

ARTHUR ROBINSON AND THE CREATION OF AMERICA'S FIRST SPY AGENCY

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BACKGROUND AND INTRODUCTION

In the fall of 1941 a 26-year old graduate student was working towards his degree in geography at Ohio State University. That spring he had been issued a deferment of military service in order to finish his graduate studies. These included among other things working for the geographer Roderick Peattie, for whom he drew a number of maps and charts. The young man was already quite adept at drawing maps and Peattie used a number of them in his book *Geography in Human Destiny* (1941).

In October, Peattie received a visitor, his friend and colleague Richard Hartshorne. Hartshorne was an extremely prominent figure at this time, having published his influential book *The Nature of Geography* in 1939. As such he was on his way to Washington DC, where he had been summoned to help set up a new agency for the collection and analysis of wartime intelligence. It was extremely hush-hush and had only been in existence for three months. Did Peattie know of any likely cartographers he could recommend? The new organization was likely to need a few to handle the work of Hartshorne's geographical branch. Peattie certainly did; his young assistant fit the bill admirably. Send him to DC as soon as possible, said Hartshorne.

And so with that, on October 16 1941, the graduate student, whose name was Arthur H. Robinson, began his intelligence career. He moved from Columbus, Ohio and found a house for himself and his new wife Mary Elizabeth Coffin on Tuckahoe Street in Falls Church VA, just outside Washington DC. Within the year he moved from being a consultant on a daily salary of \$10, to being the Chief of the Map Division of the Office of Strategic Services (OSS), America's first spy agency. He was earning \$5,600 a year and was in charge of over 150 persons. He was, as he later said, "in the right place at the right time."

The agency which Robinson joined was known initially as the Office for the Coordination of Information (COI, 11 July 1941-13 June 1942) and then the Office of Strategic Services (OSS, 13 June 1942-1 October 1945). It developed training in many of the "secret agent" type of activities familiar from spy fiction: suicide pills, secret training camps at places called "the Farm," the Joan-Eleanor Device invented to provide live communication between French resistance on the ground and overflying American aircraft, cryptography and secret codes, counter-intelligence ("X-2") and psychological warfare ("psyops"). It was run by the forceful personality of "Wild" Bill Donovan, a WWI hero holding the rank of major general. Recently declassified OSS personnel files at the National Archives in the USA show that more than 23,000 people held positions in the OSS. Among them are hundreds of geographers, and many more who worked with them in divisions such as the Map Division, the Geography Division or a foreign desk such as Europe-Africa, the USSR and the Far East.

In order to understand how a graduate student could take charge of an important branch of the country's intelligence service, it is necessary to situate these developments in their historical context. There are a number of important points here.

THE NEED TO FORMALIZE INTELLIGENCE

First, although the United States had had some intelligence capability, notably military intelligence or G2, by the time the war began, there was no central agency that would coordinate efforts. The OSS was established by President Roosevelt on the advice of Donovan who had met with the British head of intelligence, a man known as "C" (Sir Stewart Menzies or "M" of James Bond fame) and Bond author Ian Fleming himself who had a post in naval intelligence (Jeffery, 2010). This gap is in contrast to other countries such as the United Kingdom, which established its central intelligence agency as long ago as 1909 (known as MI6 or more formally the Secret Intelligence Service, SIS).

The Map Division (MD) was part of the Research and Analysis (R&A) branch of the OSS, which has been described as the heart of the operation. In reality, and despite the spy stuff, only a tiny fraction of the OSS were field agents; most were of the so-called "Chairborne Division" collecting, sifting and summarizing intelligence. MD had four sub-sections: Cartography, Map Intelligence (MAPIS), Topographic Models, and Special Photography. It served the Joint Chiefs of Staff (JCS) with map and geographic intelligence and as such the Map Division produced many specialty or thematic maps, performing research as well as map production. For example, it was responsible for the maps used at the four Allied Conferences between Roosevelt, Churchill and Stalin, as well as those for the Civil Affairs Staging Areas (i.e., D-Day invasion

practice sites) in California and Shrivenham, UK. Robinson estimated at the end of the war that the Map Division had made over 8,000 maps (about 100 per month) had amassed the world's largest map intelligence collection (nearly two million items) and had an operating personnel of over 150 people.

"KNOWLEDGE AT A DISTANCE": THE NEED TO DEVELOP DISTRIBUTED SOURCES OF KNOWLEDGE

Second, with the attacks on Pearl Harbor on 7 December 1941, it was evident that existing intelligence was either incapable or insufficient to provide adequate warning of attacks and other threats. Although Pearl Harbor was perhaps the closest that the USA would come to having its homeland directly threatened, there was still a need to get intelligence from the European fronts, to work closely with other intelligence agencies such as SIS and to have a presence in strategic locations in Asia, Africa and South America. To this end the Map Division established numerous overseas outposts, and a significant part of Robinson's job was coordinating intelligence both from and to these outposts. The Map Division Outposts will be discussed in more detail below.

THE NEED TO DEVELOP AUTHORITIES AND EXPERT

Third, and most significantly, was the relationship between government and experts. In establishing a new field, a new discipline, it was necessary to identify authorities. These authorities acted as channels through which various kinds of knowledges could be promoted or retarded. In other words we see the emergence of a discipline with its objects of study, its assumptions, and its techniques. During the period of the OSS the archives show Robinson and his colleagues in the Map Division eagerly developing new mapping technologies. One of these, which Robinson developed with the geographer Wallace Atwood (later Chair of the Clark geography department) and Hereward Lester Cooke of Princeton (later Curator of Painting at the National Gallery of Art) which was internally dubbed the "atorob device" (Roosevelt, 1976, p. 170). The atorob was a machine developed to speed up the carving of physical map models by casting an image of the map over the surface to be carved out. (Cooke patented many of these devices and provides useful sketches.) As Robinson notes, "if this lives up to our hopes it may be a way, for the first time, of allowing accurate topographic models to be built rapidly in the field." Considering that each model at that point took 2,200 man hours to construct, this was a considerable advancement (Roosevelt, 1976).

These new techniques, processes and forms of knowledge would work to eliminate the subjective in mapping, make the maps useable by suitably trained members of the military in the field and would thus require standard systems of symbolization, and set map scales. The important point of this is that the OSS became what Trevor Barnes has called a "center of calculation" (Barnes, 2006). This means not only did the OSS create and channel knowledge but that it did so in a particular way; as objective, neutral and non-political. Notable among the OSS employees were the top academics of the day, as well as those who would go on as Robinson did to be influential in their fields. Hartshorne, Preston E. James, Edward Ackerman, Edward Ullman, Wallace Atwood, Will and Ruby Miller (who would later found the geography department at Penn State). Other influential personnel included Arthur Schlesinger, Jr., Walter Rostow, two future Nobel prize winners, three future presidents of the Association of American Geographers, and anthropologist Carleton Coon who operated in the field in Tunisia, but later became well known for publishing a last-gasp racial explanation of human origins. Another group of experts perhaps surprisingly were the left-wing members of the Frankfurt School, including Harold Deutsch, Otto Kirchheimer, Franz Neumann and Herbert Marcuse (Katz, 1989).

These scholars highlight a paradox at the heart of the OSS. If, as Donovan is reputed to have said the "ideal OSS officer is a PhD who can win a bar fight," what is the relationship between intelligence and policy? Is it possible to take politics out of intelligence? These men thought so. As Hartshorne instructed his R&A Division, all reports must be strictly neutral, objective:

"It is of the utmost importance that our political intelligence reports should strive for the highest degree of objectivity. We should cultivate what might be called a clinical attitude--ie, to report the situation and the results that can be expected from following particular policies in such a way that the reader cannot tell whether the writer views the possibilities with favor or disfavor...Proust, Joyce, or Gertrude Stein would all be equally out of place in R&A."

But is this a tenable position? The claim to write in non-political, non-rhetorical manner is itself a political rhetorical claim akin to those who claim their scientific observations are uninfluenced by any particular theoretical position. As work on positionality has shown however, people pay more attention to findings that confirm their beliefs and less to those that do not (called "confirmation bias"). Or as Foucault has observed, there can be no knowledge without relations of power. Yet Robinson and his colleagues carried

forward this ideal of objectivity into cartography, and it explains no doubt his avid objection to the explicitly political Peters projection or world map.

During his time at the OSS Robinson was exposed to both secret intelligence and propaganda efforts. On the one hand this gave him an impetus to provide more objective and scientific methods for map design, which he expressed in his ground-breaking book *The Look of Maps*:

"our experience in the Cartographic Section of the [OSS Map] Division clearly showed that the creation of a special purpose map was frequently as much a problem in design as it was a problem in substantive compilation" (Robinson, 1952, p. viii).

With these words Robinson ushered in a new era of study on map design and communication, the legacy of which has permeated whole sectors of geography, not least through several generations of students, and his role as founding editor of the US's leading scholarly mapping journal, the *American Cartographer* (now *Cartography and GIS*) of the American Congress on Surveying and Mapping (ACSM) which represents US national interests to the International Cartographic Association (ICA) (Ristow, 1983). Robinson also supervised 15 PhDs and ultimately nearly 200 students and student's students (Castner, 2005) as well as writing the most single influential postwar cartography textbook, *Elements of Cartography* which went through six editions (1953-1995).

ACTIVITIES OF THE MAP DIVISION OF THE OSS

At the end of the war Robinson summarized some of the achievements of the Map Division. They had he claimed, distributed over 5 million map sheets (copies) from a collection of over 1.7 different maps; they had themselves drawn 8,200 maps. R&A as a whole had produced over 7,000 reports, had captioned 300,000 photographs and possessed another 300,000 classified intelligence documents (Barnes & Crampton, 2011). To take but one example, in July 1945 in preparation for the forthcoming Nuremberg War Crimes Tribunal, the OSS R&A Branch prepared a report on "Illegal Annexation of Territory by Nazi Germany" (R&A 3114.5). This report covered in detail the German policy of a greater territory and lebensraum and provided historical and political analysis, along with illustrative maps produced in the Map Division.

Many of these maps are available in the National Archives and cover an amazing array of topics from plans of cities in Korea based on military sorties, the partitions of Poland, electrical power stations in Java, shaded relief maps of Okinawa, the mineral resources of Sakhalin, Indochina linguistic groups, the Axis partitions of Yugoslavia, weekly maps of the military fronts across Europe, zones of intensive land use in the Ruhr, air raids over Italy, to detailed maps of the Normandy area including the principle railroad lines and of course the Normandy beaches.

The archives also contain historically significant maps such as one drawn by President Roosevelt of his preferred partition of post-war Germany that he sketched in with colored pencils one lunchtime (FRUS). The significance of this archive in the history of cartography and political history is as yet not fully realized. In fact it would not be an exaggeration to say it is a scandal for the history of cartography that these thousands of maps have not been properly studied.

One of Robinson's most important cartographic innovations was designing a standardized base map that consolidated military operations across a large area, yet still provided details of smaller areas. Prefiguring the zoomable maps of Google Earth or GIS, Robinson describes the procedure:

One of the larger projects was the compilation, construction, and printing of the OSS Theater Map, a "base map," scale 1:1,500,000, in reasonable size sheets (approximating those of the International Map of the World) organized so that any number of sheets of any area would fit together when mounted. It was to be used as a wall map in situation rooms on which to post the daily military positions and other strategic data (Robinson, 1979, p. 99).

Another innovation introduced by Robinson was a quality control table for maps that indicated for each data layer the reliability of the quantitative and qualitative data, the coverage, and the locational accuracy. Prefiguring what we would today call metadata this was an innovative technique that was designed to allow even non-experts to properly assess the worth of any map they were using. As Robinson had begun to realize the question of the circulation of information and knowledge among people of different backgrounds, with different interests and training in map use (or none at all) had to be addressed. Standardizing information and standardizing its metadata was his solution, one which still lies at the heart of mapping and GIS today (see for example the map communication model based on Claude Shannon's Information Theory (Shannon, 1948). It is of course an incredibly prescribed view which limits mapping to the delivery of information rather than as a relay in power/knowledge relations, or as a governmental

technology. Work since the 1980s, to which this paper contributes, has explored the situated and political nature of mapping.

THE OSS MAP DIVISION OUTPOSTS

The Map Division had major strategic outposts in Bern, Bari, Kandy (Sri Lanka), New Delhi, Kunming and Chung King (China) and most importantly London. It had more minor deployments to Algiers, Cairo, Caserta, Paris, Stockholm, Honolulu, Istanbul, Bucharest, Lisbon, and Athens. Again, the very locations of these reflects the US's strategic interests.

The London office was the most valuable and largest of the outposts. It was established on 1 February 1944, and had some 60 staff, half of which were US personnel. It carried out both map intelligence and cartography. It was the London Map Division office that issued a secret report on its first two months of operations for Donovan. Leonard Wilson, its Chief, divided the Division into two: cartography (mapmaking), and "map information" that dealt with only published maps that were borrowed, copied and catalogued. Incredible numbers of maps were processed from R&A Map Divisions worldwide and sent to Washington, some 200,000 a month. The OSS plundered existing map libraries. The entire map research catalog of the AGS was microfilmed, and Donovan even made a nationwide radio appeal for maps (Wilson, 1949, p. 302).

The entire map research catalog of the AGS was microfilmed. But still it wasn't enough. Donovan went on the radio to make a nationwide appeal for receipt of yet more maps (Wilson, 1949). At one point the Map Intelligence Section (MAPIS) was so far behind in cataloguing that there were $\frac{3}{4}$ million maps waiting for processing. By war's end the OSS claimed to have the largest map intelligence library in the world. Robinson stated in an Encyclopedia Britannica publication that some 750 million maps were made by the government during the war (Robinson, 1947).

One noteworthy acquisition made towards the end of the war was in Gotha, Germany. It was taken from the map publisher Justus-Perthes, and resulted resulting in nine tons of material being sent to OSS-Washington. T-Force #17554, 4 April 1945 sent the urgent dispatch:

"109 directs that contents of the firm Justus-Perthes (at Gotha, Germany), the largest map firm in the world, be obtained by OSS. All necessary steps should be taken to secure the building pending arrival of the map division personnel and guards should be placed over equipment. 109 authorizes Lloyd Black, Robt. Hall, and John Wells be ordered to Gotha immediately for this task. He further instructs that all authorization, transport and assistance be given this team. Materials to be forwarded to Washington without delay."

"109" was actually the codename of OSS Director William Donovan. It does appear that a substantial amount of captured German maps and map equipment made it to Washington DC, and in a postwar paper the OSS Map Librarian estimated that they acquisitioned some nine tons (Wilson, 1949). Once they arrived, the maps were immediately put to work. The Map Division supplied tactical and strategic maps for a number of conferences, such as the Second Quebec Conference, codenamed OCTAGON, in September 1944 between Roosevelt and Churchill. Thousands of maps were also sent into the field for briefings, and 13,000 a month to the War Department. By far the biggest number of maps, over 100,000 a month, were sent out for Joint Army and Navy Intelligence Studies (JANIS) (Barnes, 2006).

CONCLUSIONS

This paper has traced some of the main outlines of the work of the OSS and its Map Division but is only the very start of a full study. Three components of the work of OSS have been highlighted; the need for formalized systems of knowledge, the need for distributed sources of knowledge, and the usage of academics and scholars and their commitment to the objective scientific method.

But it is already clear that the OSS played a valuable if not uncontested role in the war. Its institutional history is not without struggle, and after Roosevelt's death, President Truman lost little time in disbanding it. Donovan, a Republican, was disliked by Truman, a Democrat. More significantly, there were still rivalries between the various military intelligence services, not to mention J. Edgar Hoover's and the OSS. (Hoover blocked the OSS from operating in South America, preserving the region for the FBI.) Donovan had established good relations with the United Kingdom and helped the start of the "special relationship" which in the Gulf War would prove so useful for the Bush administration's propaganda efforts about weapons of mass destruction in Iraq.

But as this example shows, the relationship between politics/policy and intelligence can sometimes be very shaky. As we now know, one of the main sources of intelligence used to justify the war on Iraq, a source dubbed "Curveball" (an Iraqi defector named Rafid Ahmed Alwan al-Janabi) deliberately lied. Yet his claims found their way into President Bush's State of the Union speech and were graphically presented by

Secretary of State Colin Powell to the United Nations in February 2003. It is not just a case of being misled--the information was actually already discredited before it was used by Bush and Powell (and PM Tony Blair of the UK). As we now also know the Bush administration very early on decided to invade Iraq, and in the words of the famous Downing Street Memo of 23 July 2002 (prior to the invasion) that "intelligence and facts were being fixed around the policy." The memo was written by the then head of MI6 (Secret Intelligence Service) Richard Dearlove. As the Butler Review concluded in its official enquiry into intelligence and the justification of the Iraqi invasion, the British secret service placed more weight on the evidence than it could bear, took interpretations of that evidence to the "outer limits" and that many of the claims used were "unsubstantiated."

The least we can say about these relationships specifically and in the case of the OSS is that intelligence does not purely drive politics; rather there is a complicated and ultimately political rationality to intelligence activities. This is the Clausewitzian view.

Ultimately the work of the OSS and the Map Division is less important in its particulars than in its legacy of cementing ties between government, the military and mapping. Today "geospatial intelligence" or GEOINT is a multi-million if not billion dollar business. Over the last ten years for example, government records reveal that the GIS company Esri received over \$630 million in government contracts, most of them with the Department of Defense and the National Geospatial-Intelligence Agency (NGA). What does this money purchase? The FY 2012 US Defense allocation proposed by the Obama administration is \$630 billion, but this does not typically include intelligence. The budget of NGA is classified. How does its work continue that of the OSS and the CIA? This is not known. Much more openness is required and the work of groups such as WikiLeaks in bringing to light government activities has to be commended. The question is how and in what ways does intelligence interact with or drive policy?

The other major question thrown up by the work of the OSS Map Division is in the post-war careers of its employees. Since so many of these were academics they had a significant effect on the development of the cartography discipline. As such it is clear that they used their policy of value-free knowledge to form a post-war discipline that rejected a political understanding of maps. This understanding still operates and retards the discipline today.

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ENDNOTES

Memo, Arthur H. Robinson to William L. Langer, 28 September 1945. NARA, RG226, Entry 1, Box 6, Folder 8.

Coon ingeniously developed exploding "mule turds" for use against the 10th Panzer Division of the Afrika Korps in Tunisia before George Patton's US II Corps arrived in May 1943 (O'Donnell, 2004, pp. 41-42).

"Draft of Proposed Guide to Preparation of Politics Reports" NARA, RG226, Entry 37, Box 5, Folder 3.

Memo, Arthur H. Robinson to William L. Langer, 6 July 1945. NARA RG226, Entry 1, Box 6, Folder 8.

Memo, Arch Gerlach to Arthur H. Robinson, 7 June 1945. NARA RG 226, Entry 1, Box 6, Folder 8. Part of the citation for Robinson's Legion of Merit award was the development of a cataloguing system that could adequately keep track of this collection.

NARA, RG226, Entry 99, Box 13, Folder 1.