A HISTORY OF THE
Twentieth Century IN
100 MAPS
Tim Bryars and Tom Harper
The twentieth century was a golden age of mapmaking, an era of cartographic boom. Maps proliferated and permeated almost every aspect of daily life, not only chronicling geography and history but also charting and conveying myriad political and social agendas. Here Tim Bryars and Tom Harper select one hundred maps from the millions printed, drawn, or otherwise constructed during the twentieth century and recount through them a narrative of the century’s key events and developments.

As Bryars and Harper reveal, maps make ideal narrators, and the maps in this book tell the story of the 1900s—which saw two world wars, the Great Depression, the Swinging Sixties, the Cold War, feminism, leisure, and the Internet. Several of the maps have already gained recognition for their historical significance—for example, Harry Beck’s iconic London Underground map—but the majority of maps on these pages have rarely, if ever, been seen in print since they first appeared.

There are maps that were printed on handkerchiefs and on the endpapers of books; maps that were used in advertising or propaganda; maps that were strictly official and those that were entirely commercial; maps that were printed by the thousand, and highly specialist maps issued in editions of just a few dozen; maps that were envisaged as permanent keepsakes of major events, and maps that were relevant for a matter of hours or days.

As much a pleasure to view as it is to read, A History of the Twentieth Century in 100 Maps celebrates the visual variety of twentieth century maps and the hilarious, shocking, or poignant narratives of the individuals and institutions caught up in their production and use.

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The largest map in this book, at an impressive eight by five and a half feet, this map of the ‘German scheme’ for ‘Mittel Europa’ was a theatrical backdrop, commissioned from specialist map-makers Sifton Prad to illustrate a morale-boosting lecture by Rudolph Fielding, 9th Earl of Denbigh: ‘Why Germany Wanted War, and the Dangers of a German Peace’. The text panel contains a summary of Lord Denbigh’s fears regarding German expansion, which would have taken keen eyes to read from the back of a concert hall, but no-one could miss the German-built Baghdad Railway, a livid scar running from the Baltic to the Indian Ocean. In spite of its tremendous size, the rest of the map has been stripped back to the barest essentials to make the point more clearly.

The early twentieth century was an age of great unfinished railway schemes: Cape to Cairo and St Petersburg to New York (still a live issue: proposals for a tunnel to bridge the Bering Strait were approved by the Russian government in 2011). The German project – Berlin to Baghdad – was delayed by technical, bureaucratic and diplomatic issues and even, to an extent, by the brutal displacement of skilled Armenian workers by the Ottoman authorities during the war. Had the line reached Basra ahead of the British and Indian Expeditionary Force which captured the port in late 1914, the course of the First World War could have been very different. If it had been completed, the railway would have consolidated Ottoman control over their diverse and fractured empire, facilitating the movement of men and materiel at speed; it would have granted Germany greater access to the oil fields of the Middle East, and the overland route would have rendered the Royal Navy (which was itself increasingly dependent on that oil) all but impotent in terms of preventing the resupplying of German colonies in Africa and Asia, or neutralising a very real threat to British India.

Strategic considerations aside, there was another facet to the oriental dreams of the last Kaiser. Newly unified Germany came late to the scramble for colonies, but here was a chance to extend German influence over a vast region. Much of the railway still exists: small Germanic stations dot the countryside in Turkey, Syria and Iraq, though given the fragmented political situation stretches of the line are seldom used and its original purpose is all but forgotten.

1916: Berlin-Baghdad Railway
1945: Berlin's U-Bahn

This diagram, produced in September 1945, is almost certainly the earliest postwar map of the Berlin underground railway network. It also shows the S-Bahn (suburban railway) connections and the remnants of the rest of Berlin's transport infrastructure, the trams and buses. It is an unofficial map, privately printed by an obscure publisher, M. & R. Meier, rather than issued by the system operator, the BVG. The printing costs were offset by the 50 pfennig cover price and by advertising – filling a gap in the market perhaps, but no mean feat of entrepreneurship in the rubble of Berlin. The U-Bahn had ground to a halt altogether when the power generators failed in April 1945, days before the war's end, but trains were running again by June. The map has been specially commissioned rather than adapted from the standard BVG edition. It bears the monogram of Heinz Schunke, a draughtsman located in Offenburg in south-west Germany. Schunke was presumably a cartographic specialist, but he seems to have had no prior involvement with the transport network and it is curious that no local artist could be found. However, the information is up-to-the-minute. Adolf-Hitler-Platz has already reverted to its original, pre-1933 designation Reichskanzlerplatz (preserving the name of the office though not the individual) and unlike any BVG map this author has seen, including a proof date-stamped October 1945 which never seems to have been published, Schunke's map indicates which sections remained closed.

The U-Bahn network had suffered from Allied bombing – the shallow cut-and-cover tunnels were vulnerable – but a great deal of devastation was caused by the deliberate flooding of tunnels in the final phase of the Battle of Berlin.

For the benefit of U-Bahn passengers, the map also shows the partition of their city and their country. A German nightmare of the First World War (see item number 001) was realised after the Second: at Potsdam in August 1945, the Allies divided Germany into zones of military occupation. The German defeat was total and unambiguous, backed by the presence of foreign soldiers. A generation of British National Servicemen would see out their time with the British Army of the Rhine, although the army of occupation switched rapidly to its Cold War role of first line of defence against the Soviet threat.

Berlin, within the Soviet Sector, received special treatment: it was divided among the Allies, becoming a microcosm of the country as a whole. The zones are not marked on our U-Bahn map itself – they never were – and trains from West Berlin rattled through closed ‘ghost stations’ in the East until 1989.

Maps are two-dimensional representations of three-dimensional space which distort or highlight aspects of that space for a purpose; by their nature, maps impose a sense of order that can seem artificial, but this is seldom more the case than here. More than half the housing of Berlin was uninhabitable, more than a million Berliners were homeless. There was a lack of food, power and clean water. There was the terrible absence of friends and family – killed, captured or wandering the continent among millions of other displaced people. There was the presence of strangers, often hostile, mostly from the Red Army. Among the thousands of acres of bomb-blasted buildings, personal property and personal morality often went by the board; rape and other acts of violence became commonplace.

Across the continent, survival was often more important than celebrating victory or reflecting on defeat. The very existence of this map reflects efforts to return to a semblance of normality, for against this backdrop of misery and lawlessness its creator managed to drum up advertising from the Astoria.

100 MAPS OF THE 20TH CENTURY
MARKING THE CENTENARY of the Great Exhibition, the 1951 Festival of Britain was, as ‘Lord Festival’ Herbert Morrison put it, a ‘pat on the back’ for the British people after a thoroughly miserable decade. The queues, shortages, power cuts and rationing had, if anything, worsened after the war, and the Festival was a modest opportunity to look to the future through a celebration of British architecture and design. Britain would be remade. The main Festival site was 27 acres of bomb-blasted warehousing on the South Bank of the Thames in London, but it was to be a truly national occasion with exhibitions in Glasgow and Belfast, and touring musical and dramatic performances.

It is that sense of national involvement which the commercial artist Cecil Walter Bacon conveys through this poster. ‘What do they talk about’ is Bacon’s wry but optimistic take on the state of the nation in 1951. The map was given away as a souvenir with the Festival issue of Geographical magazine, and additional copies could be ordered at 2/6. The major sponsor was Esso. Petrol was still rationed, indeed it was still pooled (branded petrol was not sold again until 1953), but the major players were already seeking to revive brand loyalty. Unusually for a petrol map, Bacon does not show a single road or name a single town. We are invited to guess through what the locals are talking about.

London, of course is dominated by the Festival site, the Skylyn and Dome of Discovery and the Royal Festival Hall, one of Britain’s most exciting postwar buildings to date, and a symbol of renewal. Elsewhere Bacon has been topical whenever possible. He features Esso’s Fawley Refinery, rebuilt and expanded in 1951 and still the largest in the UK. Oxford scholars discuss the old (Aristotle) and the new (Lord Nuffield): the first bricks of Nuffield College were laid in 1949. Bacon also celebrates the ill-fated Bristol Brabazon. A giant passenger airliner conceived for transatlantic flights, the prototype had been test flown in 1949 but was broken up for scrap in 1953 due to lack of commercial. Bacon’s holidaymakers wear the daring new two-piece bathing costumes (the bikini proper had arrived on the scene in 1946). Not everything new is good: the lament in Scotland is ‘Whisky for Dollars’. Industry was no longer engaged on war work, but very few manufactured goods found their way into British shops: anything which could be sold abroad was exported in an attempt to bring foreign currency into the economy, and Scotch was no exception.

The map reflects a Britain which still existed, but which was passing. The title itself – what do they talk about in factories, mills and offices – reflects this dichotomy. Industrial Britain was in decline; office world was on the rise. In Festival year, Britain was on the cusp of something new.
From the late 1950s the ‘Spanish Miracle’ transformed Spain from a rural, war-torn country into a modern industrialised nation. Its special industry was tourism, and Franco’s nationalist government shaped, controlled and marketed it with sophistication through language, literature and images, including maps. This folding tourist map of the ancient coastal town of Alicante was produced for the prospective and actual British tourist in 1957 by the Junta Provincial del Turismo just when the wider stretch of south-eastern Spanish coast was on the cusp of being ‘discovered’ as the Costa Blanca. The first package holidays from Britain, thanks to cheaper air travel and higher wages, began at precisely this time. The Costa Blanca was invented by British European Airways when it launched its route to Valencia in 1957. The 2.8 million visitors to the coast in 1959 (half of them British) rose to 19 million ten years later.

Since its aim was to attract visitors, this map is drawn in an elegant and – most importantly Spanish – style. It was practical in showing the layout of streets and tourist offices, but it was entertaining too, conveying a sense of discovery and adventure with features such as the steam engine playfully bouncing along the track to Murcia. The street plan is fleshed out with photographs of the beach, castello and harbour, and informative text about Alicante’s history, culture and discoverability. This text was printable in German or Swedish. Of all these elements it is the vast stylised sun that enforces the reason why British travelled: good weather.

The enormous success of the tourist industry transformed the character and makeup of large areas of the Spanish Mediterranean coast. The Costa Blanca was transformed from sleepy coast to busy, bustling resorts of white concrete hotels. Just up the coast from Alicante, Benidorm had been a small fishing town until the mid 1950s, when it began to be transformed into the large fabricated holiday town synonymous with British football shirts, suntan and alcohol we visit today. Unlike Benidorm, Alicante had a previous and distinguished history. It was an important port that had appeared on portolan sea charts since at least the thirteenth century, built on the site of a Roman town, with more authentic tourist sights for the visitor.

Although the town had been in existence for centuries, its ‘discovery’ by holidaymakers was provoked by the offering up of its unspoilt, authentic nature through countless maps and images, which continued even after this reality had ceased to exist.
1972: Bloody Sunday

On 30 January 1972, thirteen men were shot dead by soldiers of the British army Parachute Regiment during a civil rights protest in Derry, Northern Ireland. An inquiry into the events of the day, named ‘Bloody Sunday,’ made one month after the incident, exonerated the army. But nearly forty years later, another report found the shootings to have been unlawful. The two reports were hampered by their circumstances. The Widgery report, labelled a whitewash, happened before the dust had settled, whereas the later Saville report had to peer back through the mists of time, avoiding all subsequent contexts up to and including the political climates of its decade-long investigation.

The Saville report was published on 15 June 2010, and on the same day an interactive map appeared on the online version of the Guardian newspaper. It consisted of seven animated screens illustrating the course of events of two hours of the afternoon of Bloody Sunday with quotes from the report and contemporary photographs. In frame 2 we observe the route of the loyalist protest march moving through the Derry streets. A further movement is then diverted by army barricades into the exclusively Catholic Bogside area, which is transformed into bird’s-eye view level. Blue arrows of advancing armoured army vehicles cause the march to scatter in a number of directions. The next we see are the ‘mopping up’ movements of soldiers, and in the final screen the resultant thirteen red dots. These mark the places where protesters were killed, and there are photographs of their faces.

The accompanying quotation from the report reads thus: ‘none of the casualties shot by soldiers of Support Company were armed with a firearm or (with the probable exception of Gerald Donaghey) a bomb of any description. None was posing any threat of causing death or serious injury. In no case was any warning given before soldiers opened fire.’ The findings were by no means universally accepted. Much remained contentious, including who had fired the first shot. The neat graphical simplicity of the multimedia experience suggests otherwise. Simple and clear, it persuades us of the clarity of understanding of the event despite the intervening time, the resultant gaps in knowledge, and continuing biases.

It is easy to see the value, but also the impossibility, of an emotionless approach. Far from being incidental, emotion, fear and anger were some of the most important features of the events. But the movement and noise of the march are not captured, nor the terror of the armoured cars as they ‘screamed into the courtyard’ at aggressive speed. The map’s simply rendered buildings do not represent the dilapidated state of reality and with it the poverty, unemployment and prejudice that had contributed to the Troubles. The wider context of the Catholic minority in Northern Ireland, and the more recent incidents of internment and torture by the army, with reprisal murders, are not alluded to.

It is tempting to view the attempted cold clarity of the interactive as representing the distance that stands between the events of 1972 and their assessment in 2010. Even the Guardian newspaper had sympathised with the Army at the time, and we may therefore view this as entirely appropriate. Yet neutrality in maps, especially with such contentious subject matter, is a difficult course to steer.
We are very accustomed to seeing the earth as a sphere suspended in space. Even before the astronauts of Apollo 8 photographed the globe for the first time in 1968 (see p.60), successive civilisations had been anticipating what it looked like with varying degrees of accuracy. After ‘Earthrise’, the image of the globe became even more prevalent, reproduced on flat surfaces and in three dimensions, animated in moving images, and recreated as simulations on computer screens.

This image is a frame taken from one such computer animation. It was used to illustrate a conference paper on Information Visualisation, though in the animation the globe was viewable from a variety of angles, and the arcs connecting points on the globe with each other were also dynamic. These arcs are not the paths of missiles, though as Martin Dodge pointed out, they do look unerringly similar.

What they show is the flow of internet traffic, online communication between the capital cities of countries between 1 and 7 February 1993. The application was created by a team of scientists at the telecommunications company Bell-labs in Illinois. The purpose was to make visible the usage statistics for the information flow between internet servers in order to understand it better. This animation used colour, intensity, height and transparency to articulate every aspect of internet activity over the week under study.

Unlike any modern road system the flow of online ‘traffic’ – which suffered from the same bottlenecks, accidents and repairs as heavy road traffic – required constant maintenance. Such visualisations served a practical purpose in assisting scientists’ analysis and improvement of the service.

The internet has its origins in US government investigations into secure data transfer in the 1960s, but the National Science Foundation (NSF)-funded programme of the 1980s, and the NSFNET backbone, was developed to link the main academic computing centres in the US. The date of this animation is significant because in 1995 the internet became a commercial service for public use, to be used by increasing millions worldwide.

Rapidly increased traffic (6 million users in 1995 leapt to 248 million in 1999) necessitated sophisticated maintenance equipment. But the value of this image moves well beyond its original purpose of the programme for the Bell-labs engineer/motorway repair person. It shows not only the general geographic location of internet users (not every internet user was, however, located in a capital city), giving some global picture of access to computer hardware, but also where users were connecting to. Lines of communication, email or else contact with home websites, linked migrants in North America and Europe with their Latin American homeland.

What the image tells us merged with what it has come to mean. It is an example of the early years of the phenomenon of the internet and World Wide Web, an online virtual world which by the end of the century had developed such a rich and complex topography that it had obtained its own atlas. Its history had become interesting. In addition to practical, historical and academic angles (the academic conference on the then-young field of data visualisation), wonder at the complex beauty of information visualisation became an art form in its own right.