war differed between both countries. Bombing peaked in the early years of the war in Britain (1940–1941) and in the final years in Germany (1943–1945), where it also caused far greater destruction, loss of life, and became increasingly problematic for the state’s claim to protect German civilians. This study demonstrates how the German state increasingly relied on the blackout restrictions for the social discipline it engendered, as much as its defensive purpose. Additionally, it contributes to Lemke and Süß’s work by examining the blackout as a type of totalizing wartime structure that worked almost identically in Britain and Germany, and gives a sense of the way social and political structures in each country were changed under it, and to what degree a common problem developed common solutions.

A NOTE ON SOURCES

This monograph applied primary sources drawn from several national and regional archives in Britain and Germany, as well as many contemporary published sources. Public opinion is represented by the wartime diaries and letters of civilians, the reports of the British Ministry of Information, the British social research organization Mass Observation, and the German secret police. Most of the archival material provides narratives of the administrative and political development of the blackout, generally comprising the minutes of meetings, statements issued to local authorities from central governments, statements made by government or other authorities to the wider community, as well as legal cases. There is a degree of filtering and selection at work across all sources that affects the narrative that can be told. Most references to the blackout occur in

the initial years of the war, as the systems in both countries settle and the population becomes accustomed to coping with life during the blackout, particularly during the winter. Perhaps more importantly, owing to the relative freedom to complain about government restrictions, criticism of the blackout is more often raised in Britain. Because the blackout generally caused the same problems for both populations, there is a gap in the German sources that may tentatively be filled by the responses of Britons. In Germany, the reports of the Sicherheitsdienst (SD) remain one the key sources for tracking public opinion, although the lack of any systematic analysis from the British Ministry of Information and Mass Observation means that they can be perceived as incomplete in comparison. Kershaw contends that what was recorded by the SD was done for “particular administrative and political purposes and contain their own heavy internal biases and colouring.”¹³ That is no less true for the British data. What both sets of public opinion share is their use in finding issues with the blackout before they became major problems. The analysis in this monograph takes into account both the differences and the similarities in the recording practices in both countries, and suggests that meaningful comparison between wartime Britain and Germany is possible despite the different political cultures.

STRUCTURE

This monograph is structured thematically. Chapter 2 discusses how plans for blackouts in both countries were developed at different paces. Early trials in Germany were spurred by its vulnerability to aerial bombardment from its neighbors, and after 1933, provided a demonstration of the Nazi state’s power in organizing and disciplining the population under a siege mentality. By contrast, British development of the blackout was tempered by its invasiveness, and public consent for testing blackouts was only forthcoming as the security situation on the continent deteriorated. Despite that, any advantage gained by early development in Germany was marginal because it also needed to account for the public’s yearning for the disruption of trial blackouts. Rather than familiarizing either public with the requirements of a rolling blackout, they were more useful for the authorities learning how best to administer the blackout.

Chapter 3 analyzes adherence to the blackout, and how it affected the relationship between citizens and the state. At that time, a rolling blackout brought into effect what had been implied during peacetime.

Its obligations and the ethic implied in its successful operation meant it was one of the key aspects of wartime life in Britain and Germany that framed and sharpened the idea of a wartime community. A universal system required consistency in application, and key to that was fairness in how the blackout rules were applied to citizens and government authority. Although leading members of the British government frequently advocated for reductions to the blackout, the ultimate authority lay with the Royal Air Force (RAF), who were convinced that any modification could only assist the enemy. Political considerations were secondary to the technical and strategic goals of air defense and after the blitz, there was no political or popular inclination for reducing the blackout in the event that the Luftwaffe took advantage. The blackout had become thoroughly embedded in the fabric of British wartime life. In Germany, where cities suffered far more raiding than Britain, there was little support among the Party leadership for lifting the blackout, particularly as its disciplined ethic echoed the ideals of the National Socialist community.

Chapter 4 examines the effect of the blackout on the fear of sexual crime, juvenile crime, and the effect of the blackout on justice. The association between the blackout and the threat of sexual violence altered the way in which women used blacked out and poorly lit public spaces in Britain and Germany. The effect of the perception of security and the associated moral response is seen in the heavy sentences handed down to offenders who were believed to have exploited the blackout for criminal gain. That was also seen in the attitudes toward exploitation of the blackout for sexual purposes. While the evidence for increased sexual violence as a result of the blackout is mostly anecdotal, there was a clear perception of it increasing. Responses to blackout crime in both countries echoed the model of ‘moral panic’ responses to crime in the post-war years, although in Britain and Germany the problem was generally framed as one of gender and youth, with women both the focus of the threat, and the cause of it. While sentencing and the application of justice in Britain and Germany differed substantially, the moral pressure of the blackout was similar, resulting in harsher sentencing and a focus on policing certain types of undesirable behavior.

Chapter 5 examines the main purpose of the blackout, which was to protect industry and the nation’s capacity for war production and defense. At the start of the war it was the brightly lit industrial installations that were the main targets of bombers—ports, power plants,

factories, and transport infrastructure. Those needed to be blacked out as much as possible, so that war fighting capability could not be compromised and had two effects. The first was to make it more difficult for night time raiders to find their targets, which in the British case contributed to the eventual switch toward area bombing. The second was to force the rest of the home front to blackout as well to distribute the threat of bombing across all of society. The blackout explicitly placed the survival of the community above the needs of the individual. Blacking out workspaces and factories was expensive and time consuming, and while adjustments over the course of the war gradually mitigated the worst of the effects, poor lighting and ventilation and a lack of natural sunlight, took its toll on the working population. That extended to traffic safety, which became a particular problem and political issue in Britain owing to its greater private ownership of vehicles. However, the blackout was a threat to the safety of pedestrians in both countries.

To my knowledge, this monograph is the first study regarding the manner in which people lived under the blackout during the war. For six years people in Britain and Germany were not allowed to shine a light in the dark, and seemed like an inversion of progress.¹⁴ Only a few years before the war began did Albert Speer's *Lichtdom* draw on the transcendent power of light at the Nuremberg rallies, built from hundreds of searchlights lined along the rally's Zeppelin field and casting their beams into the sky. In 1936, 150 lights (drawing 4000 kilowatts of energy) converged to a single point upon Hitler's entrance, effecting what Speer called "a vast room, the beams serving as mighty pillars of infinitely light outer walls."¹⁵ British Ambassador Neville Henderson admiringly called them 'cathedrals of ice'.¹⁶ However, for civilians in the war, a light in the dark was a threat, and the searchlights were arranged around the cities instead, their job to find, dazzle, or lure enemy bombers. Candles became scarce as the war dragged on, making German Christmas trees duller. In their place came the 'Christmas Trees' of red and green marking flares, dropped on cities to illuminate them as a target and heralding the start of an RAF night bombing run.¹⁷ In the Home Intelligence reports of the British Ministry of Information the word 'dread' is often associated with the start of the winter blackout throughout the war. During those days of long wartime shifts, people could go to work and come back home without ever seeing daylight. It's not surprising that as the war drew to an end, people had the sense they were slowly emerging from a long dark tunnel.

NOTES

1. Air raid precautions in this book are referred to as ARP, whether British or German.
2. On this see Carolyn Kitching, *Britain and the Problem of International Disarmament, 1919–1934* (London: Routledge, 1999).
3. J. B. S. Haldane, *ARP* (London: Victor Gollancz, 1938), p. 81.
4. Sonya O. Rose, *Which People's War? National Identity and Citizenship in Britain, 1939–1945* (Oxford: Oxford University Press, 2003), pp. 13–14.
5. Both subjects have provoked excellent recent literature. See Susan Grayzel, *At Home and Under Fire: Air Raids and Culture in Britain from the Great War to the Blitz* (Cambridge: Cambridge University Press, 2012); Richard Overy, *The Bombing War: Europe 1939–1945* (London: Allen Lane, 2013); Michele Haapamaki, *The Coming of the Aerial War: Culture and the Fear of Airborne Attack in Inter-War Britain* (London: I.B. Tauris, 2014); Brett Holman, *The Next War in the Air: Britain's Fear of the Bomber, 1908–1941* (Farnham: Ashgate, 2014); Dietmar Süß, *Death from the Skies* (Oxford: Oxford University Press, 2014); Malte Thiessen, Jörg Arnold, and Dietmar Süß (ed.), *Luftkrieg: Erinnerungen in Deutschland Und Europa* (Göttingen: Wallstein, 2009); Dietmar Süß (ed.), *Deutschland Im Luftkrieg: Geschichte Und Erinnerung* (Munich: Oldenbourg Verlag, 2007); Claudia Baldoli, Andrew Knapp, and Richard Overy (ed.), *Bombing, States and Peoples in Western Europe 1940–1945* (London: Continuum, 2011); Lindsey Dodd, *French Children Under the Allied Bombs, 1940–45: An Oral History* (Manchester: Manchester University Press, 2016). For more established texts see Uri Bialer, *The Shadow of the Bomber: The Fear of Air Attack and British Politics 1932–1939* (London: Royal Historical Society, 1980); Tami Davis Biddle, *Rhetoric and Reality in Air Warfare* (Princeton, NJ: Princeton University Press, 2004); David Edgerton, *England and the Aeroplane: An Essay on a Militant and Technological Nation* (London: Macmillan, 1991); David Edgerton, *Warfare State: Britain, 1920–1970* (Cambridge: Cambridge University Press, 2006); Peter Fritzsche, *A Nation of Fliers: German Aviation and the Popular Imagination* (Cambridge, MA: Harvard University Press, 1992); Alan J. Levine, *The Strategic Bombing of Germany, 1940–1945* (Westport: Praeger, 1992); and Jörg Friedrich, *Der Brand: Deutschland Im Bombenkrieg 1940–1945* (Ullstein Taschenbuchvlg, 2004).
6. See T. H. O'Brien, *Civil Defence* (London: HMSO, 1955); Erich Hampe, *Der Zivile Luftschutz Im Zweiten Weltkrieg* (Frankfurt am Main: Bernard & Graefe Verlag für Wehrwesen, 1963). Hampe's generally positive assessment of German preparations is colored by his position within

- the German military during the war and role as deputy leader of the *Technische Nothilfe* (Technical Emergency Corps).
7. Ian Dear and Michael Foot, *The Oxford Companion to World War II* (Oxford: Oxford University Press, 2001), p. 105.
 8. See Richard Overy, *The Dictators* (London: Penguin, 2005), p. xxxii; Stanley G. Payne, *A History of Fascism, 1914–1945* (Oxford: Routledge, 1995), pp. 208–211. Further recent comparative studies between Russia and Germany can be found in Moshe Lewin and Ian Kershaw (ed.), *Stalinism and Nazism: Dictatorships in Comparison* (Cambridge: Cambridge University Press, 1997); Sheila Fitzpatrick and Michael Geyer (ed.), *Beyond Totalitarianism: Stalinism and Nazism Compared* (Cambridge: Cambridge University Press, 2009). For comparative work on the First World War see Jay Winter and Jean-Louis Robert, *Capital Cities at War: Paris, London, Berlin, 1914–1919, Volume 1* (Cambridge: Cambridge University Press, 1999); and Richard Wall and Jay Winter (ed.), *The Upheaval of War: Family, Work and Welfare in Europe, 1914–1918* (Cambridge: Cambridge University Press, 2005).
 9. See Earl Beck, *Under the Bombs: The German Home Front 1942–1945* (Lexington: University of Kentucky, 1986); Micheal Burleigh, *The Third Reich: A New History* (London: Pan, 2001); Angus Calder, *The People's War: Britain, 1939–1945* (London: Pantheon Books, 1969); Angus Calder, *The Myth of the Blitz* (London: Johnathan Cape, 1991); Juliet Gardiner, *Wartime: Britain 1939–1945* (London: Review, 2004); Olaf Groehler, *Bombenkrieg Gegen Deutschland* (Berlin: Akademie-Verlag Berlin, 1990); Robert Mackay, *Half the Battle: Civilian Morale in Britain During the Second World War* (Manchester: Manchester University Press, 2002); Harold L. Smith, *Britain in the Second World War: A Social History* (Manchester: Manchester University Press, 1996); Nicholas Stargardt, *The German War: A Nation Under Arms 1939–1945* (London: Bodley Head, 2015); and Jill Stephenson, *Hitler's Home Front* (London: Hambledon Continuum, 2006).
 10. R. Mackay, Response to Review No. 332, *Reviews in History*, <http://www.history.ac.uk/reviews/review/332/response> [accessed 1 August 2017].
 11. Jürgen Kocka, 'Comparative History: Methodology and Ethos', *East Central Europe*, 36 (2009), pp. 12–19 at p. 15. See also Jürgen Kocka, 'Asymmetrical Historical Comparison: The Case of the German Sonderweg', *History and Theory*, 38/1 (1999), pp. 40–50; James J. Sheehan, 'Paradigm Lost? The "Sonderweg" Revisited', in Gunilla-Friederike Budde, Sebastian Conrad, and Oliver Janz (ed.), *Transnationale Geschichte: Themen, Tendenzen Und Theorien* (Göttingen: Vandenhoeck & Ruprecht, 2006).

12. Dietmar Süß, *Tod Aus Der Luft* (München: Siedler, 2011); Süß, *Death from the Skies*. This was a project that, perhaps tellingly, he worried some would take offense to. See Claudia Baldoli et al., ‘Round Table: Death from the Skies: How the British and Germans Survived Bombing in World War II’, *Britain in the World*, 8/1 (2015), pp. 107–118.
13. Ian Kershaw, *Popular Opinion and Political Dissent in the Third Reich* (Oxford: Clarendon Press, 1983), p. 6.
14. Walter Schivelbusch, *Disenchanted Night: The Industrialization of Light in the Nineteenth Century* (Berkeley: University of California Press, 1995); Matthew Beaumont, *Night Walking: A Nocturnal History of London* (London: Verso, 2016).
15. Kathleen James-Chakraborty, ‘The Drama of Illumination: Visions of Community from Wilhemine to Nazi Germany’, in Richard A. Etlin (ed.), *Art, Culture and Media Under the Third Reich* (Chicago: University of Chicago Press, 2002), p. 181.
16. Joachim Fest, *Speer: The Final Verdict* (London: Weidenfeld and Nicholson, 2001), p. 51.
17. Walter Schivelbusch, *Licht Schein Und Wahn: Auftritte Der Elektrischen Beleuchtung Im 20. Jahrhundert* (Berlin: Ernst und Sohn, 1992), pp. 90–93.



CHAPTER 2

Context and Planning

Planning for the Blackout in Britain and Germany In this chapter, Wiggam establishes that although German development of the blackout was more visible during the interwar period, little practical advantage was gained because of the difficulties of testing blackouts during peacetime. Blackout trials were useful as propaganda and for learning the administration of blackouts, which is like the British case, where development was hindered because of the lack of a popular mandate from the state to develop intrusive civil defense plans. That changed with the deterioration of the security situation on the continent and Germany's resurgence as an airpower.

Keywords Civil defense • Blackout • Air war

In the twenty-one years between the end of the World War I and the start of World War II, the capability to deliver enormous destruction from the air would change the way wars were planned and fought. The Zeppelins that had roamed over Britain in World War I, and the bombers that later followed them, marked the point at which Britain could no longer rest on its navy for protection. Bombing assaults by the allied nations over the German border showed how vulnerable Germany was to air raids, now stripped of its air force via the terms of the Treaty of Versailles. Bombing opened the cores of nations at war, and the once distant public would become spectators, victims, and participants of the advanced way of waging war from the air.

BLACKOUTS IN WORLD WAR I

Although the use of aircraft in World War I was limited when compared with the raids experienced in 1940–1945, they were enough to rattle the population and the political establishment.¹ Casualty numbers show the preference for bombing at night; 229 German and 418 British casualties from daytime bombing versus 446 and 996, respectively, from nighttime bombing.² The security of night bombing enabled pilots to deliver more bombs with a greater chance of returning home safely. As a result, by the end of the World War I parts of Britain had been under blackout conditions for over four years. Although limited in comparison with World War II, it exhibited the most of the issues that would face both countries in that conflict.

The strategic intent of the blackout in World War I was to conceal important infrastructure from enemy aircraft and to hinder navigation at night.³ The first orders for blackouts in Britain were made on August 12, 1914 and were intended to darken ports and harbors so that their light would not reveal shipping for the benefit of marauding German submarines. The first general order for a blackout for London soon followed on September 17, 1914, and was enforced entirely by the police. London had already been surveyed from the air by naval airships, the results of which had made it clear that only complete darkness could obscure the city from the air on a clear night. Mindful of the restrictions it would entail for every-day life, the authorities were reluctant to pursue a complete blackout in the absence of any clear threat, and instead arranged for a partial blackout that would obscure the more strategic areas of the city.⁴ While this first general restriction was imposed only on London, further orders were mandated as German air attacks on the country progressed. By February 16, 1916 the blackout had been extended to the entire country of England. While the preference was for darkening as much as possible, the authorities recognized the effect that total obscuration would have on commercial and civilian life and allowed for some flexibility.⁵

The political and public demand for blackouts varied with the frequency of attacks. With German raids diminished by the end of 1916, there was a feeling that German airships no longer posed a serious threat to the nation. However, the restrictions remained. The coal controller, in calling for greater efficiency in coal consumption, was against any easing of the restrictions and the Chief Constables were wary of allowing any increase in illumination if there was competition between towns and cities over which ones had more light.⁶ Although regarded as a nuisance,

the lighting restrictions had been deemed by officials to be effective. German raiders had mistakenly identified entire cities and parts of the country in previous assaults, which was partly attributed to the blackout.⁷ Participation in the blackout in Germany was altogether less comprehensive, confined as it was to the western part of the country.⁸ Blacked out zones were restricted to a strip of land of approximately 150 kilometers in length behind the western front lines, which at its greatest extent stretched south from Trier to Freiburg; Lights were reduced to as little as possible, and were extinguished entirely in the event of a raid.⁹

The complications that the blackout presented to authorities were early signs of what was to come. In Britain, there were difficulties in deciding how best to prosecute offenders. The zealotry of some local officials caused the government to issue a notice advising against trivial prosecutions, which had a negative impact on the morale of the population. Nevertheless, the fear of air attacks became such that there was popular demand for a blackout even in those areas of the country that were exempted from lighting orders because of their remoteness, or lack of strategic importance. That was demanded most strongly in the districts of provincial cities such as Cardiff, Exeter, and Plymouth, in the wake of the Zeppelin raids on the West Midlands which had brought about an extension of the blackout restrictions there.¹⁰ There were individuals who were prosecuted for smashing streetlights outside their own houses so that their homes wouldn't be illuminated, which the journal *Flight* hoped would produce a "good moral effect" because "such illicit attempts to further reduce the illumination of our streets can only be harmful, as it carries with it far more danger than if the lights are left burning."¹¹ The tension of managing a blackout could be more dangerous than the threat that it was intended to ward off was also familiar to the authorities in Germany. In the southern German town of Freiburg im Breisgau, the novelty of the blackout quickly gave way to weariness. Roger Chickering's study of the town during the war illustrates the effect of the blackout on the city's population, and their sometimes—ambivalent opinion of it.

Nocturnal paralysis set in. Whether between pedestrians on the sidewalks or between vehicles in the street, collisions became frequent. Travellers were reluctant to stray from the vicinity of the railway station in search of hotels in the inner city. Liability claims against the city increased, as did protests from darkened neighbourhoods. Other residents, however, welcomed the dark for the protection it offered.¹²

Local government had to manage the needs of securing the town from bombing along with the needs of military and civilian traffic. Managing that tension—and perhaps more importantly for the next war, legitimizing it—would form the backbone of interwar blackout development. Under the less draconian restrictions of World War I, life in both nations had been relatively free to carry on as normal. The period between the wars found the British and German governments attempting to develop courses of action that could cope with the advancing science of aviation, and the increased potential for destruction that it brought with it.

INTERWAR PLANNING

In March of 1936 the film *Things to Come* premiered in Britain. Adapted from H. G. Wells' novel, Alexander Korda's production mounted an impressive sequence in which the city of 'Everytown' is bombed to ruins. Just before the city is destroyed, a father tells his son as he leaves for air raid precautions (ARP) duties that "You've gotta do your bit, son. Gotta do your bit!" as the boy beats a march on his drum. There was a stark contrast between the film's vision of terror and martial civilian life, and the life outside a cinema in Britain in 1936. British ARP preparations at the time of the film's release had been stymied by the lack of a public mandate for developing ARP and blackout preparations. While the Nazi state could manufacture a climate and political system in which ARP could be developed without great hindrance, the authorities in Britain had to wait until the public's sense of national security accorded a mandate to pursue more open development of ARP and blackout measures. However, little material advantage appears to have been gained by Germany because of its earlier development of the blackout, beyond its use as a propaganda tool as part of the wider course of ARP preparations. That was ultimately because a rolling blackout of indefinite length (as would be expected during a war) was impossible to plan for during peacetime. Blackout trials and their overall scale were restricted in both countries by the times at which they occurred. Although a public mandate for the interference of ARP trials in peacetime could largely be taken for granted in Germany, it was not possible to run a trial blackout for more than a week. Limited blackout practice could not adequately prepare the populations of either country for life under a permanent blackout. The trials during that period were more useful in raising awareness of the air threat and developing the administrative framework that

defining and enforcing the blackout would require, with both countries succeeding at that level. Observed from the air, the British and German blackouts were the most secure in Europe. Although British administrators had to wait until the Munich crisis for a public mandate to begin large scale blackout trials, that appears to have been sufficient to secure the basics of a good blackout. The fraudulent war would provide an opportunity for adjusting the details of the blackout, and alleviating the pressure on the public as much as possible.¹³

EARLY BLACKOUT PREPARATIONS

The conditions of the Treaty of Versailles made the Germany military particularly conscious of its vulnerability to air attack, and it was perhaps inevitable that it became the first country to begin blackout trials during the interwar period. Following the early general ARP trials held in 1930, the first recorded trial dedicated to blackout preparations occurred at a gas and electrics works location in the town of Königsberg in December 1932.¹⁴ The disruption caused by trial blackouts meant that there were limits placed on their length, scope, the overall reduction in levels of light, and at what time a blackout might be practiced. There was also the question of what type of blackout the population and industry should prepare for. Should they prepare for a permanent blackout irrespective of the threat, or for a blackout brought into force on the discharge of an air raid alarm? It is not surprising that these questions, although certainly considered by the public, remained chiefly the concern of industry and government during the early interwar period. The difficulty of enrolling entire communities into practicing ARP was too great for large scale public trials to be considered seriously at the early stage. Furthermore, relegating the public to the second priority tier during blackout preparations was an aspect that would be retained in both countries until the end of the war. Production would always take precedence over public safety.

Trial blackouts in Germany were initially concentrated within industrial establishments. The blackout's effect on wartime industry will be discussed comprehensively later in another chapter of this monograph, but it is worth briefly commenting on some of the issues interwar preparations raised. Industry, especially heavy industry, relied on copious amounts of light to carry out the work, and used processes that emitted a great deal of it. Given industry's strategic importance in carrying out any

future war effort, it was recognized early that preparations would need to be made for adequately blacking out complex sites and processes well in advance of a war. A site such as a steel rolling mill would emit light from skylights in roofs, from the molten steel as it was processed, and from the plant's furnaces and chimneys. It would have increased traffic within its vicinity, transporting materials to and from the site. And it would also be easily identifiable, being largely distinct from domestic sources of light. Other open sites such as dockyards, railway yards, sawmills, and large industrial facilities all had complex processes that needed diversion. If not obscured, all those lights would provide tell-tale markers for the enemy from several kilometers away. Despite domestic housing being darkened, the sequences of large, light emitting sites in strategically key areas would be enough for enemy pilots to read the terrain. The complexity of screening those processes required not only a great deal of ingenuity in design, but substantial investment in their construction. Compensation for any disruptive effect that preparatory scenarios would have on peacetime production was also a key factor that fed into the early work on ARP and blackouts. Special attention was therefore paid to developing blackout tactics for sites of heavy industry in Germany and Britain during the interwar period.

The first blackout trials in Germany appear to have begun in the early 1930s. The files of the Reichsverband der Deutschen Industrie (RDI) indicate that preparations had already begun by that point, with the lead taken primarily by industry itself. By 1932 the union had already undertaken its tenth 'Luftschutzlehrgang', a series of seminars held in various parts of the country to disseminate and discuss matters regarding ARP in industry. In 1931, the union published a short leaflet on ARP which, among other issues, detailed early blackout policy. The guidelines are not very specific, and no mention is made of any specific lighting standards. However, what is evident is that a partial blackout was envisaged at that stage—that is, one allowing for various levels of lighting. Such a tactic would have involved zoning areas and industries for risk, and allowing them various stages of lighting according to the severity of the air threat.¹⁵ Early planning clearly recognized for the union that the ability of industry to function adequately under blackout restrictions was paramount. Although preparations were clearly in their infancy, early mistakes were apparent in the imprecise language of the pamphlet. The guidelines for reduced lighting conditions advised for painting or screening skylights and glass roofs, and is easier to write than it is to carry out.

Those sections of a factory were generally among the most difficult to reach, and opening and drawing curtains that were secure enough to block out light would have been an arduous and time-consuming task. Painting windows, as advised, would black them out entirely, but at the expense of any daylight coming through them to enable work. The easiest solution would have been to leave on electric lights, but that would have the effect of both increasing the temperature of the working space and the energy costs of the factory. Spread across the entire country, the increase in energy demand would be huge. While the intent for developing ARP and blackout was there, a reasonable and considered practical application of it was not.¹⁶

Experiments in Germany continued, and the need for striking a balance between blacking out and maintaining production was highlighted through small scale blackouts tested throughout the country, the results of which were disseminated among members of the union. In 1932, the report of a trial held in a gas and electric works facility in Königsberg stipulated that while a short blackout had been easily handled by staff, a longer trial had shown the need for increased emergency lighting to help workers cope with the darkness.¹⁷ The pursuit of a blackout that would allow a reasonable level of freedom would be recurrent in both countries leading up to the war, and indeed during it, although efforts at finding a tactic that would allow various levels of lighting according to risk would ultimately falter.

Perhaps the greatest distinction between the two countries during that period, beyond the practical trials held in Germany, was the forum in which those matters were discussed. Blackout policy was very much an industrial concern in Germany, whereas in Britain the blackout was primarily discussed relating to early drafts of the Police War Instructions (PWI). ARP was made more visible in Germany, with the positive attitudes to aviation it prescribed coupled with an awareness of the country's vulnerability to an attack by enemy bombers. That made the necessity of ARP more apparent not only to the public, but to industry as well.¹⁸ Discussion of ARP was far less open in Britain and a public mandate for trials that would have enabled early practical development of ARP, which was contingent on the relative security of the country from neighboring air forces, did not exist at that time. There was little enthusiasm in British industry for taking a lead on ARP because the added costs of developing procedures, along with the weak leadership from government, were a profound nuisance. Development of the blackout during the interwar years would continue in that pattern, where the

German public's understanding and assent was taken as far more of an article of faith than it was in Britain.¹⁹ It was not until later that shifts in the public's attitude to ARP in Britain, prompted by increasing concern within political circles over German rearmament, allowed the government to pursue a more practical blackout policy, as a Home Office briefing from 1935 makes indicated:

The Air Staff felt...that the complete darkening of a town was impracticable by reason of interference with and stoppage of vital activities. It is, however, possible that, particularly with the ungrudged assistance of the general public and of industry, the control of lighting might not be exercised to a greater degree than has hitherto been considered politic or practicable, on the grounds of interference with essential activities.²⁰

The shift in the public's attitude was a necessary condition for the British government to begin practice blackouts. In Germany, the limiting of public debate regarding ARP after 1933 meant that such a shift in public attitudes was not required, as government could construct and disseminate ARP discourse through the media and through the state. Before 1935, parts of German industry and some towns had held small blackout practices, while in Britain there had been none. It was not until 1935 that concerted efforts at developing the British and wider German public's awareness of blackout procedure really began.

THE FIRST LARGE-SCALE TRIALS

1935 was a watershed year in the development of ARP in Britain and Germany, one in which Germany unveiled the Luftwaffe and began extensive blackout trials around the country. The reemergence of Germany as a military air power now provided the motive force for the development of ARP in Britain. The first blackout in Berlin took place on March 19, 1935, and ran from 10 p.m. until midnight. The first hour tested a reduced lighting scheme, and the second hour was a complete blackout. The *Times* correspondent admired the apparent feat of the German organization:

Out of thin air emerged the machines whose existence had been so vigorously denied. Months of propaganda by the Air Protection League, which claims nearly 5,000,000 members and twenty per cent of the population

of Berlin, had taught them how ‘to behave as in war’ and preserve good ‘darkening discipline.’ Consequently Tuesday’s ‘blackout’ was a revelation of discipline and organization. Trains coming into Berlin were darkened over a radius of fifty miles; cars drove dead slow with lights dimmed by cardboard; customers in cafes sat behind sheets of blackened paper, and inspectors and police roamed their beats in search of chinks of light.²¹

Smaller trials had already been held around the country, but Berlin, as the capital city and prime target for any air raid, was a showcase. Throughout 1935 and 1936, Berlin hosted visitors from other countries to demonstrate its ARP system, including Norway, Yugoslavia, Hungary, Greece, Japan, China, and Spain.²² How well their early trials were followed by the public is difficult to discern from the archives. No formal powers to enforce trial blackouts had yet been issued during that period, although in 1934 some police forces were using sections of the law related to firefighting to enforce ARP measures.²³ A 1935 memorandum disseminated to members of the RDI carried a report of the Police Chief of Görlitz criticizing individuals who had failed to comply with or had sabotaged ARP preparations, making clear his intent to use all of his powers to prosecute them and make them known via the local press.²⁴ There is no indication of the politicized dissent that became common in Britain before the war, although some of the reservations articulated by the left in the years before 1933 must have remained after the Nazi seizing of power. However, in an article that perhaps assumed at least some antipathy to the exercise, on the day of the exercise, the *Deutsche Allgemeine Zeitung* reminded Berlin’s residents that it was in their interest to blackout their rooms as completely and economically as possible, and not simply go to bed earlier than usual.²⁵ By 1935 the extent to which the state could enforce blackout practices had developed, and the residents of Soest were asked to keep their front doors open should police, or other bodies working with them, wish to enter the house to secure the blackout. Those other bodies would have been either the Sturmabteilung, the Schutzstaffel, or Nationalsozialistisches Kraftfahrkorps—the Nazis’ motoring organization, who would secure the blackout for traffic—and all were later employed in practices around the country.²⁶

Berlin’s two-hour blackout was deemed by the authorities to have been success. A report produced for the British Police War Duties Commission was similarly impressive, and noted that while the reduced

lighting had largely failed to obscure the city, the complete blackout had made it almost invisible from the air.²⁷ However, the general feeling of satisfaction caused some unease among officials. Dr. Kurt Knipfer, the undersecretary of the German Air Ministry, claimed that the Berlin blackout had achieved the opposite of what it had set out to do. In his mind, the enthusiasm over its success was unjustified, because a blackout where the lights were switched off and everything allowed to come to a halt was no success at all. For him it was not a case of turning out the lights for a short while, but about living and working under those circumstances. Chastising those who proclaimed the successes of Berlin's blackout, he stated that the two-tiered system of lighting—the reduced and the complete blackout—would more than likely not be used in many areas, but rather a full blackout instead. It was under those circumstances that their success had to be judged.²⁸ Knipfer's assessment was perceptive. A one-night blackout practice was rather annoying for the population of both countries. But what World War I had shown, and what World War II was to show again, was that the real test of the blackout for the civilian population was in living with it every day, and for a long and unspecified period. Knipfer's observation highlights a key problem that could not be solved before the war—that of the public getting accustomed to a blackout. Coupled with the limited hours in which blackout practices took place, the public's awareness of the blackout would never have been as sharp on September 1, 1939 as it would a year later. Later chapters in this monograph will explore how the blackout developed once the war eventually began, assessing how much had to be learned by the government and the public, and what effect the absence of bombing during the first few months of the war had on the public acclimating to the blackout.

The first trial blackout in the United Kingdom was held by the Admiralty as part of Air Defence of Great Britain exercises on May 31, 1935 in the Medway area of Kent on the east coast.²⁹ The exercise covered an area that included the extensive naval facilities at the dockyards at Chatham, as well as the Royal Naval and Royal Marine Barracks. Further tests that year also occurred in prominent naval sites on the mainland—Sheerness on June 27th, Portsmouth on August 14th, and Plymouth on October 2nd, as well as Gibraltar on December 3rd.³⁰ Those blackouts, like the other exercises around the country in the years that followed, took place in the dead of night—11.30 p.m. at Chatham and Sheerness, 1 a.m. at Portsmouth, and 2 a.m. at Plymouth. A report regarding the

exercises held in 1935 stated: "The object...was not to train the civil population in the restriction of lighting but mainly to see whether the town was visible from the air under conditions of more or less complete darkness."³¹ The reluctance to pursue an exercise during the early evening can be ascribed to the practicalities of getting an efficient black-out, when the authorities had no legal power to force citizens and businesses to comply. Running an exercise during the middle of the night when most people were in bed and had no need for lighting made the testing and observation of the blackout that much easier for the authorities. It also limited the potential for accidents and the resulting liability that would fall on the authorities. Despite those limitations, dissent against the early trials resulted in extensive protests from pacifist and civil liberties groups. Tension existed between preparing a nation for war that most hoped would never come, while still maintaining the distance of the state from the ordinary life of the people. Any unnecessary interference in the freedom to go about one's business would have been an unpopular move for any government to make. The blackout, more than other ARP measures of that period, was a form of social control, which meant that it was contentious from the start. Political dissent could be found running among left-wing groups, the clergy, and pacifist organizations. In a letter to the editor of *The Guardian*, the National Council of Civil Liberties questioned the legality of blackout exercises and reminded readers that following the blackout restrictions was an entirely voluntary act with no legal repercussions.³² It further questioned the motives behind the blackout itself.

On the larger issue as to the efficacy of this form of air-raid protection the council is awaiting the results of inquiries which are being pursued by various organisations before declaring its view as to whether the 'black-out' principle is a genuine attempt to protect the civil populations under aerial warfare, or whether it is designed as propaganda for the creation of armament expansion.³³

In 1934 an unofficial national ballot regarding support for the League of Nations, organized with the help of 500,000 volunteers, asked people whether they would support the abolition of all military and naval aircraft by international agreement. Approximately 9.6 million individuals answered yes, a figure which Overly points out was almost half the number who voted in that year's election.³⁴ That politicized dissent existed

in addition to one that simply found the blackout trials too much of a nuisance to be bothered with. Shortly after the Munich crisis, *The New Statesman and Nation* ran an article depicting the apathy among some members of the public.

A Mass observer who keeps a small tobacconist and news-agent's shop in a working class district in Birmingham, recorded many conversations like this one:

Customer (young man, single, about 23, worker): Well, Betty, how's the Air Raid Wardens going on?

Me: All right, and it looks as if they will be needed yet. Have you heard tonight's news?

Customer: No. I heard there was a special out, but I shall hear it on the wireless. I am not bothering though, if I've got to go I shall know soon enough.

Me: Well you ought to bother. Call yourself patriotic. If you was in Germany and took no interest you would be put in prison.

Customer: I don't think it's any good bothering, it's people who keep worrying who are causing all the trouble.³⁵

The uncertainty that surrounded ARP and blackout education in Britain was a marked contrast to Germany, where ARP policy became increasingly invasive. However, there does appear to have been a similar kind of negligence and indolence in some blackout practices. The mayor of Soest remarked in advance of the town's 1936 blackout practice that care needed to be taken in enforcing the blackout, particularly among the town's businesses and shopkeepers, whose precautions in 1935 had not been satisfactory.³⁶ Those small instances of incomppliance did not add up to any kind of concerted, politicized resistance, for the simple reason that such dissent was not permitted in Germany.

MITIGATING THE BLACKOUT

The effect of Germany's resurgence as an air power in quickening the pace of British ARP was warmly received by the Air Ministry.³⁷ Discussions on blackout preparations were initially centered on drafts of the PWI, point 12 of which dealt specifically with the responsibilities of the police in managing it. The focus gradually drifted away from the PWI as the Home Office began to develop its ARP preparations in

earnest, and subsequent revisions of the instructions referred instead to the policy of the Home Office's own ARP department. At the outset, it was clear that there was a desire to ameliorate the effects of the blackout as much as possible by dividing the country into three areas, zoned according to the level of threat those areas were thought subject to. Areas in zone A on the east coast most easily reached by raiders from the continent would be permanently blacked out, with no exceptions made except for adequate obscuration of aids to movement of traffic and important industrial work. The central belt of the country, Zone B, would be blacked out at the discretion of local authorities, with some street lighting retained to help movement and some further exemptions for work vital to the war effort. In both cases however, the ability to obscure or switch off any light on notice of a warning was a precondition. Zone C, covering much of west England and all of Wales, would be allowed some further exemptions under the direction of regional Police Commissioners. That plan was not envisioned without some universal restrictions. All residential and commercial properties were to be screened, and all illuminated advertisements were to be permanently removed. The relaxations in Zones B and C related to street lighting and industrial premises only. Matters to do with lighting on trains, shipping, or aircraft were to be decided upon by operators and the government, with the police having no authority on such matters. Likewise, enforcement of restrictions on government property was to be handled by the government.

The plan continued to evolve over the years leading up to war, with the preferred option within the Home Office and Air Ministry being as dark a blackout as possible. At some point between 1936 and 1937 the number of zones was reduced to two, a change likely initiated by the increased range of modern bombers and lighting experiments undertaken by the Air Ministry, which were beginning to have an impact on blackout policy. A joint memorandum drafted by the Air Ministry and Home Office in November 1937 to the Home Defence Committee of the Committee for Imperial Defence reiterated the preference for as complete a blackout as possible, and is one of the few documents in the archive that addresses any potential criticism of the system. It lists two options to be considered for lighting during wartime: unrestricted lighting despite air attack; or a modified form of permanent blackout much as the one detailed above, that would allow some lighting for the purposes of industry and traffic movement, and which could be extinguished after

notice of a warning. It is interesting how the memorandum preempts many of the complaints about the blackout, addressed in the section on unrestricted lighting.

...it may be argued that modern aids to air navigation tend to make aircraft less dependent on the recognition of landmarks, and that even the greatest practicable degree of darkening might still fail to prevent large towns and other important targets from being identified from the air. It may further be argued that reduction of industrial output, and the inconvenience to the civil population resulting from severe lighting restrictions, prolonged over some considerable period, might cause more material damage and loss of morale than any enemy bombing which might thereby be averted.³⁸

The rejoinder to these arguments in the document is that other European nations were instituting blackouts and that, under conditions of war, the populace would insist on the extinguishing of lights to obtain 'greater security from night raids' in the darkness. The memorandum stated that 'Experience in the last war provides strong reinforcement for this view.' Thus, the recommendation made to the Home Defence Committee was for the 'severest practicable lighting restrictions possible...coupled with a system of decoy lighting to protect essential industries which cannot be concealed and to confuse the enemy navigation.'³⁹

The eventual recourse to a uniform system of lighting restrictions on September 1, 1939 appears to have resulted from the cost of centralizing lighting systems within local jurisdictions. From the beginning of blackout planning, the Ministries were concerned that the ability for immediate extinction of street lighting upon notice of an air raid was made available. However, lighting systems as they stood in 1935 were varied, and according to historical records, few cities had centralized control over their lights, most being clock or hand controlled. As a result, the ability to switch off external public lighting on notice of an air raid warning was severely compromised. Organizing an immediate extinguishing of lighting across several different forms of lighting control would therefore have been far more difficult to organize, and less secure than simply instituting a blackout. On December 1, 1937, a report on available lighting systems to the Committee for Imperial Defence stated that '[t]here are a number of control systems for both gas and electricity on the market, but we are advised that none is at present fully reliable.' The memorandum goes on to state of the following:

As this war-time system would have to be in readiness in time of peace, would have little peace-time value (apart from the possible utility, in some cases, of centralised control) and would involve appreciable expenditure, it is a matter for consideration whether the conditions of darkness contemplated for Zone A should not apply also in the case of Zone B.⁴⁰

Evidently that view held sway within the government. The costs of implementing systems that could switch off lights from a single point were simply far too great. The only way that such costs could be legitimized would be in the face of a national emergency, and a serious and concrete threat. In less than a year, Britain would have such an emergency, but by then it was too late to contemplate installing a single-switch system. If that reticence is understandable, it is perhaps also the case that its potential cost was dwarfed by the loss of production the blackout would later cause.

The distribution of risk in Germany did not rely on any similar system of zoning. While the blackout in World War I had been confined to the western areas of the country, and then only a narrow strip, Germans had grown used to hearing of the threat now posed to the nation on all sides. Planning for the next war had to take into account the fact that there was now no area safe from modern bombers. However, experience during the war showed that the eastern reaches of the Reich were less beset by air raids than the industrial and economic heartlands to the west, and some measure of relaxation was allowed in those areas. Hampe wrote that where the blackout was maintained in those areas, it was largely for saving energy, and it was only in the final year of the war that the need for blackouts as permanent as those in the rest of the country became necessary.⁴¹

It is difficult to find in the archives just how formalized that relaxation was, although discretion would presumably have rested with Police Chiefs in consultation with industry, the party, and organizations such as the Reichsluftschutzbund. It appears that adaptation of the blackout according to the threat had been planned for in the preliminary stages of the war. A trial blackout held across all the Ruhr on October 23, 1935 consisted of a reduced blackout for traffic and external lighting from the onset of evening to 9 p.m., a full blackout from 9 p.m. until 11 p.m., and a reduced blackout until midnight. Domestic and business premises were to be blacked out thoroughly during that time, although shops were allowed to adhere to a reduced lighting plan during the

relevant hours.⁴² Similar to the plans being developed in Britain, what that showed was a willingness to mitigate the effects of the blackout as much as possible. Tying the blackout to the actual threat of a raid would have been ideal, and attempted concessions to that was a feature of inter-war development of the blackout. However, they proved to be rather optimistic. The level of administration involved was prohibitive save for those areas that could genuinely be viewed as minimal risk. That, coupled with a lack of specificity in the plans until shortly before the war began meant that despite the years of trials, no one can be said to have been truly familiar with the realities of the blackout regulations until they were called into force on September 1, 1939.⁴³

To a certain extent, even when the blackout was being tested across entire areas Germany, the myriad problems it would cause were not being acknowledged. Confronting the fact that the blackout would probably need to be almost total was an unappetizing prospect for both the British and German governments, given the effect it would inevitably have on movement, production, and morale of the people. Generalized adjustments to the restrictions could not be planned for until either side could gauge the flow of the war and the level of threat posed by enemy aircraft. That both countries should have found themselves in that position is perhaps peculiar, given the importance attached to ARP in Germany. That this was in fact the case is perhaps indicative of the importance of the discursive and propaganda function of ARP in militarizing the population. However, it did not mean that local officials or the population were very familiar with the detailed requirements of ARP. Viewed in that light, the absence of a firm grip on ARP before the war in Britain does not seem to have been a great advantage for the Germans.

LIABILITY AND BLACKOUT EXERCISES

The question of liability for any accidents occurring during blackout exercises in Britain was disregarded until the outbreak of war. A letter sent by the Admiralty to the Home Office on November 15, 1935 outlined the problem.

On a recent occasion of Air Defence Exercises at Portsmouth, the Town Clerk of the Borough of Gosport, while agreeing to extinguish the lights on Gosport landing stage and Gosport wharf, stated that his Council must hold the Admiralty responsible for any damage which might be

caused as a result of the action. My Lords are advised that the fact that lights have been extinguished at the request of the Naval authorities would afford no defence to a claim for damages and that so extinguishing the lights might, if a fatal accident resulted, find himself faced with a charge of manslaughter.⁴⁴

A response to that letter was long in coming, and was eventually sent on June 23, 1936, agreeing with the position as set out by the Admiralty and noting that the Secretary of State was investigating how the exercises might be conducted under existing law. Those discussions were ultimately fruitless, because the position, as stated in a response to the Admiralty on April 18, 1938, remained the same.

I am directed by the Secretary of State to say...that it is not at present his intention to introduce such legislation [to delineate responsible authorities], but to rely upon the conduct of exercises in a manner which minimises the possibility of claims being made against the Government or local authorities.⁴⁵

The lack of legal accountability and tools for coercion hindered any large-scale exercises that could take place during hours when most people were awake. Conducting blackout exercises to minimize the chance of accidents, and to avoid authorities becoming liable for damages or injury because of them, inevitably meant restricting the times and scale at which exercises could take place. Without evidence of a national emergency, there was no mandate to inconvenience the public and trade. In fact, large-scale exercises such as those in Berlin in 1935 reported by *The Times*, were not used by the authorities because of the odd legal position that the exercises placed everyone in. A note from 1936 advising the Home Office on that issue outlined the nature of the problem.

As regards motor cars, I will assume that it is contemplated that the police, in accordance with arrangements agreed between the local authority and the A.R.P.D. would request all motorists on entering the 'blackout' area to put out their lights and side lamps. A motorist who complies with such a request commits a criminal offence (i.e. failure to carry at night he lights requested by law); and the constable who made the request might, in theory, be charged with procuring or aiding and abetting the offence. In addition to his criminal liability, the motorist incurs abnormal risk of causing damage to other people and to property by driving his car without lights.

The fact that the motorist was doing this at the request of the police would not afford him any defence in civil proceedings for damages or criminal proceedings for careless or dangerous driving or driving without proper lights.⁴⁶

Therefore, in the absence of any legal requirement for a motorist to turn off their lights in a blackout zone, the local authorities had to request that drivers break the law. In those instances, many exercises simply requested that drivers, in advance of an exercise, refrain from driving, which was easy enough given the hours during which they occurred. If they were stopped on entering a blackout exercise, they were asked to park and take shelter until the exercise was completed. That was in effect a test of the administrative practicalities of the blackout, rather than a test of how civil society might cope with it.

By extension, the same legal reasoning that could turn a motorist during a blackout into a criminal might do the same for local authorities charged with providing adequate lighting. Some confusion existed over whether that was in fact the case. The legal note referred to above, written in 1936, stated that because local authorities were legally responsible for lighting the streets under its supervision, they would be offered no protection from legal proceedings should anything go wrong during an exercise. Any defense by a local authority because the lights had been turned off on instruction from a government department would not hold up in court because there was no legislation ceding legal authority over lighting to the government. The idea of the government indemnifying local authorities in such cases was discussed within the Home Office, but seems to have come to naught. However, a guidance note issued to local authorities in the summer of 1939, in advance of an extensive blackout trial held nationwide with the cooperation of the Royal Air Force (RAF), contradicts that advice, stating that “there is not generally any obligation in law on local authorities outside London to maintain street lighting where it has been installed.”⁴⁷ Because the method of trial blackouts was to be held late at night and in the early hours of the morning, it is debateable whether, when the lighting restrictions were imposed on September 1, 1939, the public were ready for its effect on their lives. The guidance on lighting restrictions in the initial months of the war were steadily developed as the war progressed. As much as the trials had benefited the development of technical methods of compensating for the blackout, the first few months of the war were a test for how it affected

the lives of the population. An indication of how much was learned in those first few months can be found in the increase in length of the lighting instructions issued under the emergency orders. When they were issued on September 1, 1939 they comprised eight pages; by January 1940 they had more than tripled in length to 28 pages.

While German blackout tests began much earlier, they were still faced with the problem of their relatively limited scale. Despite propaganda efforts to make Germans aware of ARP after 1933 and the threat from foreign air powers, the Nazi government dragged its heels in formalizing ARP into law. It wasn't until 1935 that the first *Luftschutzgesetz* (Air Raid Law) was introduced on June 25th, and it was another two years until the bylaws governing the detail of the regulations were signed on May 4, 1937 by Göring. There does not seem to have been any great discussion regarding liabilities for blackout exercises, although insurance from the state for ARP practices was covered under the regulations. What is notable from the four years of trial blackouts is the gap between the rhetoric of ARP and its adherence on the ground. Press reports of the large-scale Berlin trial from 1935 may have been optimistic, but they were by no means indicative of the public's ability to cope with a rolling blackout. It is in fact difficult to separate press assessments of trial blackouts from their use as propaganda, and they cannot be considered a reliable indicator of the blackout's thoroughness or quality. Other sober assessments from the German press give hints of a less enthusiastic reception. A report of a trial blackout from the Ruhr city of Essen in October 1935 wrote of 'countless lapses' visible from a water tower.⁴⁸ An apparently more successful trial in Dortmund in 1935 was still impaired from problems with industrial blackouts that 'despite substantial investment are still not satisfactory', with many people staying at home to avoid the trial.⁴⁹ This was not normal life under a blackout, and whatever successes may have been claimed, a real test could not be validated until the extensive trials of 1937. The city of Hamburg, along with much of northern Germany, was blacked out for seven nights between September 20th and 26th. The first reports claimed an overwhelming success—'discipline on all sides' cried one headline from the Party-affiliated *Hamburger Tageblatt*, although it had only been practice for a more limited 'reduced' blackout.⁵⁰ The complete blackout on the next night was less successful, and the *Tageblatt's* report asked for 'no slacking in the blackout!'⁵¹ Berlin, which had been holding a rolling blackout during the same time, had its practice postponed when Mussolini arrived

in the city. Göring's reasons for that contradict the problems of peacetime blackout exercises, and the politics of adherence to them.

The reason for the lifting of the restriction was with regard to the commercial and economic life of the capital and above all the immaculate attitude of the entire population of Berlin, who have made the blackout practice in Berlin a complete success.⁵²

It can only be imagined how the people of Hamburg, who were made to continue with their blackout for the next few days, felt upon reading that. While the German authorities had more extensive plans for testing blackouts than the British, they still underestimated the task. The week-long trials of 1937 were the last of their kind until the war began, and even those were confined to specific regions of Germany. Their scale pales in comparison to the wartime rolling blackout, and it is probably unfair to imagine any amount of practice could make the public familiar with the true burden of living with an indefinite blackout before a war. But the gap between rhetoric and what actually occurred on the ground is rather extensive.

ACCURACY, TARGETING, AND DECOY LIGHTING

Area bombing was a consequence of the difficult conditions of bombing with any degree of accuracy, which the blackout exacerbated. A report commissioned into the RAF's accuracy in August 1941 estimated that only one in five aircraft arrived within five miles of its target. The RAF's own analysis had shown a very wide margin of error in its accuracy. However, in its defense it noted that the enemy was also struggling, with only 24% of German aircraft estimated to arrive at their target. Measures to overcome the blackout and poor weather to help bomber crews find their targets were developed during the bombing war, although none were accurate enough to defeat them entirely. The German *Knickerbein* (Crooked Leg), X-Gerät (X-Device), and Y-Gerät systems all used a combination of radio beams to guide bombers to their targets. In good conditions the X- and Y-Gerät systems worked well, and were installed in target-finding aircraft for which the purpose was to mark target areas with flares and incendiaries for following bombers. However, by the spring of 1941 all three systems had been compromised by British countermeasures that were able to jam and distort the radio beams the

systems relied on. German pilots came to rely instead on a mixture of electronic aids and visual markers for navigation and target finding, and accuracy suffered as a result. British radio targeting systems were also a problem. The Gee system was first used in the spring of 1942, its roll-out delayed by arguments within the Air Ministry over whether guidance systems should be used across the bomber fleet or reserved for path finding aircraft. Gee was compromised by its accuracy and range, which only stretched into western Germany, and was quickly jammed by the Germans in August 1942. Two other systems were developed and rolled out in early 1943. Oboe was the first and reached as far as the Ruhr area and could only be used by one aircraft at a time, but was more accurate than Gee. The second, H2S, was a radar device that generated an image of the terrain below, allowing pilots to distinguish urban areas. Both of those systems were installed in Mosquito target-finding aircraft, and were successful in raising the RAF's accuracy from the poor levels identified in the 1941 report. However, they could not provide pinpoint accuracy, and despite improvements, every second bomb in 1943 still fell wide of its target.⁵³

While radar became the preferred method for electronic navigation at night, both sides had developed early forms of infra-red (IR) sighting systems. In 1940, a night-fighter variant of the Dornier Do17 became the first aircraft to be equipped with the *Spanner* (Peeping Tom) IR system, which allowed pilots to find the heat signatures from enemy aircraft at night. However, it was not successful because it was compromised by its short range and was eventually dropped in favor of radar navigation systems.⁵⁴ In 1942 the Germans realized that the *Spanner* system might render the blackout entirely obsolete because it could theoretically find heat signatures on the ground. The *Spanner* system did not have the range to achieve that, but the possibility was there that the Allies had a system that could look further. That development was kept secret to maintain public order, and blackout materials, which had to be approved by the state, were later mixed with a chemical additive to reduce light leakage.⁵⁵ The panic was for naught, however, and no similar discovery was made in Britain. Lighting cities by marking runs and fire-bombing was, in probability, more efficient and reliable.

Both sides exploited the blackout, rigging chains of lights and decoy installations near cities and strategic targets to trick enemy aircraft into dropping their bombs on open ground. Their success was used by the

British Air Ministry as evidence of the necessity of the blackout; decoys effectively legitimized blackout policy to the extent by which enemy aircraft bombed areas with high concentrations of lights. Decoy lighting had already been speculated on by the British during World War I. In 1916, the British Rear Admiral Commanding at Immingham suggested to the Admiralty that because enemy Zeppelins tended to steer toward whatever group of lights was nearest, apparently confused as to their whereabouts on making landfall at night, a system of decoy lighting might be used to draw them away from actual towns and cities.⁵⁶ While that idea was never developed by the Admiralty, examples exist from the Western Front where decoy lights and dummy airfields had a practical effect.

...the men of 54 Night Bombing and Fighting Wing began to lay false flarepaths to deflect night attacks from their landing grounds. Sited around two miles from their 'parent' stations, lit with paraffin flares and accompanied by small clusters of softly-illuminated dummy buildings, their decoys attracted many bombs, though supervision reportedly proved 'dangerous and nerve-wracking' for their six-man crews.⁵⁷

Decoy lighting sites had also been considered in Germany during World War I, but were not constructed until the middle of the 1930s as part of war game exercises with French forces in 1934–1935.⁵⁸ Colin Dobinson's comprehensive study of decoy systems in Britain during the war shows that work on decoy lighting sites began in the summer of 1938, having been neglected for many years, although Home Office files indicate that preparations for decoy lighting were discussed at least as early as 1937. A Home Office and Air Ministry memorandum for the Home Defence Committee from 1937 established the main reasons for decoy lighting:

The representation in rural districts by means of decoy lighting of important industrial plants and other centres of activity which cannot be darkened completely, would tend to 'spread' the weight of the enemy bombing attack, and so reduce its intensity on important targets.⁵⁹

A separate memorandum prepared by the ARP department of the Home Office made a plea for consideration of decoy lighting by committee

members as a useful form of defense where light from industrial premises could not be entirely obscured.⁶⁰ Correspondence sent after the meeting noted that the idea had also been put forward by Sir Henry Tizard and Winston Churchill, and while notes from that meeting apparently do not exist, it does appear that the evidently less conservative ideas of Tizard and Churchill went beyond what the Home Office and Air Ministry were proposing. A letter sent on March 25, 1937 to Air Vice Marshal Peirse at the Air Ministry by the director of ARP at the Home Office, Wing Commander Hodsoll, stated:

I must say I am not altogether happy about the decoy lighting proposals. It is all very nice for Winston Churchill to talk about having rows of fairy lamps all over the south of England, but it might be even more difficult to do that than to have an effective black-out.⁶¹

The somewhat vexed language betrays what the Home Office and Air Ministry might have felt was a lack of seriousness in the government's approach to the question of the blackout—in line with ARP preparations more generally until the Munich crisis. In fact, Peirse goes on to criticize Henry Tizard, head of the Aeronautical Research Committee, for the 'light-hearted' way he spoke about decoy lighting. In further correspondence, Hodsoll wrote on April 15, 1937, 'I have heard unofficially that Sir Henry Tizard is going about saying that there will be no black-out, and that his idea of giving people as much light as they like is going to hold the field.'⁶² Ultimately that proved not to be the case. However, it exemplifies the difficulties for the British in finding a clear blackout policy during the interwar period. Even at that stage, black-outs were not a given for the director of ARP. Eventually, development of decoy lighting was assigned to the Air Ministry, although it did not receive great attention until the war began. Dobinson wrote of the first experiment organized by the Home Office, which rather confusingly appears to have been done without the knowledge of the Air Ministry.

These first trials were designed to conceal the faint pinpricks of light showing from a town by smothering it in an array of artificial lights spreading for many miles around. The 'baffle lighting' technique saw its first tests around the Humber on the night of 20/21 May 1939, when no fewer than 4000 hurricane lamps were laid out on a grid (at half-mile intervals)

on either side of the estuary... A Whitley bomber was sent out from Dishforth to observe the result, which the crew and representatives from the ARP department found strangely convincing.⁶³

Despite the apparent success, the system was never developed, owing to what one must assume to have been the enormous logistical problems that such a system would involve, particularly in a long war. In any event, decoy lighting was discussed but never adequately developed until the war began. In contrast, German decoy sites were more established in the build-up to war, with Hamburg alone having 11 sites by the end of 1935.⁶⁴ Those sites multiplied throughout Germany during the interwar period. Their early success in the war can be measured by the instruction of the Luftwaffe's General Hugo Sperrle in June 1940, at that time commanding Air Fleet 3 to construct more decoy installations within his command without heed to material and expenses.⁶⁵ Their construction, like those in Britain, involved using large tracts of countryside to simulate industrial and town lighting, and the methods used were ingenious. Galleys were rigged to simulate the spark from a tram's overhead power lines, and in a technique that perhaps says much about systematic adherence to the blackout in Germany, sites mimicking towns would be designed to portray a poor blackout, parodying it with intermittent lighting. Flak batteries and searchlight units were placed around those sites, furthering the illusion in the hope that they would lure enemy bombers. British systems were developed along similar lines. Control over the development of decoy systems was assigned to Colonel John Turner, then director of Work and Buildings at the Air Ministry, at the outbreak of war in September 1939. Owing to conditions of secrecy that were strict even within government circles, the decoys section of the Air Ministry became known simply as 'Colonel Turner's Department'.⁶⁶ The skill of building illusions was imported from the British film industry to construct Britain's decoy defences, with Turner hosting auditions of cinema prop makers.⁶⁷ Early work on daytime decoys switched to night-time systems as the Luftwaffe altered its tactics in 1940. The network of QL (lighting) and QF (fire) sites mushroomed around the aerodromes and towns of Britain and were a noted success. A Home Office review and defense of the blackout from the summer of 1941 cited numerous instances where 'the display of lights frequently catches the enemy's attention and attracts bombs in places which would otherwise not have been subject to attack.'⁶⁸ In 1942, Arthur Harris noted the continued importance of visual identification for bomber crews.

The multiplication of enemy decoy-fire sites in 1942 greatly added to the problems of target location – as the Luftwaffe had found over here. ‘GEE’ [one of the RAF’s early radio navigation systems] was not sufficiently accurate to indicate whether a promising-looking fire was one started by our own aircraft at the aiming point (or, mistakenly, in the wrong place), or was an enemy decoy some miles distant from the target. Only in clear weather conditions and with the assistance of moonlight could we have reasonable hopes of success. Even in the best possible conditions, however, industrial haze generally prevented visual recognition of Ruhr targets.⁶⁹

However, the extension of the zone of danger from urban areas into the countryside would not be without its cost or protest. In contrast to much of the information presented in this study, decoy sites were one of the few aspects of the blackout that required structural preparations and were held secret from the public as much as was practicable, it being forbidden to refer to them in public.⁷⁰ Free of the problems of scale and adherence that afflicted interwar development of the blackout, the success of decoy sites in confusing pilots and absorbing ordinance helped to legitimize the use of the blackout during the war.

CONCLUSION

This chapter has examined how the blackouts were developed in Germany and Britain prior to the war. Despite earlier development, and larger-scale exercises, little advantage was gained by Germany over Britain beyond the militarization of the population through the wider propaganda of ARP and the discipline it encouraged. That it was thus lies in the intractable nature of testing blackouts over an extended period during peacetime, given its detrimental effect on civilian and economic life. While blackouts in both countries were successfully organized at the administrative levels, it was difficult for either country to adequately prepare the public for the difficulties of living under an indefinite, rolling blackout. The delayed start to the bombing war was invaluable in allowing the public to become accustomed to blackout discipline, and to iron out the flaws and unforeseen problems that the restricted trials had failed to identify. Hence, while interwar trials were no doubt important, they were of more practical use for administrators and air forces rather than the civilian population.

NOTES

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8. Hampe, *Der Zivile Luftschutz im Zweiten Weltkrieg*, p. 546.
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13. For an overview of French and Italian blackout preparations, see Claudia Baldoli and Andrew Knapp, *Forgotten Blitzes: France and Italy Under Allied Air Attack, 1940–1945* (London: Continuum, 2012), pp. 69–72.
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23. BA Berlin, R36/2718, RDI letter to members, August 1, 1934.
24. BA Berlin, R36/2718, RDI letter to members, January 29, 1935.
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26. Stadtarchiv Soest, P22 1055, blackout plan issued by the mayor of Soest, October 16, 1935.
27. TNA, HO45/18132, Home Office memorandum for Police War Duties Committee, [undated] January 1936.
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Adherence

Following and Resisting the Blackout in Britain and Germany In this chapter, Wiggam contends that fairness in how the blackout regulations were applied was central to how it was legitimized. He also clarifies that although there was pressure to reduce or entirely abandon the blackout in Britain, the Air Ministry considered it a vital part of civil defense, based in no small part on the difficulties that the Royal Air Force had in finding targets at the beginning of the war. The blackout was a system of social discipline for the Nazi Party in Germany, as well as being part of the civil defence system.

Keywords Civil defense · Blackout · Civil liberties · Bombing war

In the preliminary days of the war, British newspapers regularly reported on blackout transgressions among the population. The *Bristol Evening Post* ran a story about an ironmonger in Bournemouth who, on being told by a policeman to stop showing a light, had shouted “Off back to Germany where you belong.”¹ That same day the paper ran an article by Duff Cooper, the former Secretary of State for War and future Minister of Information, who told readers that “a good first rule for behaviour in wartime is obedience to orders and abstention from criticism, whether it be of the Prime Minister or local air warden.”² Unthinkable during peacetime, that type of language highlights how air raid precautions (ARP) and the blackout helped redefine the idea of the individual’s

responsibility during the war, and responsibility to the state. Göring issued a statement at the beginning of the war that exemplifies the kind of rhetoric that was attached to ARP in Germany.

You warriors in self-defence, know that in your duty you protect not only the lives and health of your wife and your children, but also the fate of millions of fellow citizens... Our enemies will retreat from our unbreakable will to resist. Long live the Führer! Long live Germany!³

However, failing to properly secure the blackout was not necessarily a criminal act. Most blackout transgressions were not the result of active or willful sabotage, or of people seeking advantage. Their main causes were laziness and carelessness. Those could be resistance of a sort, demonstrating the limits of the state's power in regulating people's behavior, although one would hesitate to say they were rarely more than passive examples. In *The Tin Drum*, Oskar the protagonist mocks those who grandly claim they were 'men of the Resistance' for simply breaking the blackout regulations.⁴ However, not complying with a black out did oppose the importance that the Nazi state had attached to ARP, and in theory no distinction was to be made between deliberate infraction and accidental ones.⁵ Local officials and party functionaries were concerned that blackout offenses were committed at all; whether criminals or good citizens, how those offenders were dealt with, and how the blackout was made secure throughout the war, provides an interesting point from which to consider the character of Nazi policing and justice. Because of the universal character of the blackout, those considerations also play a part in how it was policed and adhered to in Britain. The work done by the Nazis in the years prior to the war in trying to foster a coherent national identity has no comparison with Britain, but the implications of exposing a light and endangering the rest of the community carried the same repercussions. Rose wrote that despite attempts to foster popular ideas of togetherness across the classes in Britain, the war still found cases of "defiance, resistance and indifference."⁶

THE POLITICS OF THE BLACKOUT

It can be assumed that the quality of the blackout was better in Germany than it was in Britain, however, the experience of British pilots flying to Germany at the start of the war was that its blackout was less

comprehensive than Britain's. A report from 1940 gauged the effectiveness of the blackout from the opinions of pilots and other members of aircraft crews, and described the transition over various countries.

A pilot leaves England which is 'blackened out' and his first impression is one of thankfulness for neutral countries. In reasonable weather conditions he sees Holland, a blaze of light, and later perhaps Denmark with a blacked out area between them. At first the blackout in Germany was not complete. Towns like Hamburg and Bremen could be identified by the fact that there were large lighted areas in the positions where the pilot expected to find these towns.⁷

The report noted that "sometimes our aircraft find lights in use when they approach but they are extinguished immediately it is known that bombers are in the vicinity." There was a gradual tightening of the blackout across Germany during those first few months, but there remained enough infractions to occasionally help British bomber crews find their target. In observations of both Germany and Britain the report noted that "occasionally the position of towns is disclosed by numerous separated lights," presumed to be blackout infractions.⁸ That report would have illustrated the importance of the blackout to policy makers in the Home Office. Although political and public reaction in Britain began to question both the severity and the necessity of the blackout, aerial observations of the German blackout, and the use of blackout infractions for navigation, reiterated the importance of maintaining it. All future discussions by the government regarding that matter would defer to the opinion of the Air Ministry. For purely political reasons, no adjustments were made to the blackout. A ministerial briefing before the winter of 1941 was unequivocal.

It should be made clear at the outset that there can be no question, at this stage, of modifying the basic principles of blackout policy. This policy and its applications are under constant review in consultation with the Air Staff, and due account is taken of any fresh development as it occurs; but the Air Staff assert that the maintenance of a strict black-out is as useful and necessary now as at any stage of the war.⁹

Although that may have seemed reasonable in Whitehall, the blackout nevertheless had some vociferous detractors in Britain. The associations and double meanings of the blackout were unpleasant, as Lant described.

The noun ‘blackout’ referred to the fabric of or paint used to cut out light, and to the government regulation of blacking-out. It also designated, in older use, the condition of being without information or news, and the temporary, complete failure of memory or loss of consciousness. In the context of flying, it referred to transient blindness resulting from centrifugal force incurred when a sudden turn was made. As a verb, it meant to obscure or obliterate, particularly lights escaping from windows.¹⁰

From the beginning of the war, Churchill was concerned with the impact of the blackout on the morale of the nation. Apparently taking advice from members of the naval staff when he was First Lord of the Admiralty, he argued during War Cabinet meetings for a relaxation of the blackout that was in keeping with the scale of the threat, and cautioned against overreaction. He believed that the Germans wouldn’t launch indiscriminate attacks on civilians until later. The danger was that “the advantages in increased security... might well be outweighed by greater disadvantages in other fields of our war effort.”¹¹ At the beginning of the war, correspondence between the naval staff outlined not only the extent to which the effectiveness of the blackout was being debated among senior staff, but also its range over the Empire. The blackout in Gibraltar had caused a seven-month delay to the widening of a dock; Malta was also blacked out, as was Colombo in Ceylon.¹² The scope of the measures in those early months seemed entirely out of character with the threat. The Deputy Chief of the Naval Staff argued that:

the effect on morale of all this blacking out must be very bad indeed, and I should not be surprised if we are the laughing stock of the world over it. How anybody with any sense of proportion can black out East Africa because raiders appeared in the Mozambique Channel I find it difficult to conceive. I suppose the chances of an aircraft from this raider trying to bomb anywhere in East Africa are certainly not more than one in a million.¹³

Although he agreed with those criticisms and passed them on, Churchill had to tolerate the blackout during the war despite his misgivings, settling instead to argue for relaxations wherever possible. At the third meeting of the interdepartmental lighting committee in November 1939, he argued for a relaxation of the regulations that, in view of what was to come over the following years, betrays the uncertainty of the war’s preliminary months.

I venture to suggest to my colleagues that when the present moon begins to wane the black-out system should be modified to a sensible degree. We know it is not the present policy of the German Government to indulge in indiscriminate bombing in England or France, and it is certainly not in their interest to bomb any but a military objective. The bombing of military objectives can best be achieved, and probably only achieved, by daylight or in moonlight. Should they change this policy, or should a raid be signalled, we could extinguish our lights again.¹⁴

Gradually a consensus developed that something had to be done to alleviate the very worst effects of the blackout. By January 1940 a new 'Lighting (Restrictions) Order' set the various modifications now allowed under new lighting regulations.¹⁵ However, despite the apparent enthusiasm among the public for what was known as the 'starlight' system, some councils chose to forego instituting it. Despite that reticence, the speed of movement on alleviating the blackout as much as possible was both a practical consideration and a political one. Practical in the sense that the restrictions had taken a severe toll not only on the cultural life of the nation but also on the flow of people, traffic, goods, and the ability of industries gearing up for war to maintain output.

Justification for the blackout's inconvenience and danger relied on a threat that was yet to appear. It was a burden, and the Minister's consideration of its impact on morale was not unwarranted. The Ministry of Information's Home Intelligence reports noted how much people dreaded every winter blackout during the war. Churchill's views on the blackout may in part have been influenced through his occasionally fractious friendship with the newspaper magnate Lord Beaverbrook, whose stable of papers maintained a steadfast line against the blackout. Beaverbrook's positions in government during the war brought him into direct confrontation with the blackout's effect through his roles as Minister of Aircraft Production, Minister of Supply, and a short-lived term as Minister of War Production. However, at a Regional Commissioner's Conference in August 1943, the weight of the opinion of the Air Ministry was clarified—"the R.A.F. would be very grateful if the enemy would lift their blackout."¹⁶ No amount of cabinet influence could overcome the Air Ministry's faith in the blackout. Antipathy to the blackout had perhaps more to do with politics than with its practical application, or its effectiveness as a defensive measure. The only appeal that could ever be made for its abolition was on the grounds of

prosecuting the war effort, and will be discussed in the next chapter. The Beaverbrook press pursued its agenda against the blackout with a vehemence that was puzzling, and with no small amount of disingenuousness. Sir John Anderson, the Home Secretary, became an early target of the *Standard's* editorials—according to the paper, it was he who had decided on the current system of lighting, and had done so on the back of “one night when Sir John trudged through the streets.”¹⁷ That of course was nonsense and the Home Office was convinced that Beaverbrook was pursuing a grievance against the Home Secretary.

...this inspiration comes from the proprietor. Both Editors [of the Express and Standard] were present at the Minister's recent press conference and know the facts – that the black-out is imposed by the Air Ministry and that the deciding tests are made from the air and not from the ground.¹⁸

The steadfast attitude against the blackout may to a certain extent have been commercial—none of the other national papers took a hard-line stance against it. Therefore, perhaps because of that, there may have been a need for a voice to articulate a grievance against the blackout, that found it too timid a reaction to the circumstances of the war, and too reminiscent of a level of state control more familiar to its enemy.

Hitler maintained a keen interest in the blackout, and throughout the war he was provoked to personally intercede regarding matters of poor lighting, the technicalities of the blackout, and blackout judgments. It is easy to imagine him at the *Kehlsteinhaus* at Berchtesgarden, perched high in the Bavarian Alps, looking down at the valley floor and scrutinizing the blackout in the surrounding towns and villages. In memoranda for blackout awareness campaigns, maintaining awareness was always central to the Party and was always foregrounded. As the nights grew longer in the autumn of 1941, the Party instigated a propaganda campaign to highlight the correct blackout discipline among the population. There was a concern that people were likely to have become complacent in maintaining the blackout, having become too accustomed to organizing it later in the evening. Party members, having been made central to the maintenance and policing of the blackout, were reminded of their duty to support the campaign and to be aware of and ready to be questioned about any aspect of ARP.¹⁹ The importance attached by the Nazi state to blackout discipline, coupled with the harder line taken on criminal offenses in general, meant that blackout punishments for repeat

offenders were more severe. Blackout discipline became such a huge issue that in August 1940, Hitler's office issued a decree stating that persistent blackout offenders would have their electricity suspended for a minimum of eight days. However, although that punished individual irresponsibility, there was also a provision for entire communities so that if a town was persistently poorly blacked out, their electricity could be shut off for a minimum of seven days.²⁰

Lenient discipline, in a country where ARP had been so fundamentally drawn into the fabric of the society and constructed as a patriotic duty, was an affront to the unity of the nation and the authority of the Party itself and the increased severity of the punishments reflected that. In the south of Germany, a deteriorating standard of blackout discipline forced local authorities to address the problem. The note issued by Hitler's office in 1940 set in motion an overhaul of blackout monitoring in the areas surrounding Munich. Officials had noted an increasingly relaxed attitude toward the blackout which was attributed to the relatively few incursions into German airspace in the south until that time—the link between the state of the war and willingness to follow the blackout was not distinctive to Britain. In fact, it was noted that communities in the countryside were particularly lenient.²¹ The lack of discipline was by no means systematic; rather, varying standards of blackout were blamed on differing standards of punishment. A comprehensive Sicherheitsdienst (SD) report written in December 1940 stated that the same offense would in one area be dealt with by issuing a warning, whereas in another it would be prosecuted by a local commissioner. And in the latter case, where monetary penalties were sought, there was a great deal of difference in the amounts being levied. Differences were also found in how complaints and prosecutions against blackout offenders were processed; where some local courts had fined offenders 100RM, others had been jailed, and some had yet to receive any court prosecution at all. It was believed that the lack of uniformity had brought about lax discipline.²² Despite the report identifying those issues and making recommendations to correct them, poor blackout discipline continued into the following year. An SD report in March 1941 noted that where some courts were charging first-time offenders the sum of 5RM, 10RM, or 15RM, others started at 100RM or more.²³ Although the wide variation in fines was generally attributed to taking into account the specifics of each case when making a judgment, there was nevertheless a feeling that sentencing might seem capricious and unfair. In responding

to the criticism of the SD, the office of the Regierungspräsident outlined the variety of ways in which local authorities were handling blackout offenses.

Some rely primarily on warnings, others with warnings and punishment handled by the police, others with warnings and punishments handled through public prosecutors, and only some choose to prosecute according to the letter of the law.²⁴

There does not appear to have been a unified system for fining blackout offenders. However, the Bavarian Ministry of the Interior recognized the wildly varied manner of fining and prosecuting blackout offenses, and therefore, by the end of 1941 had developed a set of standard practices for local authorities to follow. The fines were graded according to severity and how often an offense occurred. First time offenses garnered a warning, or else a 1RM fine when corrected by the police, but only in instances of minor infringements. After that the fines increased according to scale. Where the blackout was poor, fines of 5–25RM could be considered; where an offense was repeated, 10–50RM; and in severe cases fines of 50–150RM could be charged. After that, arrest was also a possibility, as was the disconnection of electricity from the premises for eight days.²⁵ There is some indication of a later revision of the fines as the war progressed, owing to the pressure to amend them because of increasingly damaging attacks by Allied bombers. Again though, it is doubtful if that occurred at a national level. Just how much of an issue blackout offenses became later can be seen in one letter, forwarded to the Bavarian Ministry of the Interior by the Gauleiter's office in 1942, which asked that enormous fines of 500RM and 1000RM be made possible for blackout offenses.²⁶ Obviously, some people were still not doing as they were told. The gradual dwindling of archive sources that discuss those types of blackout problems may indicate an eventual level of satisfaction in how it was administered, although that is not to say that offenses did not continue throughout the war.

By the war's end in Britain almost one in fifty had been convicted of some sort of lighting offense.²⁷ Adey et al. noted that under the Defence regulations, lighting offenses in conjunction with speeding offenses on darkened streets numbered almost one million over the duration of the war.²⁸ It was almost certainly more, considering those who had been let off with warnings and those whose infractions had not been noticed. Despite that, only 0.3% of offenders were jailed for breaking the blackout

regulations, with almost all cases resulting in financial penalties.²⁹ Similar concerns as in Germany about the disparities in fines and sentencing were raised in Britain. At the opening of the York assizes in 1940, a judge criticized magistrates for failing to take full advantage of their powers:

There are some places well within my knowledge where you do not get an effective and complete black-out. It is for that reason that magistrates have been given a weapon to punish those who do not obey. But there are those who use it so gently and sparingly that if I were minded to be naughty and show a light I could do so every day of the week and not be much poorer. The punishments are inadequate and must be administered even more strictly and heavily than ever before.³⁰

The policing of the blackout, and specifically the fines issued to poor and wealthy blackout offenders, could undermine community cohesion. In November 1939, the parish council of West Dean in Gloucestershire was already fed up with the blackout. Holding a meeting to air their grievances, the council claimed that the police were playing a cat and mouse game with the public. Speakers described the district as “living in a state of terror.”³¹ In late 1940, Bow Street magistrates were noted for particularly large fines that in the view of the Home Office, were likely to cause grievance and undermine the national interest.³² There was a balance to be struck between the need to punish blackout offenses and make an example of the crime, against the social background of the offender. Magistrates’ rulings in that matter were not consistent across the country. The ability to pay one’s fine was as much a political question as it was a matter of justice. One respondent to a Mass Observation survey responded that, “3 pounds isn’t enough to make Lord Nuffield stop and think, but it’s enough to make my mother go without breakfast for a fortnight.”³³ It is notable however that in the same Mass Observation report, a survey found an overall acceptance of the severity of sentencing, with 30% claiming they were in fact not severe enough.³⁴

STATE BLACKOUT

While officials from both countries encouraged their fellow citizens to follow proper blackout procedures, they found themselves undermined by poorly secured blackouts in state buildings and facilities, much to the irritation of citizens. Despite the rhetoric of community and unity, the

maintenance of the blackout was very much an imposition by the state on the population, and few welcomed it in the ambiguous days of the Phoney War. Whether from government offices, police buildings, or military installations, a shaft of light emitted by employees of the state was damaging, and any breach was a visible failure of the state in managing the war. While the management of any large building might reasonably have been expected to have had a few problems in the preliminary days of the war, continued incidences of government offices being lit proved to be a recurring problem.

On September 3, 1939, a few days after the lighting restrictions had come into force, a civil servant took a stroll around Whitehall to see how well the area had blacked out. In a note to the Lord Privy Seal, he reported that the War Office had been particularly poorly secured, with “about a dozen windows revealing strips of light from 2–4 inches down the sides of the blinds.” Night watchmen were found wandering around with exposed oil lanterns, and the telephone exchange nearby was also poorly blacked out.³⁵ Although all those problems were easily fixable, issues continued, and a later survey found continuing problems around Whitehall. In November 1939 Mass Observation found breaches among other sites: 17 breaches at the Admiralty, 35 at the Home Office, and 29 at the Office of Works (whose job it was to secure the blackout in government buildings).³⁶ *The Daily Mirror* told its readers that if they had to break the blackout, then Whitehall was the cheapest place for them to do it.³⁷ That was not a problem specific to the early days of the blackout. Over a year later in March 1941, a letter from the Metropolitan Police to the Home Office again complained of government offices not adequately blacking out. Buildings occupied by the Treasury, having caused local police “trouble on several occasions,” and the Air Ministry were cited as particular examples.³⁸ Those infractions by the state also extended to militarized areas. In the village of Burford in Oxfordshire a correspondent for Mass Observation wrote that:

by the end of October the military had moved in, and were illuminating the landscape vividly through their rectory skylight and other sources, although they had already been in occupation of un-blacked out places for as much as a week. This pleasantly infuriated many of the villagers, nursing their quiet grievances of the blackout, which is quieter in Burford than in most places, because there are two enormous aerodromes in the immediate vicinity.³⁹

No publicized notices of blackout infractions by government departments in Germany were found in the press, although they certainly took place. In 1940, on passing a poorly blacked out army barracks, Hitler complained and ordered for it to be corrected.⁴⁰ The relationship between ARP and the successful advancement of the war had been politicized to such an extent that any infraction by the state would have been profoundly embarrassing not just for the offending department, but for the Party as well. By 1940 it had been reiterated throughout Germany's public forum that the home front should conduct itself in a manner befitting the sacrifices their soldiers were making on the fighting front; a failure by any property owned by the state or Party to comply with the blackout would have been extremely damaging.

The question regarding all state infractions was who would take responsibility for them. Fault could easily be established for the ordinary householder showing a light through a poorly arranged curtain. In buildings where many people lived or were employed that became a trickier problem, and where the authority of the crown was invoked even more so. A lack of uniformity in who took responsibility for poor lighting in government offices, and how they could be sent to court, forced the Home Office into formulating a policy in early 1940. The most common situation that was familiar to office and tenement buildings in the private sector also, was that a member of staff would often be held responsible and charged by the police for defying the blackout, where in many cases they were not in fact directly at fault. It was possible that if an office worker failed to draw a blind at the end of the working day, a cleaner working at night might find themselves inadvertently breaching the blackout simply by turning on the light when coming into clean an office and was common to cleaners in both Germany and Britain. In 1941, over a year from the start of the war, the journal of the Reichsluftschutzbund (RLB) ran an article stating that it was still a problem. A cleaner complained:

Look, when we arrive to clean it's already completely dark. So for us to get to the window in order to put the blackout blinds in place, sometimes we have to climb on tables. Ask yourself, could you do that in the dark?... The people from the Reichsluftschutzbund should make sure that people arrange the blackout themselves, before they leave the office.⁴¹

When needing to prosecute such infractions, the common method of dealing with them was through appointing somebody within that building who would take responsibility for the infraction and pay the fine, whether at fault or not; and also applied to instances where the person to blame for the infraction could not be identified. It was always assumed that where blame could be established, those at fault would be held responsible. Bristol City Council issued notices to all its depots reminding their employees of that fact following reimbursement to an employee at a depot who had been fined £1.10d for a breach of lighting regulations, despite not being responsible.⁴² That was the pattern for similar offenses around the country, included government property. However, one of the oddities regarding blackout offenses in government-occupied buildings in Britain was that they were technically immune from prosecution. A legal note from the Treasury solicitor to the Treasury secretary made it clear that the Crown had immunity from prosecution under the Defence Orders for matters including lighting, although in their opinion it did not extend to cover negligent officials. A memorandum recognizing the political impact that exercising that immunity would have stated that:

If, as a matter of policy, it is desired not to take full advantage of this immunity, I do not think that there is any objection to each department appointing some senior official on whom the summons can be served who will, if so advised, defend the proceedings and whose fine (if any) will be reimbursed by the department.⁴³

That advice appears to have been heeded by the government. As previously noted, there was already a keen popular interest in how those in authority adhered to the blackout. Had the state exercised its immunity, it would have heavily impaired the integrity of the blackout, as well as the government.

COUNTRYSIDE AND ADHERENCE

Cities and towns are distinguishable by the dark spaces between them when viewed at night from above. What the blackout was designed to achieve was the obscuration of towns and cities by hiding them in the darkness found in the countryside, which created a tensivity between the various parts of the landscape. The extension of decoy lighting systems

into the countryside, and the erroneous release of bombs from aircraft confused by the blackout, meant that it was an ambiguous system for people living in the countryside. While it was designed to keep cities and towns safer, it was at the expense of increasing the risk to people living outside of them. As detailed in the previous chapter, decoy sites utilized various tricks to fool pilots, fashioning the illusion of either a poorly lit town, a blazing target, or a dummy facility. When flown toward by enemy bombers, those sites would become flak traps, or simply absorb most of the artillery; but those sites also had the potential for attracting stray bombs onto outlying villages and towns. The citizens of Lauffen, a village near one of the decoys for the city of Stuttgart, lost forty houses in an air raid, and complained to officials in the city that they had protected “urban facilities and denizens at the reckless expense of villagers.”⁴⁴ However, the success of those sites in Germany meant that, when protests came from local officials, they were ignored.⁴⁵ To my knowledge, no similar protests appear in the records in Britain, possibly owing to the lower intensity of bombing. O’Brien notes that although Morrison shelters were distributed to households who lived near airfields, that was not extended to people living near decoy airfields, nor to people near searchlight batteries or anti-aircraft guns.⁴⁶

The tension between urban areas and the countryside was important to how the blackout operated.⁴⁷ Those who lived in the countryside sometimes coped with the blackout differently than those in urban areas, and resulted in a different level of adherence, at least at the onset of the war. Perhaps the most immediate effect of the blackout on life in the countryside was in the work. Fire was no longer allowed in open spaces, and transgressions were threatened with severe penalties in Germany.⁴⁸ Hop pickers in Kent bemoaned the restrictions, with their days in the fields no longer ending with a gathering around a campfire but with the onset of night.⁴⁹ When the blackout began, newspapers ran commentaries on how country dwellers found the fuss over it bemusing because the ribbons of street lights and shopfront lighting were far less common. A journalist for the *Münchener Neueste Nachrichten* wrote of a friend visiting from the country before the war who, dazzled by the lights of the city at midnight, looked up at the sky and cried “The moon! You’ve killed the moon!”⁵⁰ Now it was the town and city that became strange and unfamiliar.

Urban populations were expected to take the brunt of any bombing, and the ideal of the *Volksgemeinschaft* should have mitigated any

difference in threat between town and country. However, that was not borne out in reality as in 1940 a memorandum sent to local officials in the areas surrounding Munich identified a particular drop in blackout discipline in the countryside, which was attributed to a relatively quiet summer and the longer hours of daylight.⁵¹ Other correspondents complained that rather than stick to the prescribed hours of the blackout, people living in the countryside tended to blackout when *they* believed darkness had fallen.⁵² The solutions to that were both higher penalties with a greater focus on educating the public. Recognizing the need to broaden the administration of the blackout among a sometimes reticent rural population, the Gauleiter of Munich and the surrounding area had made the Hoheitsstrager—the functionaries of the Party—responsible for the maintenance of the blackout.⁵³ A county director put in a memorandum to local chapter directors that doing so was urgent because it was “clear that police bodies, as well as ARP wardens and other such functionaries, cannot possibly maintain the required measures without the help of the Party.”⁵⁴ Doing that implied that it was not just the organizational breadth of the Party, but also its authority, that was fundamental in raising the standard of the blackout among the population. By moving it from being mainly the focus of administrative bodies to include the Party as well, it highlighted the blackout’s political importance.

The fact that the countryside differed politically and socially from the towns in Britain was perhaps something of a truism. Those differences had occupied the minds of Labour Party members during the interwar years, who were more used to dealing with urban society. The blackout had already made life difficult for local organizers in every party, impacting their ability to hold meetings and maintain membership through doorstep collections in the evening.⁵⁵ For them, the rural constituencies were foreign lands, “inaccessible backwaters that no fellah could reach except he were a Stanley or Livingstone.”⁵⁶ Working to establish an electorate in the countryside required a different approach than that of the towns. Clare Griffiths perceives in her study of Labour Party’s relationship with the countryside was the idiosyncrasies of organization and informal networks that gave it a different character to urban areas.⁵⁷ Those aspects found an expression through the blackout also, and were apparent in the Mass Observation report from the Oxfordshire village of Burford at the onset of the war, which portrayed a vivid picture of the differences between town and country life, and the weight that the local

community placed on offenses. In the observer's opinion, because relationships among members of the community tended to be closer than those of urban communities, that gave the act of illicitly showing a light a subtle difference. In their words, "one of the main reasons why the blackout is so effective in villages appears to be that immediately anybody shows a light someone else comes and sneaks on them to the ARP warden."⁵⁸ She wrote:

The effect of the local warden coming and ticking one off for not blacking out in a village is rather one of feeling that a village delegate is coming to censure you and that you, the outsider, have behaved rather shamefully. In London, on the other hand, the feeling rather tends to be that when a warden knocks on your door he is a damn nuisance and you suppose you've got to see to it about the curtains.⁵⁹

That act could be far more impersonal in towns and cities, and while there is perhaps something of a caricature about the report's account of village pettiness, the tighter relationships within a small community must surely have given the act of snitching to the warden a different kind of weight. The report noted that there was a 'latent resentment' against the influx of evacuees in Burford, whose villagers, particularly the elderly, were 'only too happy to report.'⁶⁰ New arrivals setting up home in the countryside were also liable to censure upon violation of the blackout. A correspondent for *The Times* noted during a survey of their village's blackout that "the newer quarter, where the curtains had always been of the lightest as became recent converts to the country, let the village down badly."⁶¹ However, despite the arrival of evacuees, the observer found a community spirit under the blackout that they felt was unique to villages. In their words, "In large towns, which have no such feeling of local entity, there is no such spirit. There is not even a street loyalty."⁶² Those features of country life that were so unappetizing for the urban population—the limited entertainments, and the pace of life in general—were the blackout conditions that now affected them. In Germany, commentators found that to work in the country dwellers' favor.

Much of what living in the city makes difficult is solved by itself in the country... The farmer prefers to stay at home in the evenings. And if he leaves the house, he can find his way home in the pitch black.⁶³

In fact, when the blackout came to an end in Britain, the distinction between the city and town was again made apparent, as a poem from an issue of *Punch* in 1944 reveals:

Black-out had blessings, friend, as well as banes;
We lost our ways at times, but there were gains
In ugliness unlit, in beauties shown
That, but for black-outs, we had never known.

Town-dwelling folk, I mean – the countryside
Saw no great difference and had less to hide;
But some who knew so long the darkened city
May say, when lights go on again, ‘A pity!’⁶⁴

The link between the dark and rural life made the transition to the wartime blackout far less troublesome than for those in the towns. The difference in experience also highlights the fact that the blackout was a problem of modernity; it was the urban population and infrastructure that were most affected by bombing and by the blackout restrictions. Problems suffered by rural populations during the blackout were largely a result of urban life and infrastructure extending into rural spaces, either through mobile populations or else the cover given to towns and cities by the countryside.

BLOCKWART AND WARDEN

The warden in Britain, and the *Blockwart* in Germany, personified the state’s authority over the citizen in matters of ARP and the blackout. In the British public, memory has cast the ARP warden as a public nuisance, and they weren’t very popular in Germany either. However, their profile in narratives of the German home front has been understated, possibly because of a blurring of responsibilities and authority at the local level.⁶⁵ The *Blockwart* was the representative of the RLB in the block, helped by the *Luftschutzwart* who secured ARP measures within buildings. The *Blockleiter* was the Party representative in the block. Yet while the administrative functions of officials were neatly ascribed, the number of officials tasked with maintaining order within a block meant that the average German citizen used the term *Blockwart* as a catch-all term to describe the authorities monitoring them.⁶⁶ The distinction was further confused

as the war progressed by the increasing interest of the Party in ARP, and the gradual absorption of the RLB into the Party itself in 1944.⁶⁷ As a result, the *Blockwart's* role in policing the blackout and their relationship to the *Blockleiter* made the maintenance of the blackout explicitly political.

Although the maintenance and policing of the blackout was undoubtedly a political issue in Britain, its organization was free of any one party's influence. Complaining and whining were allowed, provided that people complied with the blackout. In Germany however, where the mobilization ARP had been fundamentally bound to the survival of the state itself, there was little room between the *Blockwart* and the Party at the beginning of the war, and none whatsoever by 1944. In an article published in 1939 in *Die Sirene*, the journal of the RLB, a *Blockwart* wrote that they should consider themselves "the ARP-father of the block," a paternalism that would extend over the course of the war with increasingly central role of the ARP in maintaining discipline on the German homefront.⁶⁸

The caricature of the *Blockwart's* British equivalent, the ARP warden had a basis in fact, and was largely a result of the awkward months of the Phoney War. They were "accused of being parasites and slackers... of standing around doing nothing and being paid handsomely to do so."⁶⁹ Complaints against wardens tended to concentrate on perceptions of fairness and a warden's temperament. One woman in Bolton told the following story to a Mass Observation correspondent:

Mr. Lamb used to come round and make trouble... He's a domineering kind of man. He didn't come in a nice way. There's a big Irishman who lives up Church Street and Mr. Lamb used to go up there and shout over his back, 'Put those lights out,' and the Irishman would shout back, 'I'll put your lights out.' Then Mr. Lamb would go away.⁷⁰

Sometimes arguments over a warden's behavior could lead to violence. One man in Manchester was fined £5 for assault and £2 for a breach of lights, and in his statement alleged that the warden had used obscene language at which the defendant had "flung him against the garden wall after telling him to look at another house where a naked light was showing."⁷¹ As representatives of the state, proper discipline among wardens was equally important in how the relationship of power was

perceived. A fish and chips shopkeeper in Bolton stated in an interview with a Mass Observation correspondent:

A man came in here with a torch. I said 'You're another with a torch.' He said, 'I need it,' and showed the badge on his coat, 'I'm an air-raid warden.' I said 'Oh, are you.' Then a girl came in and said, 'Shall I close the door?' I said, 'It doesn't matter, he's an air-raid warden and they can't say anything while he's in here.' He didn't say a word.⁷²

The powers of the warden were not all-inclusive, and part of the problem of the job was having to be a nuisance while having few powers other than to knock on doors and tell people to fix their curtains. Section 24 of the Lighting Restrictions only allowed members of the police and military to enter premises and forcibly put out the lights, and some wardens complained that they had even less power than the Home Guard to enforce the restrictions. Wardens who were charged with maintaining public shelters eventually had to be given legal powers under the Defence Regulations.⁷³ Discussions among Civil Defence authorities to give wardens powers similar to the police for maintaining the blackout proved fruitless, possibly due to the political impact that extension of powers would have among the population, as well the conflict with the police that would have inevitably brought. However, some Chief Constables circumvented the regulations by arranging to enroll wardens as Special Constables, and thereby giving them the power to enter premises.⁷⁴ However, that was not standard practice, and the warden's reputation as an officious fusspot seems a rather unfortunate consequence of their relative lack of power.

THE END OF THE BLACKOUT

The end of the war in Germany has left few clues as to how civilians dealt with their eventual freedom to use light again. The collapse of the German state had followed years of its infrastructure being regularly assaulted by Allied aircraft, leaving German civilians with far more to cope with than their British counterparts.⁷⁵ Interruptions in the electricity supply were frequent, and any relief by the blackout's absence was tempered by the continued difficulties in living. Olaf Groehler described the blackout in the years following the invention of radio guidance systems as a 'hysterical mania' for the Nazi state, a view that understates

the importance of visual targeting but captures the continued *political* importance of the blackout.⁷⁶ On April 13, 1945, shortly before the Red Army began to overrun the city's defenses, local officials in Berlin received a memorandum from the Police President calling for yet tighter control of the blackout. Amid the devastation of hundreds of bombing raids from previous years and the city's failing infrastructure, the memorandum's content gives an indication of just how perverse the restrictions had by then become.

Every householder must, in their own interest, secure their blackout... should any break in the supply of electricity be followed by an air raid, during which the householder leaves the premises, it is best that any lights are turned off and pulled from sockets... As well as this, upon returning it is advised that blackout materials are checked *before switching on any lights* in case any were damaged during a raid... Even when the All Clear has been given, bright light should not be allowed to fall on the street, since it is possible that enemy aircraft may still be over the city district.⁷⁷

By that stage the restrictions must have become more useful in bolstering what faltering sense of collective will and discipline to resist and fight the Nazi leadership tried to instill among German citizens.⁷⁸ Across the remainder of Germany, the blackout was lifted with the announcement of Germany's surrender. People living in the small village of Lienen, having witnessed fierce fighting in the area as the Allies advanced through northwest Germany, were finally able to take down the blackout on May 8, 1945.⁷⁹ Domestic life during that period was unusual because of the chaos of the Nazi state's collapse, and the period of transition that followed meant that when the blackout was eventually lifted there was little to cheer about. In a series of letters written to her children in the event that she did not survive the war, Else Tietze, writing from her flat in Berlin, told her children of how difficult the days of transition were. In April 1945, shortly before the Battle of Berlin began, she apologized for not writing sooner, as the cellar in her tenement building was too dark and they were sparing their candles. The electricity supply at the time was erratic, and what light they had was far from consistent. Life at night was made possible by light, and when that failed inside the homes as well out on the streets, the result was periods of confined darkness. On May 6, 1945, one day before the general surrender of German forces, she wrote:

I stayed in bed until 9.15 this morning, even though I'd gone to bed at 9.30 last night. It's just so cold in the flat, colder than we've ever known it. I'm sitting in a woolly jumper, coat and blanket; since you can't do anything at night without a light, you simply go and sit in bed.⁸⁰

Later, as the situation gradually stabilized, she struggled to adapt to the imposition of Berlin's new time zone—in areas controlled by the Russians, daylight began an hour earlier. Yet despite the peace that the city now had, amid its ruins, Else reflected that although people were free to show lights through their windows, she longed to see the moon through the darkness of the blackout again. The series of letters closed with a postscript from her son who, released from a prisoner of war camp after the war, returned home to find a light shining from the living room. "How strange," he wrote in the final sentence, "no blackout..."⁸¹

While both countries had begun the war under comparable circumstances, by the end they were very different. In Britain, over the course of 1944 the public had felt a sense of eventual victory. As the war drew to an end, the termination of the blackout came in two stages. The first, known as the dim-out, came on September 17, 1944. With the threat from Germany's Luftwaffe effectively neutralized, and recognizing the limits of the blackout in defending London against V1 and V2 strikes, the government allowed for a higher standard of lighting. Preparations for the dim-out had been performed cautiously. A report of the Committee on Black-Out restrictions in July 1944 made it clear that public opinion of it was tied to the overall course of the war, since despite the public not liking the blackout, they were "convinced that it is an essential means of defence should attack be made by piloted aircraft."⁸² The political fallout from any premature lifting of the restrictions was a key consideration. A raid from piloted aircraft seeking to counter the propaganda effect of the lifting of the blackout had the potential to cause great damage. In the opinion of the Air Ministry, were that to happen, the public would blame the government for the attack. Because of that and with the visibility of the eastern coast to enemy aircraft flying from Holland being kept in mind, the dim-out was eventually instituted across selected parts of the country. Sections of the coast defined as 'special coastal areas' were not allowed to display more light, and neither was London. Surrounding counties in the East had to apply to the Ministry for Home Security for consideration. The remainder

of the country was allowed to implement the new regulations.⁸³ Some misunderstood the new relaxations, and in confusion caused more light to be shown than was allowed. In Caterham, a woman living by herself opened her curtains, switched on every light, and stood outside to admire her brightly lit house. Her neighbors hurried out to tell her of her mistake.⁸⁴ But the immediate response to the dim-out was not one of unbridled enthusiasm, but rather of caution. Years of living under blackout conditions where light in the dark implied insecurity for the community meant that, although commercial enterprises were keen to exploit the new freedoms, the population at large were hesitant, as a Mass Observation report from September 17, 1944 states:

Practically everyone with whom [the investigator] has spoken continues to enforce the blackout regulations, perhaps not so carefully as in the earlier days of the war, but they haven't taken advantage of the revised regulations. The general feeling is, that the war isn't over yet. When it is, they'll pull down the blackout curtains, and make a bonfire of them.⁸⁵

Others commented that the new freedoms gave them "the sort of feeling that I had as a child when I picked an apple that wasn't yet ripe and had thrown it away."⁸⁶ For some, the protection that it had offered extended to more than enemy bombers. Protection from the outside world in general had mingled with the protection from the Luftwaffe, and resuming the use of lighting left them conflicted. A young woman living with her mother in the Welsh countryside wrote the following of the gradual resumption of an almost full blackout in her house after the dim-out:

September 17th 1944

The beginning of the 'dim out.' I put some different curtains on the bedroom windows but left the rest.

September 18th 1944

I've just been outside and the light from the living-room through the green curtains seems a blaze of light! I almost felt scared when I saw it, but it does light up the road.

September 25th 1944

It's no good. We're too used to a black out. Having no curtains at all on the scullery and bathroom windows made us feel too guilty, naked and unprotected, so I've had to put some back. Mum, knowing there was a

light showing outside while I was at choir practice last night was frightened of being alone.⁸⁷

Although there were, of course, many reasons for that lack of enthusiasm, the duty to the community that had been a focal point of the blackout's application during the years of the war remained one of the reasons for that reticence. However, just as people had become used to the blackout at the onset of the war, so they became used to living with light again. An article from *The Times* in 1945 stressed that now that the war was over, and after months of people leaving the curtains and letting the light shine out on principle, it was time to draw the curtains; "now that the black-out is once more voluntary we can with a clear conscience and an unwounded vanity allow cosiness to resume its empire."⁸⁸ The speaker of the House of Commons who illuminated Parliament's Victoria Tower on April 24, 1945 did so with the words "I now switch on our Lantern light."⁸⁹

CONCLUSION

By the end of the war the blackout had become part of the fabric of life in both countries, playing a constitutive role in the construction of the idea of a unified homefront. That "ideological work", the foregrounding of community and citizenship in the blackout, is little remarked upon in the literature of the homefront. Although the universal aspect of the blackout brought with it inevitable tensions in how the restrictions were applied across society, those tensions were the result of adherence being measured against an ideal of behavior that was appropriate to the threat of bombing, and the protection that the blackout was supposed to afford the wartime community. Adherence to the blackout was never faultless, and how states policed blackout infractions—more often the result of tardiness than anything else—gives some indication of the balance each country had to make in managing an effective blackout while not undermining confidence in the authorities through poor or erratic sentencing. The relatively small numbers of people jailed for breaching the Defence Regulations in Britain, as well as a preference for fining over jailing in Germany, shows the importance of catching blackout infractions perhaps tempered by acknowledgment of the burden of maintaining it.

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CHAPTER 4

Fear and Transgression

The Fear of Crime and Sexual Assault During the Blackout in Britain and Germany In this chapter, Wiggam establishes three key ways in which the blackout had an impact on people's security. First, the blackout caused genuine concern among women in both countries about the possibility of sexual assault. Second, while there was a need to secure the home front for women, licentious and poor behavior in both countries during the blackout was generally seen as a problem with women and girls, and with the youth. Finally, the blackout exerted a moral pressure on sentencing, and a focus on policing certain types of undesirable behaviors.

Keywords Civil defense • Blackout • Sexual crime • Wartime crime

In April 1944 Lynne Burgess was attacked by a group of soldiers while on her way home during the blackout. Her attackers threw her to the ground, kicked her, and in attempting to steal her wedding ring almost broke her finger. The attack caused the miscarriage of her unborn child, a tragedy that formed a key inspiration for her husband Anthony Burgess' novel *A Clockwork Orange*.¹ Burgess' extrapolation of that event into his fiction was founded on one of the greatest concerns of the blackout—the possibility of being assaulted. The potential for inappropriate advances, stalking, and sexual violence toward women in particular, seemed far greater under the cover of darkness. It was a

paradox of the blackout that securing the skies from enemy aircraft made the streets feel far less safe. In 1941, the British–German criminologist Hermann Mannheim wrote that only two types of crime could be directly attributed to the blackout—offenses against the regulations, and offenses committed under its protection.² The basis of this chapter is the latter.³

Exploitation of the blackout for criminal, sexual, or violent means was perhaps an inevitable consequence of darkening the streets. However, it is difficult to gauge the true scale of changes of the offenses that took place, and the difficulties of untangling the blackout from the wider conditions of war mean that only a very general impression can be given. Despite that caveat, three trends are clear. The first is that the blackout caused a real anxiety among women in Britain and Germany of being at the least bothered by, and at worst assaulted by men. The second trend is a marked rise in both countries of juvenile offending therefore that the blackout created, and the war’s disruption to family life. Finally, the blackout exerted a moral pressure that led to a sharpening in the language and application of justice in both countries. In all three cases exploitation of the blackout was largely framed as a problem of gender and of youth. This chapter addresses each one individually.

THE FEAR OF SEXUAL VIOLENCE

Police chiefs in Britain had anticipated an increase of assaults in the dark prior to the war.⁴ A few days after the blackout began, Glasgow police were advising for female air raid precautions wardens to be escorted home after increasing incidences of molestation took place at night.⁵ Similar problems were experienced in Germany, and by December 1939 the Schutzstaffel (SD) was noticing a high level of dissatisfaction over how assaults during the blackout were being handled by the authorities. Molestation of women was cited as a major problem, with ‘groping of the breast’ especially prevalent.⁶ Following and stalking were also more easily undertaken under the cover of darkness. A woman living in London wrote the following in September 1939:

Just before my stopping place the bus stopped at a pub and several people got on including a youngish looking man who dithered about and eventually sat immediately behind me and tried to attract my attention. When I got off the bus he followed and walked on my heels (a terrifying

experience in the black-out). When I could stand it no longer, I turned and flashed my torch full in his face and then ran for home. Felt very shaken. Had bath and turned in.⁷

Such cases could also develop into physical assault, and attempted rape.

The little girl who works next to me, aged 14 years, was attacked by a man last night going home from work about 7 p.m. She was nearly home, and walking slowly behind a man in order to not get in front of him, when he suddenly turned and put his hand over her mouth and threw her down. She screamed and fought; luckily she was so near home her people heard her and ran out, and the man made off...⁸

Responses to the danger were not always typical. In 1940 the SD reported that a Nationalsozialistische Volkswohlfahrt volunteer in Berlin had been assaulted during the blackout, but had refused to identify her assailant because she did not want cause trouble for his family. The proximity of her attacker upset other women in the neighborhood and she was convinced by the authorities to bring charges against him to 'reassure the community.'⁹ One girl in Britain, reflecting on being approached and held as she walked home, wrote in a letter to a pen pal that "when I thought about it later in bed I remembered that I had enjoyed the feeling of someone holding me," remarking that "We aren't the kind of family who go in for hugging at all, perhaps I miss it or perhaps I'm growing up."¹⁰ However, caution was the typical response. In Germany the reports of the exiled Social Democratic Party noted that by January 1940 women were far less willing to journey out onto the streets after sunset, not simply due to the sharp rise in accidents, but also because of the increase in robberies and burglaries.¹¹ One shopkeeper advertised his walking sticks as "good protection in the blackout." The small print underneath that stated that they helped to tap around in the darkness and prevent falls was presumed by the Sozialdemokratische Partei Deutschlands reporter to ward off accusations by the police of alarmism.¹² That new vigilance modified the behavior of both men and women in public spaces. At major train stations in London, where people lingered in the gloom between connections, evenings were characterized by a distinct separation between men and women and an increase in tension that a female Mass Observation reporter described as "not even equalled by the ordinary rush hour."¹³ As the train stations

gradually emptied, women could be found clustering in cloakrooms, “partly because they couldn’t see outside, partly because they felt nervous standing around.”¹⁴ The separation of the sexes seemed instinctive, in deference to the potential threat that women were faced with in public spaces after dark.

The main places in which the travellers were grouped were firstly any well-lighted place in which there were chairs or benches... As for the remainder of the travellers they either collected together in small groups – the men smoking – the women collecting against a pillar or wall in the company of others of their sex. During a period of about ten or fifteen minutes I joined one of these ‘groups’ and found that in that time that it was constantly being added to by other strays – not without a certain amount of reason for I found when standing alone I was approached several times with a hopeful ‘good-evening’.¹⁵

The crime figures in Britain appear to justify the forethought. Between 1940 and 1945 the number of sexual assaults against women recorded in Britain increased from 2381 to 3904, and the number of rapes recorded tripled from 125 to 377.¹⁶ However, in Germany the trend was the opposite—recorded rapes declined from 642 in 1939 to 112 in 1943, with similar drops in sexual assaults.¹⁷ What can these numbers tell us? A simple narrative would be that levels of sexual crime rose in Britain and fell in Germany. But the numbers can be deceptive. Although the general trends may be correct, the scale of change may not be. Furthermore, recent studies have shown that evidence for decreased levels of public lighting and an increase in crime is a rather weak fact.¹⁸ What is more important is the psychological impact of the dark and how it affects the perception of safety, with women tending to feel more vulnerable than men, and often associating the threat of crime with sexual assault.¹⁹ The association between the levels of crime and the blackout is therefore rather distorted. What the figures *can* indicate are policing and judicial priorities, and the moral and social climate in which the numbers were recorded. Historic crime data generally provide an incomplete record of crime levels when used on their own. Godfrey et al. contend that it is more useful to consider levels of reported crime as reflecting wider social processes and changes in the criminal justice system.²⁰ That may explain the relatively sanguine attitude of British Police Chiefs, who during the war were only really troubled by the rise in juvenile offending. Although

there was a steady rise in almost all recorded offenses during the war, that had followed an already increasing level of recorded offenses throughout the 1930s, and was indeed part of a trend that would continue for most of the twentieth century. The British numbers may indicate a possible rise in criminality, but that was coupled with increased police vigilance in detecting and prosecuting sexual offenses over the course of the war, and a climate of opinion that favored reporting and prosecuting such offenses.²¹ In that regard the British figures mirror the experience of criminality in the Scandinavian region.²² Although the German figures show an opposite trend to the British ones, the same caveats apply.²³ Underreporting may have contributed to the decrease, as well as a prioritizing of police resources toward other types of offenses. The decrease may also have been indicative of the effect of deterrent sentencing for all types of offenses, including sexual ones, as well as the reduced number of men on the home front (Tables 4.1 and 4.2).²⁴

Table 4.1 Sexual offenses against women in Britain, 1940–1945^a

	<i>Rape</i>	<i>Indecent assault on a female</i>	<i>Unlawful sexual intercourse with a girl under 13 years</i>	<i>Unlawful sexual intercourse with a girl under 16 years</i>
1940	125	2381	65	433
1941	169	2589	76	542
1942	200	2745	117	651
1943	257	3302	108	700
1944	416	3639	109	767
1945	377	3904	114	820

^aBritish Recorded Crime Statistics, 1898–2001/02^{*}

Note that figures for 1939 are not available from this dataset

Table 4.2 Sexual offenses in Germany, 1939–1943^a

	<i>Rape</i>	<i>Sexual offense against person under 14 years</i>
1939	642	6285
1940	445	4345
1941	431	4054
1942	380	3640
1943	112	1240

^aBlau, ‘Die Kriminalität in Deutschland Während Des Zweiten Weltkrieges’. The difference in population size must also be kept in mind—roughly 70 million in Germany compared with 47 million in Britain

While there was a clear need to ensure security of women on the homefront from sexual crime, the problem of sexual license more generally was constructed as a female problem.²⁵ As with criminal behavior, overt or excessive sexual activity during the blackout was contradictory to the system of obligations and responsibilities that the blackout and the wartime homefront in both countries entailed. Quantitative and qualitative data on the levels of sexual activity during the war are scarce, and as with the other crime statistics in this chapter, the tables may reflect more attention paid to certain behaviors by the authorities, and people reporting them, than a marked increase in sexual activity. But the link between transgressive behavior and the blackout was firmly embedded within both homefronts, and the morality of women during the wartime blackout became a concern. Because of sexual misadventure, women were now viewed as a threat to the well-being of the country's military, and therefore its capacity to fight a war.²⁶ The way in which that was reported in the press undoubtedly influenced people's perception of the threat. Rose wrote that:

Newspapers in geographically dispersed rural and urban districts increased widespread anxiety by printing lurid headlines, feature articles, a proliferation of letters to the editor, and editorials that dissected the causes and consequences of teenage girls 'running wild' or going out 'for a good time.' Routine reports often went into excruciating detail describing their 'indiscretions,' fuelling the panic by exciting both outrage and prurient attention.²⁷

In 1940, concern over reports of hooliganism and other 'undesirable occurrences' in Raphael Park in London was such that they were eventually brought up in council meetings. Subsequent reports in the local press led to a Mass Observation reporter asking around in the neighborhood about what people knew. Those who were willing to talk explicitly linked trouble to women's behavior, the park being a place "where young women go if they want a night with a soldier."²⁸ The rape of underage girls was similarly framed as a problem of female sexuality. Commenting on the behavior of US troops, a Home Intelligence report stated:

"it is not unusual to hear of the rape of young girls of 13 and upwards in the parks in and around London". It is recognised, however, that the

conduct of the U.S. troops depends very largely on the behaviour of our girls and women.²⁹

That fear continued in Britain. In January 1944 the Ministry of Information's Home Intelligence section identified concerns of molestation in several regions during the blackout, particularly from black GIs, a fear undoubtedly driven by newspaper reporting of a high-profile case the previous year.³⁰

State control over sexual behavior in Germany was tied to the Nazis' notion of the 'asocial' woman, a broad category encompassing prostitution, promiscuity, interracial sex, and even "becoming too easily sexually aroused or creating a 'strongly erotic impression.'"³¹ Set against the de-eroticized ideal of the German mother, protecting the home and hearth, those asocial women were liabilities to the Nazi state. Prosecutions for liaisons with prisoners of war increased substantially, becoming a 'mass crime' despite efforts by the Party. Recorded incidences rose from three in 1939 to a high of 6451 by 1942, reflecting the change in the composition of wartime labor on the homefront and official concern for sexual activity.³² When the war began in Germany, prostitution was removed from the darkened streets and organized instead through a system of brothels, both private and military. They were designed to minimize the visibility of the sex trade, decrease its threat to the health of the German military, and make the availability of sex a resource for maintaining military morale.³³ A letter from the Bavarian Ministry of the Interior to police officials on September 9, 1939 set out the arrangements for the policing of prostitution during the war, confining it to bordellos and the houses of prostitutes. Soliciting was to be allowed in guesthouses with the agreement of the police, but outdoor trafficking was forbidden.³⁴ The intent was to remove prostitution from the public space into a state-private one, and the general decline in convictions for procuration proves that. That kind of control over prostitution did not exist in Britain, and for those prostitutes who could only, or perhaps preferred to, conduct their business outside, the effect of a more open market led to a need to stand out on the darkened streets. Margaret Hill, a diarist in Manchester, noted the following:

We walked home across the town in the blackout, under dripping bridges and railway tunnels – a sort of nightmare at midnight. In High St. ... we

met the High St. ‘fairies’ (i.e. local prostitutes) in their white mackintoshes to show up in the blackout.³⁵

The link between prostitution and the general behavior of girls was also inferred in official reports. A specially commissioned survey of the ports of Clydeside and Merseyside worried about both the numbers of prostitutes from other cities attracted to the port, and the ‘extreme youth’ of local girls who took to the streets in the blackout.³⁶ While military brothels were never likely in Britain, the availability of women and military morale was also assumed. A Home Intelligence report in 1944 stated that “People deplore the association of coloured troops with white girls, but it is the latter who are censured. At the same time, it is suggested that the negroes might be provided with a contingent of coloured Auxiliaries, or more camp amenities so that they should spend less time out.”³⁷ The 1944 Powell and Pressburger film *A Canterbury Tale* dwells on that issue, its antagonist attacking girls in the blackout by smearing glue in their hair, scaring them from going out, and keeping them from the locally billeted soldiery.³⁸

The blackout also provided a type of safety for homosexuals.³⁹ In his memoir *The Naked Civil Servant*, Quentin Crisp described how the blackout allowed for “contacts of astounding physical intimacy without the intervention of personality.”⁴⁰ Recorded offenses of homosexual activity rose in line with the other sexual crimes, although as with other crime figures, the rise could be misleading. Seeing that the authorities were interested in certain types of offenders, young police officers wanting promotion found it far easier and a good deal safer to pursue homosexuals and prostitutes rather than burglars (Table 4.3).⁴¹

Table 4.3 Homosexual offenses in Britain, 1940–1945^a

	<i>Buggery</i>	<i>Indecent assault on a male</i>	<i>Gross indecency between males</i>
1940	97	808	251
1941	177	757	390
1942	208	998	582
1943	245	1208	623
1944	277	1186	449
1945	223	1318	459

^a‘British Recorded Crime Statistics, 1898–2001/02’

Homosexuality was also a criminal offense in Germany, and official concern that homosexuals were exploiting the blackout was already evident by the end of 1939.⁴² Official statistics from during the war indicate that ‘unnatural intercourse’ declined from 7614 in 1939 to 2126 in 1943.⁴³ Because homosexuals were classed as *Volksschädlinge*, the police in Munich monitored homosexual activity as well as they were able, and staked out known gathering spots to make arrests and generate intelligence for future operations. The darkness worked in favor of those being monitored, as a report from 1943 illustrated.

On Saturday 3rd July 1943 at 11pm, a group of nine men gathered in an unlit public lavatory who, at the switching on of a torch, were alarmed and fled the location. A raid on this location would certainly be successful. From my observations, the best time for a raid would be a Saturday at around 11pm.⁴⁴

By 1944 the police were finding it increasingly difficult to monitor the usual sites properly to make any arrests. The loss of younger detectives who were drafted into the war, in conjunction with the blackout restrictions, meant that the monitoring of locations was made more difficult; faces and clothing could not be recognized, and as such the time that suspects spent in any location could not be judged accurately.⁴⁵ The blackout provided some measure of protection not only from the enemy, from also from the state for homosexuals in both countries.

JUVENILE CRIME

The rise in juvenile offenses during the war was a transnational phenomenon that alarmed the governments of both countries.⁴⁶ The freedom of city during the blackout for wayward or bored youths seemed to invite mischief, and by 1940 Göring had already explicitly made the link between the blackout and juvenile delinquency. In an address to the Ministerial Council for the Defence of the Reich, he stated that “the blackout and general wartime conditions facilitate a lack of discipline and the commission of offences by young people.”⁴⁷ The cover of darkness provided criminal opportunities for German youths who either fell through the infrastructure of schools, parents, the Hitler Youth, and other Nazi social organizations, or else found themselves growing up

contrary to the goals of the Nazi state. The crime rate among that group soared; by 1943, 54% of incidences of serious theft were attributed to juveniles, an increase of 120% from the onset of the war.⁴⁸ The statistics released by Police Chiefs in Britain on juvenile crime were similarly unequivocal. In his report for the year 1939, Glasgow's Police Chief referred to juvenile crime specifically.

There is no doubt that the present complete absence of illumination during the hours of darkness tends to encourage the commission of such crimes as theft by the method commonly known as 'smash and grab', and by house breaking generally, by persons who, under normal circumstances, would have lacked the necessary courage. There exists, in such circumstances, a very real danger that juveniles in particular will be influenced, by the apparently reduced risk of detection, to venture on a career of crime, and the ultimate return to peace-time conditions might well reveal a consequently abnormal increase in criminal activity.⁴⁹

The blackout was considered an enabler of bad behavior.⁵⁰ Contemporary academic analysis also followed that line, attaching the most importance to the novel conditions of the war and the coarsening, degenerative effect they had among some sections of the population, particularly the working class.⁵¹ The ease with which some youths could either commit crime, or witness morally corruptible behavior—a mother's adulterous relationship is cited as an example—could only serve to contribute to delinquency. Such reasoning would inform post-war attempts to reform youth supervision.⁵² In comparison with Germany, where the state's control over youth behavior was exercised to a considerable degree through legal sanctions or through state youth groups, there does not appear to have been a serious attempt at regulating youth behavior by the British government.⁵³ In Germany, officials worried at the susceptibility of the nation's youth to outside influences. To counter that, there was a renewed focus on determining the shape of children's and adolescents' lives through Nazi youth groups and family organizations.⁵⁴ Despite that, gangs of youths continued to roam the city streets during the blackout, and by 1944 that had become a grave concern for the Party. A report by the Reich Ministry of Justice had identified three types of gangs present in Germany: politically hostile gangs, liberal-individualistic gangs, and criminal anti-social gangs.

The report stated that one of those groups, the Edelweiss Pirates, “meet at night on street corners, in doorways or in parks.” They were hostile to the community, and despised authority. Another group, the Swing Youth, admired American music and dressed like English dandies.⁵⁵ Among the third group were gangs of youths drawn from the criminal classes, and “genetically inferior, antisocial family clans.” All met at night, and their existence was linked directly to the blackout. Kebbedies wrote that the problem in controlling German youth during the war was that “free time was inevitable, yet also immoral.”⁵⁶ The link between the blackout and youth crime was explicitly tied to ideas of morality and social cohesion in both countries.⁵⁷ While that was present in all instances of adult crimes that were either facilitated by or occurred during the blackout, those ideas found their clearest expression in the surge in youth crime during the war.

BLACKOUT JUSTICE

The foundation of Nazi justice was based on securing the integrity of the national community. As a result, criminal law was specifically driven along the Nazis’ political, ideological, and biological lines. Noakes contends that the law held two specific functions in Germany: first to maintain the morale of the homefront by limiting any political or criminal disruption; and second to make sure that “the losses of the best ‘human material’ at the front were not exacerbated by the survival or even proliferation of the worst elements at home.”⁵⁸ The national community, as “the highest interest protected by the law,” superseded the rights of the individual and any ideas of rehabilitation.⁵⁹ The Decree against National Pests was issued on September 5, 1939, creating three classes of ambiguously defined offenders—plunderers, exploiters of blackouts, and anti-social saboteurs. Sections 2 and 4 of the decree relate specifically to blackout offenses:

2. Crimes committed during air raids

Anyone who commits a crime or an offense against life, limb or property by exploiting the measures which have been taken to protect against air raids with penal servitude for up to 15 years or with penal servitude for life or in particularly serious cases with death.

4. Exploitation of the war situation as grounds for increasing the sentence

Anyone who commits any other offense with the aim of exploiting exceptional wartime circumstances will be punished in excess of the normal with penal servitude for life or with death if this is required by the response of healthy popular feelings to a particularly heinous offense.⁶⁰

Differences in how the law was applied were evident across the country, and pressure from the Party on the judiciary to give harsher sentences mounted during the war. When it began, Roland Freisler, State Secretary in the Reich Justice Ministry for penal affairs, asked “If the community needs to be securely protected against the criminal personality for years on end, why not snuff it out and thereby ensure perfect protection at one blow?”⁶¹ Such reasoning made the safety of the community the key factor for deterrent sentencing. The following case of a young man caught and sentenced to death for robbery during the blackout depicts both the legal reasoning of blackout death sentences and how they were carried out. Shortly before the culprit’s arrest he was working as a driver on a building site, and on Saturday, December 2, 1939 he was asked to drive a truck to Munich for repairs. He used his free time to frequent cafes, and quickly outspent his earnings. By the following Thursday he was again penniless, and he decided to steal a handbag that evening under the cover of the blackout. Approaching a young woman from behind he grabbed her handbag. In her surprise she did not defend herself and he quickly escaped, throwing the bag away but keeping the 5.10RM he found, which he spent that evening. The following day he carried out a similar crime at almost the same time on another woman. He was surprised that she also did not defend herself, although she did raise an alarm at which point a soldier apprehended the robber. The bag and its contents were estimated to have been worth about 5RM.⁶² For those two crimes and their paltry bounty the robber was sentenced to death.

The language of the written judgement is revealing. The robber was judged to have used the blackout to steal, knowing it would be easier. Doing that when most people were leaving work to go home showed an opportunism that would have terrible consequences if allowed to continue. He committed his crimes not from economic necessity, but because of his reckless spending. In the terminology of the judgment, his “lust for dancing set him on the wrong path.” His youth, his “weakness

of spirit”—a euphemism for his intelligence—and previous good behavior were judged insufficient grounds for mitigation and the only sentence left for the court was death. The court offered the robber’s foster parents the right to take the body, but they never replied and he was instead sent to the Anatomical Institute of Munich University; his head was sent to the city’s psychiatric institute.⁶³

What is notable in that case is how quickly the judicial system in Munich had adjusted to the political climate of sentencing that had been fostered by the Nazi state. In that instance, the interpretation of the law followed Party demands to secure the community against undesirable elements. However, other special courts at that time did not always follow that reasoning—for the similar crime of robbery during the blackout, on September 8, 1939 the Hanseatic Special Court sentenced four men to 8 to 10 years hard labor and the rulings against offenders sometimes took their personal circumstances into account. In May 1941, a story in the *Völkischer Beobachter* of a 19-year-old robber who had used the blackout for his crime left Hitler incensed. In his opinion the offender’s punishment of 10 years hard labor was far too lenient, and he demanded his position on such offenses be reiterated to the State Secretary for Justice, Schlegelberger.

It is the opinion of the Führer that if we wish to keep robbery under the cover of darkness to an absolute minimum, then in such cases the death penalty must be used. In any case, as the Führer has said time and again, given the heroic efforts of our soldiers we must strike hard against such robbers.⁶⁴

Interfering in that manner was a habit that Hitler maintained during the war, which sometimes affected the severity of sentences handed down by the judicial system.⁶⁵ The Justice Secretary’s reasons for the leniency of the sentence in that case drew Hitler’s attention to facts not covered by the newspaper’s report. Although it was an opportunistic theft of a handbag at night from a war widow, the offender’s personal situation was a mitigating factor. A sickly father, humble circumstances, and previous good character all played a role in the offender escaping the death sentence. Although the moral pressure for the severest sentence possible for blackout theft was present, some flexibility was still available to the courts in sentencing the offenders. However, the general trend during the war was for increasingly harsh sentencing, encouraged by the Nazi

state and escalated with the bombing war, with looting under the cover of the blackout becoming a focus in its later years.⁶⁶ Although fewer sexual offenses were recorded in 1941 than in previous years, two offenders were executed for a violent sexual offense against a woman, and three were executed for rape. That type of increasing severity also extended to juvenile justice; in 1943, a juvenile was sentenced to death for rape and murder.⁶⁷

Execution for rape was not limited to Germany. Although Britain had abolished the death sentence for rape in 1861, the Americans brought their own system of military justice. Eighteen American soldiers were executed in Britain, of which six were convicted of rape and four of rape and murder. Sentencing betrayed the endemic racism of the American military because of the six rape convictions, five were against African American soldiers and one against a Mexican American, with the rape and murder convictions being against two white Americans, one African American, and one Mexican American.⁶⁸ More generally, the language of justice also sharpened in Britain, and looters were threatened with similar severity.⁶⁹ The Lord Mayor of London said that forthcoming legislation would put looters “into the category of murderers,” “liable to suffer death or penal servitude for life.”⁷⁰ Looting was a capital offense, but the death sentence was never handed down during the war. The fact that it was discussed in such terms at least gives an indication of the strength of feeling surrounding exploiters of air raids and the blackout. Over half of all cases of looting brought before the courts ended in jail terms, with the number of cases peaking in 1941 at 2508.⁷¹ Although there was a similar moral pressure driven by the obligations of wartime community, there was a balancing act between severity and leniency. In 1941, Churchill asked Herbert Morrison to review the sentences of six firemen convicted of looting and sentenced to five years penal servitude. Those were “terrible sentences” Churchill said, at a time when the country had “none too many able-bodied men.” Morrison, with an eye on the press and public opinion, resisted, but promised a review of sentencing for looters.⁷² That case illustrates how the practical needs of the wartime homefront were sometimes in conflict with its heightened morality, where exploitation of the blackout was a key factor. As in Germany, justice had to be seen to be appropriate to the state of emergency, and what was perceived as just according to the morals, and the morale, of the wartime homefront.

CONCLUSION

The statistics considered in this chapter, along with more recent analyses of crime trends, paint a picture of how the blackout was sometimes exploited for suppressed, anti-social or illegitimate behaviors. While its link to the dramatic rise in juvenile crime during the war is clear, some caution is warranted when trying to discern more general trends. It is likely that the scale of change in both countries cannot be reliably inferred from the figures, nor can the blackout be isolated from wider social changes that took place during the war. But what they do show is the moral pressure of the blackout in the attention paid to particular behaviors by the state during the war, and the change in social relations that the blackout contributed to. Concerns over wartime sexual crimes committed during the blackout was framed in both Britain and Germany by ideas of ‘unhealthy’ or unproductive sexual desire, and more generally as a specific problem with women’s sexual activity. In this case, the rhetoric between both countries bears some similarity. The blackout, as a feature of the war that enabled such behavior, formed a destabilizing part of the homefront. Yet while the presence of the blackout made the streets seem unsafe, it was also important in establishing wartime discourses of sacrifice and duty to the community. The blackout was in that sense something of a paradox.

NOTES

1. Anthony Burgess, *A Clockwork Orange* (London: Penguin, 1962), p. xiv (introduction to the 1996 Penguin edition), Andrew Biswell, *The Real Life of Anthony Burgess* (London: Picador, 2007), pp. 107–109. In other versions of the story told by Burgess he alleged that his wife was raped, although a habit for altering his past on a whim meant it was never certain if that was true or not.
2. Hermann Mannheim, ‘Crime in Wartime England’, *Annals of the American Academy of Political and Social Science*, 217 (1941), pp. 128–137 at pp. 132–133.
3. A discussion of lighting infractions can be found in Chapter 2.
4. Glasgow Record Office, SR22/40/1, Chief Constable’s Annual Report 1939.
5. Glasgow Record Office, SR22/43/56, Chief Constable to all Superintendents, September 4, 1939.
6. BA Berlin, R58/146, SD Mood Report, December 13, 1939.

7. MOA, Folder 1/D, 'Blackouts', September 12, 1939.
8. MOA, Box TC54/1/B, Extract from *Mass Observation's Weekly Intelligence Service* (US Publication), February 17, 1940.
9. BA Berlin, R58/146, SD Mood Report, December 13, 1939.
10. IWM 89/4/1, Letter No. 24, Undated, Circa 1941.
11. *Deutschland-Berichte Der Sozialdemokratischen Partei Deutschlands (Sopade) 1934-1940* (7; Frankfurt-am-Main: Verlag Petra Nettelbeck, 1980), p. 26.
12. Ibid.
13. MOA, Box TC70/4/C, 'Stations in the blackout', October 19 and 22, 1939 (est.).
14. Ibid.
15. Ibid.
16. 'British Recorded Crime Statistics, 1898-2001/02' (Home Office).
17. Bruno Blau, 'Die Kriminalität in Deutschland Während Des Zweiten Weltkrieges', *Zeitschrift für die gesamte Strafrechtswissenschaft*, 64/1 (1952), pp. 33-81.
18. Rebecca Steinbach et al., 'The Effect of Reduced Street Lighting on Road Casualties and Crime in England and Wales: Controlled Interrupted Time Series Analysis', *Journal of Epidemiol Community Health*, 69 (2015), pp. 1118-1124; Malcolm Ramsay and Rosemary Newton, 'The Effect of Better Street Lighting on Crime and Fear: A Review', in Gloria Laycock (ed.), *Home Office Crime Prevention Unit* (London: Home Office, 1991); David P. Farrington and Brandon C. Welsh, 'Effects of Improved Street Lighting on Crime: A Systematic Review', *Home Office Research Studies* (London: Home Office Research, Development and Statistics Directorate, 2002). See also P. R. Marchant, 'A Demonstration That the Claim That Brighter Lighting Reduces Crime Is Unfounded', *The British Journal of Criminology*, 44/3 (2004), pp. 441-447; David P. Farrington and Brandon C. Welsh, 'Measuring the Effects of Improved Street Lighting on Crime: A Reply to Dr Marchant', *ibid.*, pp. 448-467. Mannheim speculates that the blackout may have reduced certain kinds of crime at the start of the war as crooks adjusted to the new conditions. See Mannheim, 'Crime in Wartime England', p. 133.
19. Diederik Cops and Stefaan Pleysier, '"Doing Gender" in Fear of Crime: The Impact of Gender Identity on Reported Levels of Fear of Crime in Adolescents and Young Adults', *British Journal of Criminology*, 51 (2011), pp. 58-74. On the relationship between the fear of crime and poverty see Christina Pantazis, '"Fear of Crime", Vulnerability and Poverty', *ibid.*, 40 (2000), pp. 414-436.
20. Barry Godfrey, Paul Lawrence, and Chris A. Williams, *History and Crime* (London: Sage, 2008) at p. 36. See also Peter Adey, David J. Cox, and

- Barry Godfrey, *Crime, Regulation and Control During the Blitz* (London: Bloomsbury, 2016), pp. 79–102.
21. On the steady increase of recorded crime in Britain during the inter-war see Howard Taylor, 'The Politics of the Rising Crime Statistics of England and Wales, 1914–1960', *Crime, History and Societies*, 2/1 (1998), pp. 5–28. It's clear that many sexual crimes were underreported or not recorded when the war began. The returns for the city of Manchester record four rapes in 1939, and only one for 1940, 1941, and 1942. The city of Bristol recorded two in 1939, none in 1940, and three in 1941. It is unlikely that these low figures give a true picture of the extent of sexual crime in what are some of England's largest cities. See Manchester City Council Archives, Chief Constable's Annual Reports 1939–1945; BRO, Chief Constable's Annual Reports 1939–1941.
 22. Henrik Tham, 'Crime in Scandinavia During World War II', *Journal of Peace Research*, 27/4 (1990), pp. 415–428.
 23. On this see Edward Ross Dickinson, 'Policing Sex in Germany, 1882–1982: A Preliminary Statistical Analysis', *Journal of the History of Sexuality*, 15/2 (2007), pp. 204–250 at p. 234.
 24. Evans argues for the latter point, but contends that the marked drop in sexual offences when compared with the rise in other crimes can mainly be attributed to the German police being 'so concerned to enforce war-time restrictions that they were starting to neglect other areas of the criminal law.' See Richard J. Evans, *The Third Reich at War* (London: Penguin, 2009), p. 213.
 25. See Sonya O. Rose, 'Sex, Citizenship, and the Nation in World War II Britain', *The American Historical Review*, 102/4 (1998), pp. 1147–1176 at p. 1147.
 26. See Elizabeth D. Heineman, *What Difference Does a Husband Make?: Women and Marital Status in Nazi and Postwar Germany* (Berkeley: University of California Press, 2003) at pp. 53–54.
 27. Rose, 'Sex, Citizenship, and the Nation in World War II Britain', p. 1150.
 28. MOA, Box TC54/1/B, Report on Hooliganism in Romford, June 25, 1940.
 29. TNA INF 1/292, Home Intelligence Weekly Report, August 5, 1943.
 30. TNA INF 1/292, Home Intelligence Weekly Report, January 29, 1944. The concern over black troops was likely influenced by a rape and murder committed at night by a black GI in Marlborough, Wiltshire in 1943. See J. Robert Lilly and J. Michael Thomson, 'Executing Us Soldiers in England, World War II: Command Influence and Sexual Racism', *British Journal of Criminology*, 37/2 (1997), pp. 262–288.
 31. Annette F. Timm, 'The Ambivalent Outsider: Prostitution, Promiscuity and Vd Control in Nazi Berlin', in Robert Gellately and Nathan

- Stoltzfus (ed.), *Social Outsiders in Nazi Germany* (New Jersey: Princeton University Press, 2001), pp. 192–211 at p. 194.
32. Hubert Speckner, *In Der Gewalt Des Feindes: Kriegsgefangenenlager in Der "Ostmark" 1939 Bis 1945* (Vienna: Oldenbourg, 2003), p. 157.
 33. Julia Roos, 'Backlash Against Prostitute's Rights: Origins and Dynamics of Nazi Prostitution Policies', in Dagmar Herzog (ed.), *Sexuality and German Fascism* (New York: Berghahn Books, 2005), pp. 67–94 at p. 93.
 34. Munchener Staatsarchiv, Polizeidirektion München, Nr. 7950, Memorandum, September 9, 1939.
 35. Manchester City Archives, Box M720, Papers of Margaret Hill.
 36. TNA, INF 1/292, Special Report on the Merseyside and Clydeside, June 1941.
 37. TNA INF 1/292, Home Intelligence Weekly Report, June 8, 1944.
 38. See Tison Pugh, 'Perverse Pastoralism and Medieval Melancholia in Powell and Pressburger's "a Canterbury Tale"', *Arthurlandia*, 19/3 (2009), pp. 97–113; Tom Ryall, 'Rural Imagery in Second World War Britain', in Paul Newland (ed.), *British Rural Landscapes on Film* (Manchester: Manchester University Press, 2016), pp. 59–70 at pp. 65–67; Margaret Butler, *Film and Community in Britain and France* (London: I.B. Tauris, 2004), pp. 49–51.
 39. Ross McKibbin, *Classes and Cultures: England 1918–1951* (Oxford: Oxford University Press, 1998) at p. 321; Lesley A. Hall, *Sex, Gender and Social Change in Britain Since 1880* (2 edn.; Basingstoke: Palgrave Macmillan, 2013), pp. 125–126.
 40. Quentin Crisp, *The Naked Civil Servant* (London: Penguin, 1968), p. 151.
 41. Montgomery, cited in Edward Smithies, *Crime in Wartime* (London: George Allen & Unwin, 1982), p. 149.
 42. Günter Grau, *The Hidden Holocaust?: Gay and Lesbian Persecution in Germany 1933–1945* (Abingdon: Routledge, 2012), p. 104.
 43. Jeremy Noakes, *Nazism 1919–1945, Volume 4, the German Home Front in World War II* (Exeter: University of Exeter Press, 1998), p. 136.
 44. Staatsarchiv München, Polizeidirektion München, Nr. 7975, Schutzpolizei report, July 6, 1943.
 45. Ibid., Berchem to Inspectorate of the Security Police and SD, December 12, 1944.
 46. See also Sarah Fishman, *The Battle for Children: World War II, Youth Crime, and Juvenile Justice in Twentieth-Century France* (Cambridge, MA: Harvard University Press, 2002); Tham, 'Crime in Scandinavia During World War II', pp. 423–425.
 47. Noakes, *Nazism 1919–1945, Volume 4, the German Home Front in World War II*, pp. 440–441.

48. Blau, 'Die Kriminalität in Deutschland Während Des Zweiten Weltkrieges', p. 61.
49. Glasgow Record Office, SR22/40/1, Chief Constable's Annual Report 1939.
50. Manchester City Council Archives, Chief Constable's Annual Report 1941.
51. Walter A. Lunden, 'War and Juvenile Delinquency in England and Wales, 1910 to 1943', *American Sociological Review*, 10/3 (1945), pp. 390–393.
52. For a discussion of juvenile delinquency in Scotland see David Smith, 'Official Responses to Juvenile Delinquency in Scotland During the Second World War', *Twentieth Century British History*, 18/1 (2007), pp. 78–105.
53. Attempts were made on a local basis. See Adey, Cox, and Godfrey, *Crime, Regulation and Control During the Blitz*, pp. 123–142.
54. See Noakes, *Nazism 1919–1945, Volume 4, the German Home Front in World War II* at pp. 396–464; Jörg Echternkamp, 'The Essential Features of German Society in the Second World War', in Ralf Blank et al. (ed.), *Germany and the Second World War: Volume IX /I: German Wartime Society 1939–1945: Politicization, Disintegration, and the Struggle for Survival* (Oxford: Oxford University Press, 1990), pp. 1–101 at p. 35.
55. Noakes, *Nazism 1919–1945, Volume 4, the German Home Front in World War II* at p. 453.
56. Frank Kebbedies, *Ausser Kontrolle: Jugendkriminalität in Der NS-Zeit Und Der Frühen Nachkriegszeit* (Essen: Klartext, 2000) at p. 141.
57. Adey, Cox, and Godfrey, *Crime, Regulation and Control During the Blitz*, pp. 124–128.
58. Noakes, *Nazism 1919–1945, Volume 4, the German Home Front in World War II*, p. 121.
59. Michael Stolleis, *The Law Under the Swastika: Studies on Legal History in Nazi Germany* (Chicago: University of Chicago Press, 1998), pp. 72–73. See also Elisabeth Kohlhaas, "Aus Einem Haus, Aus Dem Eine Weiße Fahne Erscheint, Sind Alle Männlichen Personen Zo Erschießen": Durchhalteterror Und Gewalt Gegen Zivilisten Am Kriegsende 1945', in Cord Arendes, Edgar Wolfrum, and Jörg Zedler (ed.), *Terror Nach Innen: Verbrechen Am Ende Des Zweiten Weltkrieges* (Wallstein Verlag, 2006), pp. 51–79 at pp. 66–69; Michael Löffelsender, *Strafjustiz an Der Heimatfront: Die Strafrechtliche Verfolgung Von Frauen Und Jugendlichen Im Oberlandesgerichtsbezirk Köln 1939–1945* (Tübingen: Mohr Siebeck, 2012), pp. 43–70.
60. Noakes, *Nazism 1919–1945, Volume 4, the German Home Front in World War II*, pp. 129–130.

61. Ibid., at p. 122.
62. Munich Staatsarchiv, Adapted from the Written Judgement of the People's Court, December 15, 1939.
63. Munich Staatsarchiv, Staatsanwaltschaften (Public Prosecutor), Nr. 9230, Minutes of Execution, February 27, 1940.
64. BARCH, R43 II/645a, Lammers to Schlegelberger, May 29, 1941.
65. Evans, *The Third Reich at War* at pp. 515–519.
66. Ralf Blank, 'Wartime Daily Life and the Air War on the Home Front', in Jorg Echternkamp, Ralf Blank, Karola Fings, Jurgen Forster, Winfried Heinemann, Tobias Jersak, Armin Nolzen, and Christoph Rass (ed.), *Germany and the Second World War Volume IX/I: German Wartime Society 1939–1945: Politicization, Disintegration, and the Struggle for Survival* (Oxford: Oxford University Press, 2008), pp. 371–478 at pp. 402–405; Dietmar Süß, *Death from the Skies* (Oxford: Oxford University Press, 2014), pp. 143–146.
67. Blau, 'Die Kriminalität in Deutschland Während Des Zweiten Weltkrieges', pp. 75–76.
68. Lilly and Thomson, 'Executing US Soldiers in England, World War II: Command Influence and Sexual Racism', pp. 268–269.
69. Süß, *Death from the Skies*, pp. 153–155.
70. Juliet Gardiner, *Wartime: Britain 1939–1945* (London: Review, 2004), p. 597.
71. Adey, Cox, and Godfrey, *Crime, Regulation and Control During the Blitz*, pp. 93–94.
72. Cited in Harold L. Smith, *Britain in the Second World War: A Social History* (Manchester: Manchester University Press, 1996), pp. 87–88.



Working in the Blackout

How the Blackout Affected Wartime Industry in Britain and Germany In this chapter Wiggam determines that the central principle of the blackout was to protect industry and war production, not civilians. He provides the first survey of how preparations for blacking out were carried out in Britain and Germany, and the effect that the preparations had on the production and the workforce. Additionally, he provides an analysis of the serious impact that the blackout had on traffic safety in both countries.

Keywords Civil defense • Blackout • Wartime industry • Wartime economy • Transport

The principle purpose of the blackout was not to protect civilians. The bombers that flew at the onset of the war hunted for valuable targets like ports, airfields, factories, large industrial plants—sites that were the bedrock of a nation’s war fighting capacity. Domestic premises had to be darkened to obscure those sites and to prevent navigation to them. The slow creep toward area bombing was the result of poor accuracy and a blackout that had made finding valuable targets at night particularly difficult. Because both countries had such comprehensive blackouts, nearly every aspect of the war economy and industry was directly affected by the restrictions. Those restrictions extended from the shopfronts on streets to the traffic driving along them, to the shipping and transport that delivered their goods over land and sea, to the factories producing

those goods during wartime night shifts. Those problems were not restricted to Britain, where industry had been generally unwilling to invest in blackout preparations during peacetime. Despite earlier efforts to raise awareness of blackout measures in Germany, little benefit appears to have been gained, and similar problems to those seen in Britain were encountered in German industry as well. Although it was a success in general, the impact of the blackout on working conditions and processes was significant. Furthermore, the restrictions on industry highlighted the position that ordinary citizens held in the hierarchy of wartime priorities. War productivity was the only real area in which compromise on the blackout restrictions could be negotiated, and the restrictions for industry and certain kinds of traffic were always more fluid and susceptible to review than those for civilians.

INDUSTRY

If there was a marked difference in planning between Germany and Britain, it lay in the level of preparations undertaken by industry before the war. As outlined in Chapter 1, German business groups were involved in blackout and air raid precautions (ARP) preparation early on, with the first meeting of the ARP committee of the Reichsverband der Deutschen Industrie and the Ministry of the Interior as early as 1932.¹ In contrast, preparation for British ARP would not begin in earnest until the Munich crisis. A 1938 report by the Ministry of Works found many businesses to be under the impression that in the event of war they could carry on largely as before, albeit with the knowledge that lights would be extinguished pending an alarm.² The scope of the alterations that would need to be made during peacetime had neither been communicated by government nor planned for by businesses, who were already bristling at the potential expense and impact of the restrictions on their work. For industry in both countries, blacking out a factory or installation was significantly more complex than blacking out a house, and it directly impacted the working conditions, productivity, and energy consumption. Preparations were not restricted to the usual system of light locks on doors and blinds over windows, although those were enough of a problem in themselves where tens or hundreds of workers had to pass through. Some factory roofs were constructed almost entirely of glass, whose reflective surface would also need to be obscured to avoid the glint of moonlight. The more elaborate the design for letting in light

during the day, the more elaborate and expensive the system had to be for keeping it in at night. Overall, the measures required to blackout industry had significant implications for the war economy. That aspect of the blackout has had little consideration in the existing literature on the war, but it is one that is fundamental to understanding the change in working conditions in both countries. The problems encountered by industry were more often than not identical; factories were built and had to be blacked out in largely the same way, whether they were British or German. There is evidence to support the conclusion that, while German preparations in industry may have had greater prominence during the interwar, they were nevertheless insufficient when tested in a rolling blackout. That is in line with development of the blackout in general. The true difference between the two countries lay in the way the existential threat was communicated before the war. That was no guarantee of action, even within a totalitarian society. Requiring industry to make their preparations for potential bombardment was less difficult in Germany when couched in terms of national defense and faith in the National Socialist community. However, diverting actual resources, manpower, and time at the factories themselves was a different matter entirely. Extensive discussions about preparations in Germany did not make for a smoother transition to the blackout.

INSIDE

One of the main problems in securing the blackout in premises was the need to let light in during the day. Because relatively few businesses had prepared their buildings before the war, cheap and quick solutions were preferred; it was common to use paint to black out windows. Of course, this was at the expense of being able to regulate the flow of light into and out of premises, and there were several undesirable side effects to that. Having the windows permanently shut made for poor circulation of air, and workers spent whole days under artificial lighting. During the winter, where the effects of the blackout were more acute, it was possible to arrive at and leave work without having seen sunlight all day. That directly impacted workers' productivity; not only did artificial light depress them, it was less efficient as a means of lighting production, and led to decreased rates of productivity on the lines. There was also a corresponding impact on the use of electric lighting during the day. With factories permanently blacked out around the clock artificial lighting

became necessary for day shifts, which led to an increase in demand for electrical energy. That was soon recognized as extremely wasteful for a wartime economy that needed to conserve its sources of coal and gas. Although changes to the way factories were blacked out were eventually forthcoming, in Britain it was still the case in 1944 that many places of work were poorly lit and ventilated, owing to the blackout restrictions. An article in the journal *Public Health* noted that:

Some windows are still permanently obscured, others carry 'mourning borders' which cut down by about one-half the light which they should give, and the usual natural ventilation is often cut off, especially at night, with unfortunate consequences for those working on night shifts.³

Additionally, there was a concern about the effects that the black-out would have on industrial productivity. The interwar work of the Industrial Health Research Board had already researched how labor productivity was affected by environmental pressures such as temperature, noise, humidity, and light. During the winter months, when the use of artificial light was far higher, the board found a reduction in productivity when compared with working under natural light.⁴ By late 1941, a British lobbyist group consisting of manufacturers of blinds and shutters set out for the restoration of daylight in factories. Their intent can be interpreted in two ways. It was certainly made with a genuine interest in improving conditions, and the group allied its case with the government's fuel economy drive and highlighted the improved health and productivity of the workforce under daylight. But the memoranda of the group again highlighted the inadequacy of pre-war planning in industry, and indeed among their own members, as the following depicts:

It is perhaps useful to consider why there has been any prejudice against shutters and why total obscuration has been recommended for existing factories and especially why it is still being recommended in the building of new factories... Owing to the urgency of the work firms carried out on factories installations which were no more than experiments. There was no time to do the usual 'try out' and preliminary research work, with the result that various types though sound in principle failed in practice... In the factories themselves shutters were often not given a fair trial... Instances are known where one labourer was given the task of opening or closing many ranges of shutters perhaps covering thousands of square feet. In those installations which were hand operated, this constituted

considerable hard work with the result that the labourer did everything he could to have as few shutters working as possible. He left a proportion closed and the management left it at that and reported to the ministry that the shutters were no good.⁵

As a solution, the note suggested the installation of fully electric mechanisms for closing blinds and the ‘educating’ of managers in their use. What the note made clear was that there simply wasn’t commercial space before the war to market expensive solutions to a problem that, at that time, did not exist. The effect was that manufacturers were neither prepared for the blackout, nor had they developed their systems well enough to cope with it when it began. That was a problem that also existed in Germany, where despite the longstanding engagement of industry in ARP, the government still needed to reiterate as late as January 1945 its preference for blinds and screens that could be removed from windows. Painting them was only allowed where installation of other devices was impractical, not only because of the effect of energy consumption through the use of lights during the day, but also for air circulation.⁶

The case for reintroducing daylight in entirely blacked out factories in Britain was taken up by others with an interest in economic productivity once the war began. An article in *Aircraft Engineering* argued for a blend of artificial and natural light where possible, and not a ‘cheerful’ form of high intensity lighting.

It appears that no matter how effective the artificial lighting system may be, there is an adverse subconscious effect upon workers who operate entirely under its influence during daylight hours. While it is not feasible to exclude the psychological value of daylight itself, there is every reason to believe that the prime requirements for welfare are bright or cheerful surroundings... fatigue on the part of the worker in a permanently blacked out building is probably largely induced by the knowledge that daylight is present outside, and this fact will obviously be accentuated in situations wherever lighting is notably artificial.⁷

Adequate lighting was key to maintaining good working conditions and high levels of productivity. An article in the Reichsluftschutzbund (RLB) journal *Gasschutz und Luftschutz* argued the moral case for good lighting, and for the use of every technical means to lift workers’ spirits from the negative effects of darkness and poor lighting.⁸ Table 5.1

Table 5.1 Productive value of better lighting on industrial processes^a

<i>Process</i>	<i>Foot-candles</i>		
	<i>Old System</i>	<i>New System</i>	<i>Increase of Production</i>
Typesetting by hand	1.3	20	24
Foundry	2.5	7	7.5
Tile pressing	1	3	6
Silk weaving	50	100	21
Lathe work	12	20	12
Post office (sorting)	3	6	20
Wire drawing	3	9	17
Roller bearing manufacture	5	20	12.5

^a‘Factory Lighting in War-Time’

Note that foot-candle is a non-SI unit for measuring luminance, and is now largely out of use. 1 foot-candle is generally rounded to 10 lux

illustrates the levels of production of fine detail work under two different systems of lighting; the first under an old system of lamps, and another under a system using new lamps that dissipated light and heat that was more comfortable for workers, and of a color more true to daylight.

At various factories in Britain, medical officers tested new workers’ eyesight, and prescribed spectacles for workers who performed fine-detail work, which in certain cases required 100 times more light than for ordinary processes.⁹ The inclination of the British workers to get behind the war effort was not taken for granted, and in 1940 it was already proving a vexing issue for the government. Communist party agitation had focused particularly on the poor preparations by government within industrial ARP.¹⁰ A Ministry of Supply survey of working conditions taken at the onset of the war identified the increased psychological strain of working in blacked out factories:

Heavy engineering shops are not prepossessing places under normal conditions but with all the daylight shut out and only purely local artificial light the effect was, with one or two exceptions, depressing in the extreme. The managements of the various concerns were unanimous that the men were not working with their usual energy... Another question is that of getting to and from work. As the days shorten this is going to interfere more and more with the movements of the workers and the winter-time drop in output is likely to be greatly increased. I have discussed it with other industrialists and they feel that there might be a gradual reduction in the intensity of the black-out.¹¹

Thomas Ling, medical director at the Roffey Park Rehabilitation Centre and an early pioneer in dealing with stress in industry, argued that while some factories' working conditions were excellent, "the majority are mediocre and the minority leave much to be desired."¹² In a review of psychiatric cases referred to the outpatient department of Mill Hill hospital by the Ministry of Labour, Ling found eight women classed as suffering from a 'fatigue state' not seen under peacetime conditions, and somewhat analogous to the 'flying stress' of Royal Air Force (RAF) crew.¹³ Their number was increasing and noted by General Practitioners. Ling wrote that it was "characterised by irritability, loss of appetite, and the accentuation of minor difficulties into major wrongs, with some associated anxiety. Disturbance in gastro-intestinal functions and loss of appetite are common features." Its occurrence was precipitated by fatigue under the wartime conditions of factory work, with "excessive noise, continual blackout and badly organised canteens... that will light up an underlying psychological disturbance or physical disability." That was joined with the domestic demands of working women.¹⁴ Early reports of 'blackout anaemia,' with doctors reporting symptoms similar to those mentioned above of 'pallor, indigestion and lassitude' were likely to have come from a mixture of general anxiety about the war and domestic pressures, which were then compounded by the poor conditions of blacked out factories.¹⁵

OUTSIDE

In 1940 the Trades Unions Congress made representations to the Home Office complaining of Exeter City Council's refusal to upgrade the city's lighting, in contrast to its neighbor Bristol.¹⁶ The revision of the lighting restrictions to a brighter standard was, as previously discussed, entirely voluntary and at the discretion of local authorities. Although initial complaints blamed the city's Chief Constable for rejecting the new lighting standard, it was later revealed to have been the decision of the council itself to reject it on grounds of cost.¹⁷ Those costs were not insubstantial. In 1941, when Bristol City Council discussed the desirability of returning to the improved lighting system after the Luftwaffe's raids on the city, it was estimated that the cost of running it would be £13,000 annually when including the costs of gas and electricity and maintenance of street lighting. Those considerations had to account for not only of the monetary cost, but the cost of using valuable energy resources. While

those considerations were of course important, some felt that restrictions on public lighting was parsimonious and debilitating. Upon reviewing the Medical Research Council's Industrial Health Research Board's pamphlet on ventilation and lighting, the journal *Public Health* wrote that:

The Board has not conditioned its tune, so far as lighting is concerned, to excessive demands for fuel economy. Some of the examples of light saving which one finds in public places strike one as being, not economy, but wild extravagance. They save a few pence on lighting at the cost of pounds in the shape of loss of alertness, vigor, and cheerfulness of the people, not to speak of peril to life and limb.¹⁸

The availability of light during the war was intimately tied to authority, and its presence or absence was a visible marker of that authority's priorities. However, the authority was not necessarily that of the management or council or government against the worker. For example, in 1941 at a coal-mining village near Durham, much to the inconvenience of villagers, the miner's lodge asked that the village be blacked out entirely via its main switch on notice of an air raid warning.¹⁹ Rather, it was that while the blackout was a universal restriction for civilians, it was a different matter for industry, where a sliding scale of importance determined how severely the blackout had to be applied. Those areas of economic and social life that could be expected to suffer the blackout with no drastic effect on the pursuit of the war (i.e., the ordinary civilian trade in goods and services) were generally left to deal with the blackout as it was. But where the infrastructure of the war economy demanded it, relaxation of the blackout restrictions was forthcoming. Maintaining war production was the overriding concern. The rhetoric of homefront mobilization that had featured so prominently in Germany was also now peppering the British public stratum, as the following extract from a Ministry of Information leaflet from 1940 depicts:

The Government will do all in their power to protect the civil population, but *everyone* is in the front line this time. And everyone must be prepared, as a citizen duty, to take a risk.²⁰

Lobbying for relaxations in Britain came from all quarters, from trade unions to Ministries themselves, asking the Home Office and Ministry of Aviation for more light to increase productivity and improve safety.

Reducing the impact of air raid warnings and the blackout on production was the main reason for introducing a new air raid message of the 'purple' or the 'lights warning' in July 1940. That was not a public signal; rather it was sent by telephone to exempted establishments with external lights or glare in the flight path of enemy aircraft. As a preparatory warning, and to minimize disruption, it was specifically restricted to those responsible for extinguishing lights, and could not be passed on to other workers or districts.

While much work occurred in closed areas, operations such as ship-building, shunting yards, mining, quarrying, and especially plants with furnaces such as iron and steel mills required some measure of flexibility in how the restrictions were applied. Those large establishments that generated intense heat and light were profoundly useful for enemy pilots flying at night. A report by the Air Ministry in 1940 stated that "The industrial undertakings in the Ruhr show up so well that they may be classified as self-illuminated targets."²¹ Between 1938 and the beginning of the war, those trades were aware of the impact the lighting restrictions would have on their operations, and clarification of any potential limitations was sought with specific concern being the potential bar on night work.²² Plans for exemption were conditional on being able to extinguish lights within a minute of an air raid warning, and approval was at the discretion of local Police Chiefs under section 12 of the Police War Instructions.²³ After the Munich Crisis, some premises began to take the initiative to screen their plants in advance of war. Among its plans to thwart and screen its blast furnace, a plant in Cardiff had ordered an experimental 'mud gun' for covering the glare of molten metal upon discharge of an alarm.²⁴ However, the extent to which the lighting restrictions were addressed within those larger industries was not uniform before the war, and again much work had to be done to screen them adequately at short notice after war was declared. By 1941 the issue was still addressed by the British Iron and Steel Federation, arguing for survey flights from the RAF so its members could avoid incurring "heavy expenditure, amounting to possibly hundreds of thousands of pounds, over the whole country, quite unnecessarily" if their measures were already sufficient.²⁵

Although industrial ARP in Germany seemed well planned in comparison, at least on paper, it is not entirely clear from the records how well it was actually carried out on the ground. Hampe's study was rather

vague on the blackout's success in industry, although he does note the familiar difficulties of permanent versus removable blackouts, and how restrictions hampered production.²⁶ Some measure of its success can be found in reminders sent by government and local officials to businesses, which continued well into the war. By the end of its first month, businesses in Hamburg were being reminded to blackout their storage areas; forgivable perhaps, given the slow progress of the war until that time, but certainly showing a lack of forethought given the strategic importance of the city.²⁷ By 1942 however, the police chief was still reminding businesses to blackout properly, noting that it was not enough to simply black out the lights that fell onto the street—ostensibly those visible to patrols—but that all sides of a building needed to be blacked out, as well as any outbuildings.²⁸ That particular trick of only blacking out areas that were visible for easy inspection was common throughout the war, and reminders invariably referred to the obligation to protect surrounding neighborhoods. More indicative of the indifferent success of pre-war preparations is another leaflet sent by Hamburg's Police Chief to local businesses in March 1943, only a few months before the devastating Gomorrah raids by the RAF. The letter stated that given the need to conserve electricity, the permanent blacking out of factory windows with paint was undesirable. That that was identified so far into the war is perhaps a little peculiar.²⁹ Given those reminders sent out within one city alone, it is evident that the blackout was not being executed as thoroughly as it had been planned. The constraints on businesses, which had to divert money, labor, and energy to ARP preparations, were the same as those in Britain, and were only tenable where there was funding for it. There were of course instances in both countries where the blackout was either too expensive or impractical to undertake thoroughly. In Germany, a November 1939 employment tribunal in Berlin stated that workers at a factory whose roof was made entirely of glass, and was too expensive to blackout immediately, were not entitled to receive compensation for loss of wages as a result of no longer being able to work nightshifts.³⁰ That was common with general practices during the war; when the air raid alarm sounded and workers had to run for the shelter, their pay was stopped until they could work again.³¹ Thrifty blackout solutions were also liable for creating a false economy. For instance, some shops in Germany had chosen to paint their large display windows black, rather than go to the trouble and expense of arranging a removable screen. The consequence of that was that where lights from inside

the shop struck the window they would heat it up, with the dark paint absorbing the light's energy and shattering the panes of glass. With glass a valuable commodity in the wartime economy, such accidents had to be avoided.³² That type of clumsiness in implementing the lighting restrictions was not exceptional, and they had a curious place in Nazi society. Few aspects of the war were as tied to the survival of the state as ARP, but poor implementation of it cannot be tied to the forms of dissent or greed normally found in studies of transgression in Nazi Germany. Instead, they share similar cases with Britain, the rather more banal reasons of tiredness, ill-consideration, or else laziness. Whether institutional or personal, such cases were common across societies that were forced to do something that impeded their day's work. The extent to which that endangered production in Germany is illustrated in the following excerpt from a 1940 RLB leaflet, which again demonstrates the link made between the pursuit of the war and ARP:

The prevention of accidents during the war is one the most important tasks of civil defence. Effective preventive measures secures the working environment and ensures higher productivity...
 Be careful when working in the blackout!
 Ensure good organisation at your workplace!
 Keep areas of traffic clear!
 Cover or mark pits, ditches, etc.!
 Allow eyes to adjust when moving from bright rooms to darkened areas!³³

As was the case in Britain, maintaining productivity as the frequency of bombing raids increased meant altering the restrictions for industry. By 1943, the movement of goods at railway stations and factories no longer had to be interrupted even if an air raid was imminent, and the blackout itself was less restrictive.³⁴ Although that preference for the rights of the state and the community over individual safety was far from a new thing, it became more evident as the bombing war intensified. In fact, the rights of the community in ARP led to some confusion over the right of private persons to patent inventions that contributed to the blackout. Although the German authorities stated that whoever invented a device or material for the blackout had a right to patent it, that right did not extend to withholding it; improving the blackout system superseded

commercial interest. That was, the RLB said, especially true of “those persons who for whatever reason have not properly patented their invention and through fear of it being copied keep it secret, and only make it available [privately] for good money.”³⁵

It is difficult to discern how much freedom there was to criticize the industrial blackout and its administration. The principle itself was most certainly not questioned publicly. But given that any improvement made to the blackout must necessarily come from critical appraisal we must assume that it did take place, although probably not in the form it did in Britain. What is clear is that although the planning of ARP plans was advanced to what British industry had undertaken, the general tenor of official worries over blackout adherence during the war in Germany does not indicate that it was any more successful in instilling complete adherence.

PUBLIC LIGHTING

Blue lights returned to blacked out Europe, although they were not as ubiquitous in Britain as they had been in during World War I. Strolling around London on the first night of the war, an official from the Home Office found some drivers reverting to old habits, incorrectly screening their headlamps with blue filters—although that was marginally better than those driving with no lights on at all.³⁶ In fact, white light was now the standard for external lighting; blue lights were mainly restricted to the interiors of public transport. Their effect is captured in the following extract from *The Glasgow Herald* from the second week of the war:

Now that the blue lights in tramcars prevent passengers reading after dusk, now, too, that there is no point in looking out of the windows, travellers, particularly those who have any distance to go, will have to develop a new method of entertainment... But it must be said that the pantomime ghostly tinge that the blue lights give to even the well favoured is no encouragement to make the first remark to the stranger planted at one's side.³⁷

Blue lights were common because of the structure of the eye and how it perceives light, its photoreceptors being more sensitive to it.³⁸ As a result, low levels of blue light are easier to see. However, there were problems with using blue light. The most significant was that it was

rather inefficient in terms of energy used relative to its output. A study of aids for street lighting in 1941 noted that “the general use of pure blue light involves considerable absorption, and is therefore uneconomical.”³⁹ Hampe noted that the absorption of light by blue filters was as much as 80%.⁴⁰ The study also found that “for some purposes [blue light] is considered inexpedient owing to certain loss in sharpness of outline of objects illuminated when viewed from some little distance away.”⁴¹ The latter issue was caused by the parts of the eye dealing with low-light vision being placed away from the eye’s point of focus. Finally, the fact that the eye could perceive blue at lower levels of illumination than longer-wavelength yellow or red light went against the principle of the blackout—low levels of blue light would be more visible to enemy pilots. Hampe explained that it is one of the peculiarities of the war that although blue lights in Germany were initially restricted, by 1940 they were reinstituted in most public spaces. That was the result of meddling from Hitler’s office, looking for short-sighted political and economic gains. When the war began the use of blue light was already frowned upon by officials. Directions sent from the Luftfahrt Ministerium in October 1939 had sought to correct the use of blue light among the public, advising they use screens of grey or black instead.⁴² The reversion to a system of blue lights a year later came directly from Hitler’s office, bypassing the advice of technical specialists. The wording of the original instruction was clear; the new blue light system was on Hitler’s orders, and its intent was to lighten the burden of the blackout.⁴³ The areas where blue lights were now allowed were mainly public spaces; areas of human and vehicle traffic such as roads, entrances to buildings, and public transportation. It also made a concession for the opening of blacked out windows and doors where rooms were lit with a blue light—the examples given being hospitals and bedrooms. Hitler’s interference in matters of the blackout shows that he was mindful of its effect on the morale of the nation, if not its efficient operation, and he may also have thought the new system a benefit to the movement of goods and nighttime working in the blackout. The following year the German Air Ministry issued another memorandum reminding officials and departments of the new blue lights system, the result of Hitler seeing building sites and roads in Berlin still lit with red lights rather than blue.⁴⁴ The irony was of course that red light was less visible from a distance than blue light. The new system was also introduced just as factories

were adapting to and installing adequate blackout systems under the old regulations. While adapting to it may have brought some relief for the workers, the capital and energy invested over the previous year could not be recouped. But perhaps more than that, the poor efficiency of blue lights, seen in the context of the needs of the war economy to be as energy-efficient as possible, made the system questionable from a long-term perspective.

Energy efficiency was, in fact, a useful side effect of the blackout. In Germany, the blackout's effect of dampening energy demand was helpful in making efficient use of limited resources. Even in the eastern reaches of the Reich, because of their distance from Allied bombers were not subject to as rigorous policing of the blackout as in the west, the blackout restrictions were nevertheless used as an energy-saving measure.⁴⁵ British data on electricity supply during the war show the extent to which most of the country's generating capacity was used for industry. Table 5.2 depicts that during the period 1940–1943, in which the blackout lasted a full year under generally unchanged regulations, the increase of electricity sent to domestic and commercial premises rose by 8% and 2% respectively, relatively stable and in line with general trends throughout the 1930s. In industry it rose by 48%; a substantial increase. Rises in the amount sent to domestic and commercial premises in 1944, as well as in public lighting, may be attributable to the relaxation of the blackout as the dim-out standards came into force toward the end of year.

Table 5.2 Electricity consumption in Britain, 1937–1947 (Units given in terawatt hours)^a

<i>Year</i>	<i>Domestic and farm premises</i>	<i>Shops, offices, and commercial premises</i>	<i>Factories and industrial premises</i>	<i>Public lighting</i>	<i>Traction</i>	<i>Total</i>
1939	5.94	3.12	11.67	0.248	1.261	22.23
1940	6.23	3	13.87	0.017	1.147	24.26
1941	6.64	3.27	16.24	0.018	1.143	27.31
1942	6.72	3.26	19.14	0.02	1.148	30.29
1943	6.71	3.06	20.52	0.02	1.142	31.45
1944	7.84	3.51	19.98	0.029	1.169	32.52
1945	8.81	3.48	17.68	0.161	1.236	31.36

^aDepartment for Business, Enterprise and Regulatory Reform, *Electricity Supply, Availability and Consumption 1920–2007*, www.berr.gov.uk/files/file40593.xls [Archived, last accessed May 12, 2017]

While there was no great dip in the overall amount of electricity used—with the exception of street lighting, as seen in the table—the blackout worked as a brake on the pre-war increase in electricity consumption among the population, to the benefit of the war economy. Certainly not every kilowatt in industry went into lighting, but under the extended working hours and permanently blacked out premises as detailed above, lighting constituted a large part of it.

The significant fall in energy devoted to external public lighting is indicative of a general fall in external lighting at all exposed industrial sites. By 1943, Churchill was concerned about the extent to which the blackout's effect on the external lighting of factories was hampering production. Given the "comparative impotence of enemy bombing," he asked for a review to allow for more external lighting and "an assurance that the Air Ministry is not insisting on any restrictions... which hamper production."⁴⁶ The Air Ministry's response was that the Luftwaffe's bomber force was comparatively impotent because it was "not thoroughly trained," and therefore "cannot find its way about the country, especially on moonless nights." It was the Ministry's opinion that allowing for more external lighting at industrial sites would markedly increase the chance of bombers navigating the landscape and finding their targets.⁴⁷ The scale on which external lighting had been dampened as a consequence of the blackout restrictions had a limited but useful side-effect in moderating energy usage. It was certainly enough in 1945 for the Ministry of Fuel and Power to worry that the restoration of gas street-lighting, which was more prevalent in some parts in Britain than electric lighting, would consume an additional 750,000 tonnes of gas coal at a time when stocks for industry and domestic use were already extremely low as a result of the war.⁴⁸

DRIVING AND LIGHTING RESTRICTIONS

The mechanization of society could be seen not only through bombing. From the turn of the century to the start of the war, British and German citizens witnessed how the use of technology brought changes to all facets of civilization; from the development of mass communication, to the construction of ever-larger ships. The development of those "modern wonders" was a marked feature of the pre-war world.⁴⁹ Within the context of the blackout, the two most important developments were flight and motor vehicles. Both made a significant impact on how civil

society related to its increasingly mechanized civilization, and how public space was organized and comprehended by the public. Traffic systems were evolving systems of civil discipline, in the same way that ARP was. The increased use of motor vehicles of all types involved a redefinition of the relationship between the pedestrian and road traffic, and the position of the pedestrian in the urban infrastructure. In Britain and Germany, it was the motor vehicle that was privileged in that arrangement. The traffic regulations brought in under the Nazis in 1934 codified a preference for the motor vehicle over the rights of the pedestrian.⁵⁰ Later during the war, as the bombs left huge swathes of German cities in ruins, Albert Speer saw an opportunity for urban renewal and to manage the expected increase in traffic after the war. In a memorandum to Hitler, Speer wrote that bombing provided “a unique opportunity to make our cities, after the war, again viable from the traffic viewpoint.”⁵¹ Traffic management and air raid protection were to be the main points on which future German cities and architecture would be planned. Within Britain, debates on road safety in the early years of the war resembled heightened forms of what had been increasingly discussed throughout the 1930s, as the death toll on the roads climbed. Luckin wrote:

It was now claimed by government, the motoring organizations and ‘moderate’ road safety activists that it was naive pedestrian fallibility rather than bad driving which frequently determined the severity of road traffic accidents... According to this interpretation, motorists must make every effort to adjust to the demands of war and the ‘comprehensive’ black-out. But even more crucial was the role of pedestrians and their readiness to adapt to the disciplines of a fully and irreversibly ‘mechanized’ civilization.⁵²

As in Germany, a pedestrian’s use of urban and traffic spaces was contingent on them adapting their behavior and to Luckin that implied “nothing less than an emergency programme in social re-education.”⁵³ For as much as people had grown accustomed to the steady increase in traffic on roads, their safety at night was always contingent on the availability of light for guiding pedestrians and traffic. Safe passage through cities meant that pedestrians—who would always come out worse in any accident—would have to manage their own safety; they were not accorded any special privileges under the blackout. The status of the pedestrian is therefore an intriguing point of comparison, and analogies of war were common—in Britain at least—with defenseless pedestrians pitted against

merciless vehicle traffic. It is no exaggeration to say that the lighting restrictions on traffic and street lighting were lethal, and immediately contentious. The vagaries of pre-war blackout practices have already been documented, but it is worth restating how much was learned during the first few months of the war when compared with the preceding years of ARP preparation. That extended from civilian authorities and the systems written on paper, and marked on tarmac and kerbstone, through to the behavior of the public. Fixing the blackout within the home was both-ersome, as was entertaining oneself through it. However, in the absence of bombing, few of the criminal dangers of the blackout compared with the enormous death toll it caused in the initial dark and wintry months of the war. The discrepancies between sources should be made apparent in this section. The uproar generated by traffic accidents in the blackout in Britain was not seen in Germany. So high was the casualty rate and its potential impact on the morale of the nation that it placed huge pressure on the government's handling of the war and ARP, and questions were asked as to its use in the absence of any threat. While it is certain that the dangers for German pedestrians were no less than they were in Britain, public discussion of the threat from traffic, given the restrictions on opinion and information, is difficult to find, and complicated by an apparent absence of comprehensive traffic death figures in the 1941/1942 edition of the Reich's statistical yearbook.⁵⁴ It may also have been the case that, given lower levels of vehicle ownership in Germany in comparison with Britain, as well as the severe restrictions on petrol use, the traffic was simply not as heavy.⁵⁵

The road accident figures were a severe political problem for the British government. Although the blackout was intended as an instrument of national security, its direct impact on road safety was a glaring paradox that the government had to rectify if the blackout was to be kept in place. Questioned in parliament on the level of road accidents in October 1939, Euan Wallace, the transport minister replied that total road deaths had doubled in September 1939 to 1130 from its previous level in 1938 of 554, and was met with a "gasp of dismay" from the House.⁵⁶ A note to the Home Office the following day advised them to undertake consultations with motoring and pedestrians' groups as soon as possible, citing Bonar Law's advice to Asquith that "In war time it is not merely necessary to be active, you have to seem active as well."⁵⁷ The result was a meeting held by Anderson and Wallace at the Home

Office on November 6th with the AA, the RAC, two pedestrians' rights groups (the Safety First Association and the Pedestrians Association), and two groups representing cyclists and motorcyclists. That was a meeting of essentially private road users, and representatives of commercial transport were conspicuous by their absence, and did not go unnoticed. A letter from the London Passenger Transport Board arrived at the Home Office two days after the meeting complaining that they had not been consulted, especially since they found themselves "with considerable conflicts of view with the private car associations, cyclists associations and people of that sort."⁵⁸ Their omission is indeed curious, given the number of accidents between pedestrians and public transport, and because the stresses of working in blackout conditions for drivers of public transport were considerable.

Although the rate of accidents declined as the public began to grow used to the blackout, action was still needed to make the streets safer. A 20-mph speed limit for urban areas was among the most prominent precaution taken. The problem was that speedometers in cars tended not to be permanently lit owing to the blackout restrictions. Light was instead cast from a dashboard switch which the driver controlled. Checking speed therefore involved the eyes briefly adjusting to light in the car, then readjusting to the darkness on the road. One of the suggested solutions for adapting to the new law was for drivers to acquaint themselves with the "feel" of driving at 20 mph—an ambiguous measure at best. In a debate on blackout restrictions and road accidents in January 1940, Conservative Member of Parliament Sir William Brass argued that the new restriction would:

not be a public benefit but a public menace and danger. If he is going to keep to the 20-mile limit, as he suggests, he will have to have his speedometer light on in order to see that he is keeping to the 20 miles an hour. When one drives at night, as I do very often, I always have my dash-lamp out because when the light is on I cannot see ahead. If I have to look at the speedometer, in future I shall not be able to see the road. But I shall not do that; I shall drive as I do to-day.⁵⁹

That was still early in the war, and the debates on the blackout at that time were suffused with irritation at its effect on the nation's life. Indeed, that debate veered from its intended subject of road accidents to a more general discussion of the very principle of the blackout, with the Home Secretary Sir John Anderson later stepping into defend it. The war was

still remote and Brass, a former RAF pilot, could not imagine a bombardment sufficient to justify the restrictions as they were; “you cannot bomb accurately at night. If bombing takes place at night, it will be indiscriminate, in order to create chaos and affect the morale of the people, and I do not believe that is going to happen.”⁶⁰ When that did happen, public dissent lessened, and the focus shifted to coping with the restrictions. One of the principal campaigns run to improve pedestrian safety during the war was to promote the wearing of white clothing, or else carrying something white. Yet the public’s indifference to carrying around gas masks was mirrored in their disdain for wearing white. After the first campaign over the winter of 1940–1941, a Mass Observation study concluded that a total of just 7% of people heeding the advice was likely to be the national average.⁶¹ That is perhaps surprising, given that the Luftwaffe’s bombing campaign against Britain had begun in earnest. The report concluded that the advertising campaign had failed, and questioned whether the figures were in fact any different to that for people wearing white in the daytime—a reasonable question that rather frustratingly was not followed up.⁶² Such levels of indifference were not sustained however, and the following year saw a ten percent increase in people wearing white. The continued level of bombing along with a propaganda campaign are the likely factors for that rise—there were certainly no changes in the regulations for the blackout. Again though, that figure indicates a pervasive indifference among most of the population toward their own protection, which to some extent mirrored the carelessness exemplified by the early absence of gas masks in Britain, and of air raid discipline in general.⁶³ As the British population grew used to the blackout restrictions during the war, and the amount of vehicle traffic reduced, the level of traffic accidents in the blackout decreased. Accidents on the roads in London, when measured over the course of the year, actually decreased overall between 1938–1943. Table 5.3 is adapted from a report on traffic accident trends in the blackout, from the records of the Metropolitan Police. It breaks down the level of accidents measured across an entire year rather than just the winter months, and compares the rates of deaths and accidents against a base level drawn from peacetime figures in 1938–1939.⁶⁴

What the data appear to show is a general decline in accidents over that period. Examined in isolation, deaths on the road rose markedly for the first two winters of the war—the latter’s daytime increase attributed

Table 5.3 Traffic deaths and injuries in Metropolitan Police District in September–August 1939–1943, expressed as a percentage of the number in 1938–1939^a

<i>Year</i>	<i>Day</i>			<i>Night</i>			<i>Total</i>		
	<i>Deaths</i>	<i>Injuries</i>	<i>Total</i>	<i>Deaths</i>	<i>Injuries</i>	<i>Total</i>	<i>Deaths</i>	<i>Injuries</i>	<i>Total</i>
1938–1939	100	100	100	100	100	100	100	100	100
1939–1940	83.6	66.4	66.7	146.2	83.5	85	110.3	72	72.5
1940–1941	116.4	71.3	71.9	123	58	59.5	119.2	67	67.9
1941–1942	81.4	51.8	52.2	62.1	42.3	42.7	73.2	48.7	49.2
1942–1943	59.7	43.7	44	51.6	29.3	29.8	56.3	39.1	39.4

^aTNA, MEPO 2/6709, ‘Road Accidents in the Blackout’, est. Winter 1943

to Blitz conditions—and then trending downward for the third and fourth war winters. As a result, concern over the level of blackout accidents was downplayed in the report from which the statistics were taken; they were, according to the report’s authors, “nothing remarkable” when set in context with overall rates of peacetime accidents. Yet the figures mask the extent to which overall traffic decreased over that period, and no attempt was made to calculate the death toll or rate of accidents according to traffic density. It is not possible to do this retrospectively, as the figures for an adequate analysis are not available. However, Table 5.4 gives some indication of the large drop in traffic from the traffic census in London from 1937 and 1942.

The census registered that traffic density in London was 51% of its level in 1937, a decline masked in the table. Adjusting the figures to take account of overall traffic density would give a more nuanced picture of overall road safety, and while it seems reasonable to say that the level of accidents did not rise as dramatically as it did during the first blackout

Table 5.4 Traffic census from the Metropolitan Police District, 1937 and 1942^a

	<i>July 1937</i>	<i>August 1942</i>
Motor vehicles	605,527	307,904
Pedal cycles	177,629	100,430
All vehicles	783,156	408,334

^aTNA, MEPO 2/6709, ‘Road Accidents in the Blackout’, est. Winter 1943

winter, their level may indeed have been far higher than is depicted by simply adding up the accident figures.

In Germany, a Sicherheitsdienst (SD) mood report from December 15, 1939 noted the continuing extraordinary rate of traffic accidents. Assessments of large cities in North Rhein Westphalia indicated that 70–100% of accidents occurred in darkness, with 50–80% attributable to fault of pedestrians.⁶⁵ Newspapers ran stories throughout the war of repeated incidents of accidents, although any criticism of the blackout itself was absent. Its necessity, so thoroughly incorporated into the Nazi social ethic, was unquestioned by the media. However, that did not prevent the usual griping. In November 1941, SD mood reports noted that drivers were still complaining over the restrictions. Permanent use of screens on headlamps made it near impossible to see even in clear weather, and there was a desire for the easing of restrictions in certain areas or up to a certain time—10 PM was suggested in the report.⁶⁶ The weight of the restrictions was intended to fall equally for all citizens, no matter what their status, and even the frustrations of high-ranking Party members were sometimes ignored by police officials. A case found within the Bavarian State archives illustrates the complex relationship between the authority of the Party and the authority of the police.

On the night of October 2, 1939, Schutzstaffel brigadier Hans Saupert and his driver were cautioned by police for insufficiently blacking out the vehicle they were travelling in. The indignant brigadier told the police officer who had stopped them, “If you knew who I was you wouldn’t question me.” After repeated requests the car’s papers were handed over, showing it was being used by the Nazi Party.⁶⁷ Subsequent representations made by the brigadier to the police protested the tone of the officer involved and rejected the idea that Saupert had threatened the officer with his position in the Party. In his words:

I tried again to explain to the officer that driving in almost total darkness is extremely dangerous firstly for pedestrians, and secondly for the occupants of the vehicle. The officer said that it was nothing to do with him, and that the car had to be, like he had said, blacked out.⁶⁸

A rejoinder from Saupert that he resented being lectured on driving regulations by men who probably had no car or licence to drive was answered with confirmation that the officer who had cautioned him had been qualified since 1927.⁶⁹

Poorly blacked out vehicles were as contentious as poorly blacked out buildings, and where those were used by people of authority even more so. Equality in adherence to the blackout regulations was important to its legitimacy. This case illustrates that even in Germany, the aggravations of the blackout were leveled across all areas of authority, and all groups of citizens. However, in Britain, as with the altered restrictions for industry, alternate plans existed for non-civilian traffic. Restrictions on the type of lighting allowed by road vehicles were therefore not always consistent, and could lead to accidents. Military vehicles were assigned a separate plan of lighting, designed for lighting convoys during exercises and maneuvers. In a case involving a death caused by a poorly lit Army truck, the Law Officers noted that the law on lighting restrictions had been interpreted to give an exemption to service vehicles from civilian standards, despite them using public roads. When asked whether that was in fact legal, their reply was ambivalent, advising only that it could not be assumed that the lighting restrictions, although clearly intended to exempt military vehicles, actually did so according to how it was written. The Law Officers also commented on the fact that the Army Council restrictions were designated as “not to be published.” In effect, that meant that civilian drivers were not aware that there was traffic on the road carrying a different lighting standard. Were service vehicles to show more light under their own regulations, that would not have been a problem. But where the lighting was less, it was the opinion of the law officers that it was undesirable.⁷⁰ What this case illustrated was that despite the militarization of public life there remained a discrepancy between the military infrastructure and the civilian, which in that particular instance contributed to the danger on the roads.

An compromise had to be found between the secrecy necessary for the military to organize and conceal itself, while allowing military traffic to mix with civilian road users and potentially causing a hazard. By the end of the war, when the threat of invasion had long disappeared and Allied forces were marching further into occupied Europe, the restrictions were becoming a hindrance to the movement of military traffic and it was the American forces in particular who were arguing for their removal. On December 19, 1944, the War Cabinet considered a request from American Headquarters for the complete relaxation on headlight restrictions over the winter period. Their arrival in the country had already generated complaints over the amount of light displayed by their vehicles. Removing the restrictions on vehicle lighting was, they

argued, of immediate operational necessity. Reinforcements from Britain to the European theatre were prepared and dispatched to the continent according to a tight timetable. The lighting restrictions, in conjunction with the conditions of winter (which always exacerbated the blackout's effects) were causing delays in supplying reinforcements at the front and compromising the war effort. Their request was supported by the War Office, who had similar difficulties. But that was not a cut and dried case, and the war cabinet again had to balance military necessity against the impact the lessening of restrictions would have on civilian traffic. Although the Air Ministry and the Admiralty were not happy at the prospect of vehicles casting more light, their objections were held in check by the need to move men and materials through the country and on to the continent at a faster pace. However, running different standards of lighting had the potential for causing more accidents, not least from dazzled drivers and pedestrians on unlit roads. The lighting restrictions impinged on the British end of the war effort, and it was already assumed that any relaxation afforded would be requested and granted to British departments pursuing vital war work. Also, should the American forces to be allowed special favor, it was feared it would exacerbate the existing public discontent at the lights already shown by American vehicles, and which had already drawn questions within the Commons.⁷¹ So when the relaxations were made—announced on December 27, 1944—it was extended toward all vehicles, civilian or military, British or American. When relayed through the press, the announcement was made with the following caveat: “The relaxations should not be taken as implying that all risk of assisting the enemy by the use of all full headlamps has disappeared, but the risk is outweighed by the operational need.”⁷² Although the AA and the RAC were both arguing for an improvement in vehicle lighting at the time, it was the progress of the war itself that provided the impetus for the gradual relaxation of the blackout on the streets and, eventually, in the homes.⁷³

CONCLUSION

While in the civilian scope the blackout was total, the restrictions for industry and transport were graded according to the needs of wartime production. The domestic life of both populations was secondary to war-time production, and that preference highlighted the coerciveness of the blackout system. The blackout also made working conditions far more

difficult, turning poorly prepared industrial premises into light-locked but stuffy, poorly ventilated, and sometimes more dangerous places to work. But the needs of the wartime economy to provide material for the front overrode the universal restrictions; “operational necessity” was the key to what had to stay dark, and what could afford to be lit more brightly. The differences in how the systems were implemented in Britain and Germany again show that although the German system of planning before the war was more thorough on paper, it nevertheless suffered the same problems and systemic flaws over the course of the war as those seen in Britain. Both countries were fortunate in having the first uncertain months of the war to fix their specifications and cajole industry into securing their properties for the blackout. Even then, installing systems that were easy to use on a daily basis for large premises was expensive and time-consuming. The drag on production that poorly installed blackout systems had, whether in how navigable premises were in darkness, or whether they were well ventilated and lit, was a substantial problem that has received little attention in the literature of the homefronts of either country.

NOTES

1. See BA Berlin, RS36/2715, documents relating to industrial ARP from Deutscher Gemeindestag.
2. TNA, HO 45/18188, log of conversation with Office of Works, August 19, 1938.
3. ‘Lighting and Ventilation’, *Public Health*, 57 (1944), p. 63.
4. A. J. Mcivor, ‘Manual Work, Technology, and Industrial Health, 1918–39’, *Medical History*, 31/2 (1987), pp. 160–189 at p. 167.
5. NAS, GD326/956, Minutes of the ‘Committee for Advocating Daylight in Factories’, c. 1942.
6. ‘Amtliche Nachrichten Für Leitung Und Ausbildung Im Luftschutz’, *Gasschutz und Luftschutz*, 15/1 (1945), pp. 1–12 at pp. 8–11.
7. ‘Factory Lighting in War-Time’, *Aircraft Engineering and Aerospace Technology*, 12/11 (1940), pp. 347–348.
8. Schwabe, ‘Die Moralischen Verteidigungs Aufgaben Des Baulichen Luftschutzes’, *Gasschutz und Luftschutz*, 10/9 (1940), pp. 175–196 at p. 180.
9. N. M. D., ‘Review: Ventilation and Heating: Lighting and Seeing’, *British Journal of Industrial Medicine*, 1/2 (1944), pp. 134–135.

10. Helen Jones, *British Civilians in the Front Line: Air Raids, Productivity and Wartime Culture, 1939–45* (Manchester: Manchester University Press, 2006), p. 47.
11. TNA, AVIA 22/5, briefing written by Bennett, October 27, 1939.
12. T. M. Ling, 'Industrial Neuroses', *The Lancet*, 243/6304 (1944), pp. 830–832 at p. 830.
13. On this see Martin Francis, *The Flyer: British Culture and the Royal Air Force, 1939–1945* (Oxford: Oxford University Press, 2008), pp. 106–130.
14. Ling, 'Industrial Neuroses', p. 831.
15. 'Industrial Diseases and Accidents in 1939', *ibid.* (1941), pp. 357–358 at p. 357.
16. After the war's first winter in Britain, a new system of lighting was quickly developed to help minimise the blackout's impact on town and city centres. However, its adoption was left at the discretion of local authorities, and not all cities chose to use it.
17. Exeter Records Office, ECA ARP Box 19/220, letters circulated between the Home Office, Trades Union Congress and Exeter Town Council, dated May 1940, May 1941.
18. 'Lighting and Ventilation', *Public Health*, 57 (1944), p. 63.
19. Hansard, Rathbone to Morrison, HC Deb May 1, 1941 vol 371 c554.
20. TNA, HO 186/2942, 'The Air Raid Warning System: What It Is, and How It Is Operated', c. 1940.
21. TNA, HO 186/1395, 'Notes on Flying Conditions at Night...', February 3, 1940.
22. On this see papers contained in TNA, Box BT 64/74, file Lighting Restrictions, and TNA, SUPP 3/4, file Lighting Restrictions and Industrial Glare.
23. TNA, SUPP 3/4, 'Lighting Restrictions and Industrial Glare', ARP Department Circular 194/1939, August 26, 1939.
24. TNA, BT 64/74, 'Lighting Restrictions', letter from Fennelly to Johnston, November 11, 1938.
25. *Ibid.*, Larke to Hodge, October 20, 1941.
26. Erich Hampe, *Der Zivile Luftschutz Im Zweiten Weltkrieg* (Frankfurt am Main: Bernard & Graefe Verlag für Wehrwesen, 1963), p. 460.
27. Stadtarchiv Hamburg, 731-06 I 16, circular from Police Chief, September 28, 1939.
28. *Ibid.*, circular from Police Chief, April 14, 1942.
29. *Ibid.*, circular from Police Chief, March 3, 1943.
30. BA MA, RL41/1, Reports of the RLB, November 22, 1939.
31. TNA, HO 186/2046, 'Intelligence memorandum on German ARP', April 4, 1943.

32. BA MA, RL41/2, Reports of the RLB, March 27, 1940.
33. Ibid., December 4, 1940.
34. TNA, HO 186/2046, 'Intelligence memorandum on German ARP', April 4, 1943.
35. BA MA RL41/2, Reports of the RLB, June 19, 1940.
36. TNA, HO 186/200, Report of Blackout Inspection, September 2, 1939.
37. 'Blackout "Terror" by Police', *The Daily Mirror*, November 1, 1939, p. 11 at p. 6.
38. Steven Bleicher, *Contemporary Colour Theory and Use* (New York: Thomson Delmar Learning, 2005), pp. 7–9.
39. 'War-Time Street Lighting and Aids to Movement in Streets', *British Journal of Ophthalmology*, 25/3 (1941), pp. 125–130 at p. 127.
40. Hampe, *Der Zivile Luftschutz Im Zweiten Weltkrieg*, p. 555.
41. 'War-Time Street Lighting and Aids to Movement in Streets', p. 127.
42. BA Berlin, R4602/09, circular memorandum from Reichsminister der Luftfahrt, October 25, 1939.
43. BA MA, R43/II/1298a, circular memorandum from Milch, October 22, 1940.
44. Ibid., circular memorandum, February 6, 1941.
45. Hampe, *Der Zivile Luftschutz Im Zweiten Weltkrieg*, p. 558.
46. TNA, PREM 3/93/6, 'Churchill to Sinclair', July 5, 1943.
47. Ibid., 'Air Ministry to Churchill', July 8, 1943.
48. TNA, PREM 4/37/12, 'Street Lighting', June 20, 1945.
49. On this see Bernhard Rieger, *Technology and the Culture of Modernity in Britain and Germany 1890–1945* (Cambridge: Cambridge University Press, 2005), pp. 21–50.
50. On this and regulation of behaviour in urban spaces more generally see Elfi Bendikat, 'The Public Urban Space in the Modern Age: Technical Functionality and Regulation', *German Journal of Urban Studies* (41, 2002).
51. Ralf Blank, 'Wartime Daily Life and the Air War on the Home Front', in Jorg Echternkamp, Ralf Blank, Karola Fings, Jürgen Forster, Winfried Heinemann, Tobias Jersak, Armin Nolzen, and Christoph Rass (ed.), *Germany and the Second World War Volume IX/I: German Wartime Society 1939–1945: Politicization, Disintegration, and the Struggle for Survival* (Oxford: Oxford University Press, 2008), pp. 371–478 at p. 446.
52. Bill Luckin, 'War on the Roads: Traffic Accidents and Social Tension in Britain, 1939–1945', in Roger Cooter and Bill Luckin (ed.), *Accidents in History: Injuries, Fatalities and Social Relations* (Atlanta: Clio Medica, 1997), pp. 234–254 at p. 236.
53. Ibid., p. 237.

54. *Statistisches Jahrbuch Für Das Deutsche Reich* (Berlin: Statistischen Reichsamt, 1942).
55. Richard Overy, 'Cars, Roads, and Economic Recovery in Germany, 1932–8', *The Economic History Review*, 28/3 (1975), pp. 466–483 at p. 470.
56. HC Deb October 18, 1939 vol 352 cc851–3; TNA, HO 186/200, memorandum RB to Minister, October 19, 1939.
57. Ibid.
58. TNA, HO 186/200, 'Pick to Eady', November 9, 1939.
59. See Hansard, HC Deb January 23, 1940 vol 356 cc473–548.
60. Ibid.
61. MOA, Box 23/11/P, Wearing White in the Blackout, January 12, 1942.
62. MOA, Box 618, Five weeks of white in blackout count, March 27, 1941.
63. MOA, Box 23/11/P, Wearing white in the blackout, January 12, 1942.
64. Frustratingly, the file from which this data is adapted does not give the numerical values of accidents, only percentage values.
65. BA Berlin, R58/146, SD Mood Report, December 15, 1939.
66. BA Berlin, R58/166, SD Mood Report, November 10, 1941.
67. BayHStA, Minn 87016, memorandum from Polizeipräsidium München to Reichsleitung NSDAP, October 4, 1939.
68. Ibid., letter from Saupert to Eberstien, October 17, 1939.
69. Ibid., letter From Munich Police Headquarters to Bavarian Ministry of the Interior, December 4, 1939.
70. TNA, LO 3/1295, account of Crook vs. Luther, March 18, 1943.
71. TNA, PREM 4/37/12, War Cabinet memorandum 'Motor Vehicle Lighting', December 19, 1944.
72. 'Headlamps on Motor-Vehicles', *The Times*, December 27, 1944, p. 8.
73. 'Motorists and Street Lighting', *The Times*, December 19, 1944, p. 2.



Conclusion

Post-War Blackouts Wiggam clarifies that blackouts continued to be part of civil defense planning well into the 1950s. He ascertains that the blackouts were adhered to in Britain and Germany because both were well-organized states, able to legitimize and maintain an effective blackout, which transcended their different political and social systems.

Keywords Civil defense • Blackout • Post-war defense

Seven years after World War II had concluded, and between the invention of the atomic bomb and intercontinental missile technology, the chiefs of staff in Britain recommended a blackout policy in the event of nuclear war. It would be less restrictive than that used in World War II, disrupting the pattern of light rather than totally obscuring it. Their report makes for an interesting post-war analysis of the blackout's effectiveness. Claims that radar guidance made the blackout obsolete were, at that stage at least, unfounded. Blind-bombing via radar guidance—the H2S system—was estimated to deliver an accuracy of about one mile. Visual targeting, by contrast, was estimated to deliver an accuracy of between a quarter and half a mile. With the effectiveness of early nuclear bombs dependent on their proximity to the target—the report estimated 100% destruction with a direct hit and 5% destruction at a mile's distance—the blackout's usefulness was evident. They concluded that:

If the enemy is prepared to use atom bombs in large numbers the influence of these considerations would be less important. But while the number available to the enemy is limited, or if (as may well be the case) a war will be won by the side which can resist atom bomb attack the longer, then it is important to take every measure which can reduce the effectiveness of the attack. We consider that black-out is such a measure.¹

The report stated that at the onset of World War II, Britain was “dangerously unprepared,” and that a blackout could not be introduced at short notice.² Planning had to be done rapidly, and trial flights were arranged for cities whose external lighting would be distorted to disrupt visual recognition. Although it was assumed that any trial could occur without the public really noticing, the Home Secretary nevertheless intended to make the trials public.³ However, planning for blackouts dissipated over the duration of the 1950s. The Sandys Defence White Paper of 1957 committed Britain to a system of nuclear deterrence, but had little to say on how the country would defend itself in the event of an attack.⁴ Ultimately, it’s likely that the increasing size of nuclear weaponry, along with the development of ballistic missile technology, had finally made the blackout redundant for civil defense planning.⁵

While blackouts have always been present in histories of the home-front and bombing, its low profile is at odds with the extent that it affected society during the war. Despite the development of technological advances for way finding, visual navigation and targeting continued to remain an important part of bombing. Beyond its use as a form of civil defense, the social obligations of blackouts helped to embed a system of behavior within both countries that mobilized an idea of a unified homefront, through its focus on community obligation over the individual. That was a principle that transcended the different political cultures of Britain and Germany. It formed a type of structural propaganda: The general *practical* principle of the blackout had to be adhered to in order to secure the nation from nighttime bombing raids; but the *political* principle of universality formed a thread that bound people under the blackout closer to each other, and the state to the people. While limited political concessions to showing more light were made on both sides, the greatest concessions were reserved for industry and for the pursuit of the war. Chapters 1 and 2 of this monograph depict how political the development and maintenance of the blackout was in peacetime and wartime. Although preparations in Britain seemed less developed, there was an

element of drama and propaganda to German blackout trials that belied the difficulties that would become apparent during the war. As it progressed and the blackout system settled, it became a fundamental part of the political and social fabric of wartime life. By the conclusion of the war in Germany, it was as much a tool for instilling discipline among the weary German population as it was a system of civil defense. Barring the importation of American military justice, there was no similarity in Britain with the severity of German sentencing for blackout crimes. There was however a similar kind of political and moral pressure that, as Chapter 3 shows, found its way into justice systems of both countries. Chapter 3 also portrays how the blackout affected perceptions of safety on the homefront in both countries, particularly for women. While the crime figures are ambiguous with regard to actual levels of crime and rates of change, they do show the priority given by each state to certain types of crimes, and the need to secure the homefront. The paradox of the blackout was that it compromised the safety of individuals on the ground for the benefit of the state. Chapter 4 clarifies that the initial principle of the blackout was not to protect civilians but to secure the largely urban industrial infrastructure, and therefore maintain war production.

Were Germany and Britain unconventional in how seriously they engaged in the blackout? Research from other countries indicates that it was not the form of government or level of threat that were important, but rather the extent to which the response to the threat was organized and maintained. Although 60,000 civilians died in the Allied raids on Italy, the blackout was not well maintained, and a fascist system of government was no guarantee of an ideal blackout. Baldoli and Fincardi wrote that:

From the very first bombing operations in Italy, RAF planes crossing the Alps were welcomed by the sight of Milan and Genoa fully illuminated. Non-compliance with the blackout is evident not only from the prefects' letters, but also from many newspaper articles and from the reports in the files of the interior ministry and the air ministry citing problems of public order. In September 1941, *Il Popolo d'Italia* complained about the indiscipline of most citizens in Milan in ignoring the blackout. Similar news came from other newspapers; for example, *Il Resto del Carlino* denounced the fact that in Bologna houses were brightly lit and cars and bicycles drove with full lights. The reason for such disregard, the journalist thought, was a misplaced optimism.⁶

The French blackout throughout the war was also troubled with a lack of cooperation, partly stemming from its defeat in 1940 which was achieved without bombing raids at night, and also complicated by the politics of occupation.⁷ That suggests that further comparative work on the relationship between systems of civil defense and the political character and organization of states would be beneficial. The fact that the blackout in Europe was most comprehensively achieved in Britain and Germany speaks to the intensity of the bombing in those countries, but perhaps more importantly to their well-developed infrastructures and economies, and the traditions of authority and administration that already existed within them when the war began. Treating both countries as divergent political cultures has perhaps obscured that. Tied to national chauvinisms, the symbolism of aerial technology and warfare had certainly been expressed differently in both countries. In Britain they were a means for maintaining status and empire; in Germany, for reviving the nation and challenging the prevailing world order.⁸ However, in finding how best to respond to the threat of air war, both countries were alike. The claims made by the state on citizens during a time of total war would be far greater than during peacetime, and the British state's reticence in clearly articulating air raid precautions (ARP) before 1938 clarifies that—without a definite threat, the disruption to daily life of peacetime ARP and blackout practice was too great an imposition. In Germany, a climate of opinion was manufactured through state propaganda after 1933 that tried to build a readiness for war among the people (and perhaps masking a latent disbelief among them that it would ever really occur). ARP and the blackout asserted the primacy of the state in both countries, whatever its political culture, in the defense of the nation. Although that would seem to privilege an authoritarian government, what the research of the blackout in this monograph has shown is that both countries were able to articulate a discourse that engendered a high level of adherence to the blackout, coupled with an administrative system that maintained it.

There were many elements to the fabric of wartime life that produced, as Rose wrote, “the pull of unity.”⁹ Rationing, salvaging, giving money to government bodies were all part of the construction of British and German wartime national identities, and the role of the blackout in that regard has been understated. The daily installation of the blackout and the regulation of space and behavior that it required was a key structure in building the pull of unity in both countries. It came to embody the ideal of the people's war and *Volksgemeinschaft*, with obligations to the

state and community rising above class or regional allegiance. Although sometimes imperfect and contested, it was still a fundamental part of how wartime citizenship was framed and enacted in both countries. To return to Mackay's question of whether there might be an explanation for morale that transcends national character, this study suggests that looking at the organizing structures of Britain and Germany might provide some answers. Morale was surely tied to confidence in the administrative systems that predicated both countries. The legitimacy of the blackout was maintained in part by the state's ability to implement it fairly and with consistency. What this study has shown is that the underlying traditions of administration and authority in both countries transcended their different political cultures. The adaptation to aerial bombing during the war highlights the need to look past national histories and to examine the common transnational effects of technology, and how those were handled by various countries.

NOTES

1. TNA, PREM 11/367, Chiefs of Staff memorandum on blackout policy, April 16, 1952.
2. Ibid.
3. TNA, PREM 11/367, RJS to Oates, November 24, 1953.
4. On this see Matthew Grant, 'Home Defence and the Sandys Defence White Paper, 1957', *Journal of Strategic Studies*, 31/6 (2008), pp. 925–949.
5. The Soviets were also still planning for blackouts well into the 1950s. See Leon Gouré, *Civil Defense in the Soviet Union* (Berkeley: University of California Press, 1962), pp. 124–125.
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