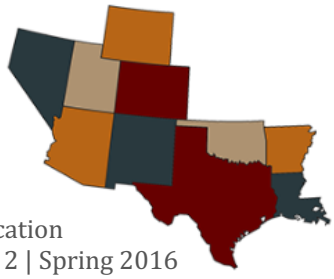
Southwestern Mass Communication Journal

A journal of the Southwest Education Council for Journalism & Mass Communication
ISSN 0891-9186 | Vol. 31, No. 2 | Spring 2016



Terror from the Skies: The Propaganda of Aerial Warfare in the Emerging Mass Media of the First World War

Thomas B. Christie and Andrew M. Clark
The University of Texas at Arlington

Aerial warfare was developed and used in the First World War to terrorize soldiers and population centers, and modern mass media played a dominant role in spreading the fear of the new innovation of war to a global audience. This view of the propagandistic value of aerial warfare played a major role in combat strategies and tactics of the war as military and political leaders began to utilize psychological operations. This paper explores the historical context of this era in light of the emerging broadcast media of the day. The study concludes with observations of the characteristics of this new 'terror propaganda,' the use of which continues today.

Keywords: propaganda, terror, public opinion, mass media, World War I, Terror from the Skies: The Propaganda of Aerial Warfare in the Emerging Mass Media of the

Suggested citation:
Christie, T. B., & Clark, A. M. (2016). Terror from the skies: The propaganda of aerial warfare in the emerging mass media of the first world war. *Southwestern Mass Communication Journal, 31*(2). Retrieved from http://swecjmc.wp.txstate.edu.

Terror from the Skies: The Propaganda of Aerial Warfare in the Emerging Mass Media of the First World War

Thomas B. Christie, Ph.D. and Andrew M. Clark, Ph.D.

Associate Professors,

The University of Texas at Arlington

Thomas B. Christie (Ph.D., The University of North Carolina at Chapel Hill, 1993) and Andrew M. Clark (Ph.D., The University of Florida, 2003) are Associate Professors of Communication at The University of Texas at Arlington. Address all correspondence to the authors at: The University of Texas at Arlington, Department of Communication, Fine Arts Bldg., Rm. 118, Arlington, Texas 76019. Phone: (817) 272-1246. Fax: (817) 272-2732. Email: christie@uta.edu, amclark@uta.edu.

Abstract

Aerial warfare was developed and used in the First World War to terrorize soldiers and population centers, and modern mass media played a dominant role in spreading the fear of the new innovation of war to a global audience. This view of the propagandistic value of aerial warfare played a major role in combat strategies and tactics of the war as military and political leaders began to utilize psychological operations. This paper explores the historical context of this era in light of the emerging broadcast media of the day. The study concludes with observations of the characteristics of this new 'terror propaganda,' the use of which continues today.

Keywords: propaganda, terror, public opinion, mass media, World War ITerror from the Skies: The Propaganda of Aerial Warfare in the Emerging Mass Media of the

First World War

"It seems that the rules governing the way in which the general public gains its image of war from the mass media have hardly changed since 1914-18, almost 100 years ago." (Seethaler et al, 2013, p. 29)

The emerging mass media of the First World War, through the use of propaganda, heavily influenced how this war and those that would follow were received by the public. Emerging mass media with a global reach was already developing at a rapid pace before and during the First World War. Between 1914 and 1918 nations not only developed the technology of mass media, but they began using radio to disseminate propaganda as a tool to influence populations at home and abroad (Welch, 2014).

During the First World War, aerial warfare, in particular, was used to terrorize soldiers and populations, and media played a dominant role in spreading the fear of these new technologies of war to both combatants and population centers. This view of the perceived terror of aerial warfare led the Germans, for example, to send Zeppelins loaded with incendiary bombs over London to terrorize the population, assuming that this operation would drive them to surrender. Even though this attack was a failure, the emerging modern mass media effectively spread the news of these attacks globally, resulting in an irrational fear of these new weapons as public opinion was formed.

Literature Review

The importance of public support is considered to be a key 'center of gravity' in modern warfare -- this is not a new observation. A noted military strategist and author, Prussian General Carl Von Clausewitz, said in the 1830s that warfare had three main objects: (1) To conquer and destroy the armed power of enemy forces; (2), to take possession of enemy material and resources, (3), and to *gain public opinion* [1](Gatzke, 1942). Gaining and maintaining favorable public opinion through mass media is valued by military and political leaders in more recent history. For example, the conduct of the Vietnam War was seen to be impaired by negative media coverage, presumably contributing to the low levels of public support present at the end of the war. The initial period of high public support for the Iraq War is believed to explain the success of the Bush administration in implementing its foreign policy and in obtaining US Congressional support (Foyle, 2004). Later, the war in Iraq challenged the US and allied governments' ability to obtain public consent for using military force (Kull, Ramsay & Lewis, 2004). Clausewitz's principles of war focused on the need for this public support as he recommended battle tactics that were "the best means for suddenly raising the nation's morale" and that would result in a quick victory for public opinion (Gatzke, 1942, pp. 46-47).

Governments engaged in the war for the hearts and minds of the people in the First World War realized this need for public support and were waging war on the public opinion front using modern mass media. As Welch (2014) says "In a state of total war, which required civilians to participate in the war effort, morale came to be recognized as a significant military factor, and propaganda slowly emerged as the principal instrument of control over public opinion and an essential weapon in the national arsenal…" (p.5). Given this early development of propaganda theory, the link to war, and the developing modern mass media in the First World War, the research questions guiding this study are:

[1] Emphasis by authors

RQ1: What is the historical context of one dominant facet of propaganda associated with psychological operations, termed 'terror propaganda', as it was conveyed to the public through the emerging modern mass media during the war?

RQ2: What characterizations of the nature of how and why aerial warfare, in particular, were used for this purpose during the conflict?

This examination is useful in explaining the nature and use of such propaganda that followed this war and that is still observed in recent history. An examination of rare original source material and a review of scholarly publications following the war, using historical methodology, was the method chosen to answer these questions.

Development of Modern Mass Media Prior to the First World War

Evans (2010) states that most histories of news agencies emphasize "the fundamental link between the spread of the telegraph and the foundation of news agencies in the mid-nineteenth century" (p. 211). Evans (2010) notes that during this time period three of the most prominent news agencies were founded: in France, Agence Havas (1835), in Germany the WTB (1849), and in Britain Reuters (1851). The development of telegraphy in the 1850s followed by the invention of wireless radio set the stage for the way mass media were used in the First World War. The Associated Press had already become a dominant source of news and information during the American Civil War, and a few years prior to the start of the First World War the introduction of United Press (to become United Press International) by E.W. Scripps took place. Evans (2010) notes that technology,

> "plays a constitutive role in defining what news is and means. Conceptions of news are not static; they change depending upon the criteria for newsworthy items. These criteria in turn are largely determined by the political, economic and technological networks behind the transmission of reports. Particularly for Germany, wireless telegraphy provided a means to communicate with the wider world in World War I and thereafter,

> vastly changing how these messages were transmitted and thereby what they meant" (p. 211).

The major news agency in Germany was called 'Transocean', used by the German government to quickly relay its messages throughout the world, and particularly in East Asia. Transocean had developed from a news agency founded in 1913, just prior to the start of the First World War, coinciding with the development of the wireless industry. Wireless was essential to the German government's information warfare both during World War I and in the years following the conflict (Evans, 2010).

The technological improvements in mass media were not limited to the speed and transmission networks alone. During the war, leading newspapers used a new printing process called 'rotogravures.' This process produced high quality illustrations and "dramatically altered their [newspapers'] ability to reproduce images." (Newspaper Pictorials, p. 1). Figure 1 shows a newspaper photo from this process picturing a London bobby warning the population about a possible Zeppelin attack from the air (Chief Events, 2014).

Figure 1. Newspaper using Rotogravure process. "Londoners scoot for the nearest cellar when they see a bobby wearing this Zeppelin card." (*New York Tribune*, August 12, 1917) http://memory.loc.gov/ammem/collections/rotogravures/

Radio development was well underway by the time of the First World War; however, terrestrial broadcasting was experiencing growing pains. Radio sets were relatively rare, and broadcasters were basically experimenting with the medium (Somerville, 2012). One of the first documented political uses of radio for news and propaganda was in revolutionary Russia, when radio was used to spread news about the Bolsheviks' seizure of power and formation of the Soviet Government in 1917 (Jowett and O'Donnell, 2006, p. 124). Hale (1975) writes that the first wireless propaganda messages came from the Soviets "Under the call-sign 'To all…to all…to all…', the Council of the People's Commissars' Radio put out Lenin's historic message

announcing the start of a new age on 30 October … 1917 (p. 16). The message stated: "The All-Russian Congress of the Soviets has formed a new Soviet Government. The Government of Kerensky has been overthrown and arrested. Kerensky himself has fled. All official institutions are in the hands of the Soviet Government" (p. 16). The message was, according to Hale (1975), designed to reach "potential revolutionaries in Europe as well as actual ones in Russia" (p. 16).

During the same period, the development of radio broadcasting in the USA was beginning– the first operating station was set up in New Jersey in 1914. There was a period of government control during the war when, shortly after the USA's entry, most private radio stations were ordered by the President to be shut down or taken over (Somerville, 2012). Despite the fledgling growth of radio during this time, citizens of the U.S. and Europe were receiving news and information more quickly than ever.

Meanwhile, Germany was building its modern radio infrastructure. Heidi Evans (2010) notes that the German radio company, Telefunken, had bought two sites to construct radio towers in 1912, and by 1914 transmission power was increased to 100 kW, and by the end of the war the transmission range had increased to 18,000 km (p. 217). "By the end of World War I, Transocean's overseas service could be received in English around the world. Transocean's basic infrastructure of cover agencies and its personnel structure were in place, as was its commitment to ambitious dissemination of its news to East Asia and South America" (p. 220). Although this was telegraphy, Evans (2010) rightly states that "This usage points towards radio's later use for broadcasting, although this was only possible after the invention of electron tubes which enabled the transmission of continuous waves and thus sound" (p. 228).All these technological innovations in mass media at the start of the 20th century, "from the moving images of newsreels

and the TV war of the cameras...," revealed how the public received and interpreted its image of war (Seethaler et al, 2013, p. 30).

Government Control of Information during the First World War

Shortly after American declared war on April 6, 1917, President Woodrow Wilson's move to achieve national support of the "Peoples War" was considered to be "perhaps the greatest single task" facing the president, and he realized the need to gain complete cooperation of American media (Larson & Mock, 1939, p. 6). The Committee on Public Information was soon formed to develop national solidarity and handle both censorship and publicity. The committee was considered to be the first of its kind, incorporating a radical multimedia approach using still pictures, motion pictures, advertising, speech, and other live events (Benson, 2010).

George Creel, a newspaper editor, was appointed the civilian chairman of the committee, established by executive order on April 13, 1917. Creel's commission was organized into two sections—domestic and foreign—and each had multiple subdivisions. One dominant domestic subdivision was the film division, charged with creating and distributing both still and motion picture imagery of the war, considered to be "possessed of the very highest propaganda value." (Larson and Mock, 1939, p. 15). In the foreign section, modern wire services, notably the Associated Press and United Press services, were charged with spreading America's war messages around the world. These services included messages by popular writers including features and news stories. These materials reached "virtually every country in the world" (p. 16). A total of 24 nations were sent 6,200 reels of American motion picture film. Printed materials were translated into multiple languages. Creel himself trumpeted the success of these efforts:

> "…We saw the government wireless lying comparatively idle, and through the close and generous cooperation of the navy we worked out a news machinery that soon began to pour a steady stream of American information into international channels of communication. Opening an office in every capital of the world outside the Central

> Powers, a daily service went out from Tuckerton to the Eiffel Tower for use in France and then for relay to our representatives in Berne, Rome, Madrid and Lisbon. From Tuckerton the service flashed to England, and from England there was a relay to Holland, the Scandinavian countries, and Russia." (Creel, 1920, p. 10).

Creel (1920) goes on to explain the significance of reaching the world through 'wireless' technology. He noted that,

> "For the first time in history, the speeches of a national executive were given universal circulation. The official addresses of President Wilson, setting forth the position of America, were put on the wireless always at the very moment of their delivery, and within twenty-four hours were in every language in every country in the world." (p. 10).

The efforts of the committee were controversial and were frequently attacked by critics. One such attack was related to aerial combat. The U.S. Senate criticized the committee for overstating the shipment of aircraft to France—noting a "brazen attempt to deceive the public." (p. 45). The Committee provided photographs of aircraft parts and engines accompanied with captions that were "admittedly flawed and overcolored." (p. 10). The photos were later withdrawn. In a separate instance, the Committee was charged with providing a false statement by a high-ranking official who mentioned seeing 1,000 aircraft in the air during a visit to France. Creel noted that the statements about the aircraft were not issued by the Committee but were simply a story in the Paris *Herald* (Creel, 1920). While the Committee may have been cleared of this overstatement, the emphasis given to stating or overstating aerial warfare reveals attitudes regarding this new weapon of war, particularly the power to affect public opinion.

In talking about the power of mass media, which at this time included films, Lutz (1933) writes that "All Allied films had the same tone. The military and naval strength as well as the inexhaustible industrial power of the Entente were shown to the civil population and the wavering neutrals. The lack of idealism of the enemy was contrasted with the immortal ideals of freedom and right for which the Entente struggled" (p. 510).

The German and French governments were also heavily invested in film reportage. The German government founded the *Bild- und Filmampt* office, using multiple film crews beginning in 1917 (Seethaler et al, 2013). The French government established the *Section Cinematographique de l'Armee,* part of the war ministry's press office, in 1915. Some of the filming was staged, since staging the war was more easily done technically and was in line with public's expectations of the war (Oppelt, 2002). These and other visual images of war were useful tools in the governments' propaganda campaigns.

Propaganda and Warfare

The rapid dissemination of propaganda to a global audience during the war was made possible by the development of radio technology. The study of propaganda has been approached from many disciplines, including history, communication, political science, sociology and psychology. A propagandist's purpose is frequently noted in these varied approaches, and when purpose is emphasized, "the term is associated with control and is regarded as a deliberate attempt to alter or maintain a balance of power that is advantageous to the propagandist" (Jowett & O'Donnell, 2006, p. 3). Ideology is assumed to drive government efforts at propaganda. For this study, focused on mass communication during the First World War, a definition drawn from the communication process is appropriate: "Propaganda is the deliberate, systematic attempt to shape perceptions, manipulate cognitions and direct behavior to achieve a response that furthers the desired intent of the propagandist." (Jowett & O'Donnell, 2006, p. 7).

The origins of propaganda in connection with warfare are debated. One author traces the beginning of modern propaganda to 1622, when Pope Gregory XV used propaganda techniques in the religious wars in Bohemia, Alsace, and the Palatinate. Governments in Great Britain and

the United States further developed the use of propaganda in warfare during the 1800s (Finch, 2000).

Lasswell offered this definition of war propaganda: "It refers solely to the control of opinion by significant symbols or, to speak more concretely and less accurately, by stories, rumours, reports, pictures and other forms of social communication" (qtd. in Lutz, 1933, p. 497). Lutz (1933) added that "all national war propaganda endeavors to mobilize home, allied, and neutral opinion in support of the country's cause and conversely to demoralize the enemy" (p. 497). He also noted the implication of re-education of the nation, that is "education with an ulterior motive: the creation of new desires, group hypnosis, isolation of counter propaganda, saturation of the public with selected and biased information" (p. 497). Another term used to describe government control of public information during war is 'information warfare.' Winkler (2009) noted that "…the leading belligerents in World War I engaged in information warfare throughout the war on a breadth and scale previously not understood." (p. 846). Winkler notes that a significant aspect of information warfare in the war was "the effort made to manipulate the flow of government and business information relating to the management of the war effort itself." (p. 846). Realizing the importance of communication at various levels, all belligerents physically attacked communication infrastructures throughout the war—on land and at sea.

Given the 'desired intent' of the government to 'sell the war' to citizens, the work of the Creel's commission and similar government efforts during the First World War have been viewed as propaganda in the sense that the work of such organizations was used to achieve a specific response—to effect cooperation between citizens and the armed forces. Governments involved with the conflict used attractive 'movie' posters to illustrate the close relationship between workers and soldiers in both the U.S. and U.K. A 1914 recruiting poster "turned the

British Secretary for War, Lord Kitchener, into an instantly recognizable icon." (Jowett & O'Donnell, 2006, p. 160).

Reflecting on the power of propaganda in World War I, Harold Lasswell (1927) believed that citizens had been manipulated and misled by propaganda efforts during the war. Walter Lippmann (1922) noted that citizens were strongly influenced by modern mass media.

One particularly effective propaganda device is the use of contrasts (Welch, 2013). "Not only do strong contrasts contain a greater emotional intensity than the more subtle nuances, but they also guide the audience's sympathies with more certainty" (Welch, 2013, p. 37). One medium where the use of contrasts is particularly obvious is in cartoons. Cartoonists became a valuable tool for both the Germans and the Allies as they created messages for at home and abroad. Demm (1993) noted that "When cartoonists became propaganda agents, their traditional role radically changed. Before the war they were social critics who sharply attacked the authoritarian structures in the government, the army, the church, and in society as a whole" (p. 166). He said that the war of words, or images, was a very important part of the overall war effort,

> "In German cartoons, the Allies perpetrate their war crimes in the name of 'civilization'. Western cartoonists, meanwhile, took extreme pleasure in comparing German pretensions regarding Kultur with the real (or invented) war crimes committed by German soldiers in the occupied territories . . .the German cartoonists defended themselves in a very simple and convincing manner: they countered the reproaches against the German 'barbarians' with positive images in which German soldiers are depicted giving food to the elderly or playing with children (Demm, 1993, p. 176).

During World War I one of the notable subjects of cartoons was fighter pilots and aircraft. Wilkin (2013) says during World War I people had a fascination with planes and the fighter pilots, but the mass media also helped to build the infatuation.

> "The physical and mechanical aspects of flight attracted intellectuals en masse, whence a number of scientific clubs were born, while the sporting aspect of flight resonated in

> popular circles. But the development of the flying man was also a product of cinema and photography. The aviator was not merely the hero of written accounts but also the visual incarnation, animated or not, of courage and modernity. Film immortalized, repeated and propagated facts about these new men" (p. 4).

Hate Propaganda and Terror--The Psychological Use of Aerial Warfare

Such use of mass media to portray the enemy in a distorted matter is related to the government's use of mass media to enhance public opinion through the "notion of psychological power" that "persisted in one form or another throughout the war" (Kennett, 1991, p. 42). Military strategists are keenly aware of such power, and typically conduct 'psychological operations' in modern warfare. Welch (2014) says the use and effectiveness of propaganda is enhanced by human's "psychological need for value judgment in simple black and white terms. This is particularly so if the country is in a state of crisis, or war, when there is an increasing need for a simplification of the issues" (p. 37). Welch (2014) goes on to write that hatred "is probably the most spontaneous of all reactions" (p. 37). Propagandists harness this emotion by blaming others for the problems individuals or society are facing. Welch (2014) says "Frightened or frustrated people need to hate because hatred when shared with others is the most potent of all unifying emotions…the aim of propaganda is to provide the object of this hatred in order to make it a reality" (p. 37).

Feeding this hatred were allegations of illegal acts of war -- often attributed to German forces (Horne, 2002). This practice painted an evil picture of the enemy for the purpose of galvanizing public support. Sometimes termed 'hate propaganda,' these news reports often distorted battles as 'massacres,' highlighted instances of mutilation in combat, and generally emphasized "the mistreatment of both soldiers and civilian populations by starvation or actual torture." (Jowett & O'Donnell, p. 215). The fear of the unknown was also used to the propagandist's advantage, especially with regard to new innovations or technologies.

One of these new innovations was the airplane. The first airplane flight occurred in 1903, only a decade prior to the start of the war. Not only was the technology itself new, the use of this new invention for warfare was a radical idea. Balloons had been used in the 1800s for observation purposes during wartime, but the thoughts of airplanes or dirigibles carrying bombs to be delivered over military targets or population centers was a new, terrifying thought.

A Royal Air Force officer recalled that staffs responsible for planning wartime attacks "appeared to think that some magic in the air would enable them to gain decisive results with one-hundredth the part of the necessary weights, provided it was in the forms of aircraft bombs." (Kennett, 1991, p. 42). Such thinking was most likely grounded in the belief that an opponent could be defeated by instilling fear in the enemy, or the population center of the enemy.

Nations at war are exposed to fear at different levels. A basic fear of the consequences of an enemy invasion is felt by population centers. The English recruiting poster in Figure 2 illustrates this fear. The poster shows a giant Zeppelin hovering over London, threatening the population in a sinister fashion. The soldier in a World War I trench would experience a different level of fear (Hoffmann, 2004). It stands to reason that opponents realize these fears and seek to exploit them for military advantage. It would also be reasonable to assume that populations would be afraid of the unknown effects of new technological innovations, such as flying machines (dirigibles and aircraft).

Figure 2. World War I Propaganda poster. Recruiting based on fear of aerial warfare. http://loc.gov/pictures/resource/cph.3g10972/

By 1912, the use of dirigibles and aircraft were seriously considered by military authorities and was reflected in exercises using these weapons of war. One British newspaper, *National Review*, carried an article written by a member of the British Parliament (E. Joynson Hicks) titled, "Command of the Air." The article boldly stated that, "It is now known that bombs and bullets can be discharged from aeroplanes over hostile armies with considerable effect—quite sufficient to expedite a retreat…" (Kennett, 1991, p. 43). Some of this thought may have been related to the mysticism of a military strike from the air. Figure 3 shows a "God punish

England" stamp made in Germany during the war. Although the German government denied issuing the stamp, a number of unofficial stamps were made by nongovernment organizations (Gott Strafe England, 2014). This stamp shows Odin, a mythological god, punishing England from the skies with lightning bolts.

Figure 3. Stamp "Gott stafe England", or "God punish England." http://www.awm.gov.au/collection/RC02377/

It would not be wise to give too much credit, however, to the planned use of air power solely for psychological purposes. Shortly before the start of the war, Hicks and other tacticians had stated three key objectives of air power. First, aerial targets should be important material resources (such as the Krupp plant ant Essen and British arsenal in Woolwich). Secondly, air power could target 'nerve centers' such as government offices, railway stations, and communications functions (Kennett, 1991, p. 44).

The third category of objectives was probably the one most linked to psychological warfare—the population itself—or the morale of the population. One example used to illustrate this point was the thought that, in the event of an aerial attack on Paris with minimal ordnance, the psychological impact on the population would be immense. This thought spread quickly, leading American Aviator Riley E. Scott, the winner of the 1912 Michelin bombing competition, to state, "If the mere rumor of a Zeppelin flights over London can produce hysteria, what would be the effect if one day the Zeppelins really did appear over the city and sow it with high explosives? (*Sunset, the Pacific Monthly*, April 1914, p. 784). The Zeppelin raids were also one of the subjects of the 'German Crimes' calendar which, according to Welch (2014) was one of Britain's most successful propaganda campaigns. The National War Aims Committee (NWAC) used the calendar to highlight "a German atrocity for each month of the year with the actual date of each 'crime against humanity' circled in red" (p. 54).

A subset of targeting the population was a type of mission known as reprisal bombings. Such attacks were conducted in retaliation for damage inflicted by the enemy on a population center. These missions were seen to be "frequently demanded by public opinion" and had become common by the end of 1917. According to Kennett (1991), "Such raids were usually little more than symbolic, but they had considerable propaganda value. They made good

headlines at home, while the enemy government was made to look powerless to its own people." (p. 55).

This targeting of population centers could not be separated from the need to maintain or manage public opinion. Even journalists and public officials called for vengeance. A writer in *Le Figaro* who had suffered a Zeppelin raid in Paris noted, "either we resign ourselves to accepting more and more frequently the insults these Zeppelins show us, or we decide to carry to the other side of the Rhine all the horrors of the air war." (Kennett, 1991, p. 56). Military strategists certainly understood the need to manage public opinion and may have planned attacks based partially on newspaper and radio reports. Wilkin (2013) says the Allies bombing campaign was a result in part based on public opinion pressure. He says, "These incursions were only of limited strategic value but they were useful for propaganda because they allowed propagandists to stress the weakness of the enemy air force when it came to protecting their own skies. Home front newspapers instrumentalized the raids while continuing their strategy of denouncing German bombardments (p. 12).

Discussion--Characteristics of Terror Propaganda

Much of what is known and observed today in terms of the use of propaganda in warfare was either developed or enhanced during the First World War. The new innovations of modern warfare, deliberate distortion of enemy actions, and the strategy of combining propaganda with psychological operations reaching a tipping point when modern mass media were capable, for the first time, of reaching global audiences quickly with news and information. As Welch states, "One of the most significant lessons to be learned from the experience of World War I is that public opinion could no longer be ignored as a determining factor in the formulation of government policies" (p. 58). The use of aerial warfare as an instrument of terror is especially

revealing.

Responding to the second research question, the authors offer these general observations regarding the use of aerial warfare as a propagandistic instrument of terror:

1. Aircraft technology was new, developing rapidly, and not fully understood. The Wright brothers flew the first aircraft in 1903, only a decade prior to the start of the war. The world was fascinated with the new technology, and mystery surrounded the nature and capabilities of flight. Even though the first transatlantic flight would not occur until 1927, innovations in flight were occurring at a rapid pace. Improvements in flight control, design and operations were made during the war.
2. Aerial warfare complemented an existing natural fear of harm from the skies. Once aircraft were developed for combat purposes, the thought of sudden and unexpected harm or death from the sky provoked natural fear. Such fear was probably connected to fears from other natural destruction from the air—storms, lightning, meteors and the like.
3. The thought (by governments) that the public opinion would be swayed in populations frightened by aerial warfare and result in diminished public support of war. In terms of the soldiers, Lutz (1933) notes that Allied propaganda efforts on the western front were only successful after their armies took the offensive. Then the veteran German troops realized that the aerial propaganda accounts were fairly accurate, and became demoralized" (p. 516).
4. The belief that, by effectively injecting fears of aerial warfare into the population quickly and effectively, through modern mass media, less military force would be needed for military and political success.

5. The development of early radio and other mass media allowed for the immediate dissemination of information about aerial warfare and the transference of propagandistic symbolism. Lasswell (1927), in his explanation of propaganda as a theory, emphasized the management of public opinion using symbols. The combination of film and other visual images reveal the symbolism. One can see juxtaposed images of the American eagle with the airplane, inferring that the aircraft had characteristics of the American eagle.
6. The possibility of mass casualties from aerial warfare was effectively communicated quickly through the emerging mass media. As Wilkin (2013) notes,

> The fascination generated by everything to do with flying was the root of a real popular dependence on news about the air war that went beyond social or military barriers. Air propaganda certainly contained important paradoxes. Sometimes over sterilized, proclaiming the chivalrous virtues of another day, it could take refuge in an old-fashioned narrative that rested on a naïve vision of the conflict. At other times violent and vindictive, it could also be the precursor of the extreme brutalization of moral codes, announcing in a visionary way the suffering of civilians under the air strikes of the later twentieth century (p. 23).

Conclusion

In the next major global conflict to follow, World War II, aerial warfare was again used to obtain a psychological goal a propagandistic instrument of terror. The Germans emphasized the terror and effectiveness of their aerial 'blitzkrieg' attacks and the V2 missiles targeted on London. The war would end with a global visual image of two atomic bombs—delivered by air on Hiroshima and Nagasaki—sending a stark warning of sudden, immediate and massive death from the skies to potential adversaries. More recently, the popularly referenced name of the Coalition aerial campaign against Iraq – "Shock and Awe" – was also designed to induce terror among the enemy population. The use of the new technologies of aerial warfare as a weapon designed to terrorize

combatants and populations through the immediacy of mass media, developed and used in the First World War, continues today.

References

Benson, K., 2010. Archival analysis of the committee on public information: the relationship between propaganda, journalism and popular culture. *International Journal of Technology, Knowledge & Society, 6*(4), pp. 151-164.

Chief Events of the War Timeline: 1914-1919. 2014. Retrieved from the Library of Congress: http://memory.loc.gov/ammem/collections/rotogravures/rototime4.html

Creel, G. 1920. *How we advertised America: The first telling of the amazing story of the Committee on Public Information that carried the gospel of Americanism to every corner of the globe*. New York: Harper & Brothers.

Demm, E. 1993. Propaganda and Caricature in the First World War. *Journal of Contemporary History*, 28(1), pp. 163-192.

Evans, H. 2010. The Path to Freedom? Transocean and German Wireless Telegraphy, 1914-1922. *Historical Social Research*, 35(1), pp. 209-233.

Finch, L. 2000. Psychological propaganda: the war of ideas on ideas during the first half of the twentieth century. *Armed Forces & Society*, *26*(3), pp. 367-382.

Foyle, D. 2004. Leading the Public to War? The Influence of American Public Opinion on the Bush Administration's Decision to Go to War in Iraq. *International Journal of Public Opinion Research, 16*(3), pp. 269-294.

Gatzke, H. 1942. Trans. General Carl Von Clausewitz, *Principles of War*. Harrisburg: Telegraph Press.

Gott strafe England Cinderella Stamp, 2014. Australian War Memorial. http://www.awm.gov.au/collection/RC02377/ [Accessed March 27, 2014]

Hale, J. 1975, Radio Power: Propaganda and International Broadcasting. Philadelphia.

Hoffmann, S. 2004, Thoughts on fear in global society. *Social Research, 71*(4), pp. 1023-1036.

Horne, J. 2002, German atrocities, 1914: fact, fantasy or fabrication? *History Today*, *52*(4), p. 47.

Jowett, G. S., & O'Donnell, V. 1986, Propaganda and Persuasion. *Beverly Hills, CA: Sage Publications.*

Kemnitz, T.M. 1973, The Cartoon as a Historical Source. *Journal of interdisciplinary History,* 4, (1), pp. 81-93.

Kennett, L. 1999, *The First Air War: 1914-1918*. Simon and Schuster.

Larson, C., & Mock, J. R. 1939, The Lost Files of the Creel Committee of 1917–19. *Public Opinion Quarterly*, *3*(1), pp. 5-29.

Lasswell, H. 1927, The Theory of Political Propaganda, *The American Political Science Review*, 21, 3, August, pp. 626-631.

Lippmann, W. 1922, Public Opinion. *New York*.

Lutz, R. H. 1933, Studies of World War Propaganda, 1914-1933. *The Journal of Modern History*, 5, (4), pp. 496-516.

"Newspaper Pictorials: World War I Rotogravures, 2014. http://memory.loc.gov/ammem/collections/rotogravures/ [Accessed from the Library of Congress].

Oppelt, U. (2002). Film und Propaganda im Ersten Weltkrieg: Propaganda als Medienrealitat im Aktualitaten- und Dokumentarfilm. (Steiner: Stuttgart).

Seethaler, J. et. al., (2013) Selling War: The Role of Mass Media in Hostile Conflicts from World War I to the 'War on Terror.' Intellect, The University of Chicago Press (Chicago) pp. 29-30.

Somerville, K., 2012. *Radio Propaganda and the Broadcasting of Hatred: Historical Development and Definitions.* Palgrave Macmillan.

Sunset, the Pacific Monthly. 1914, April. "Can the Panama Canal be bombed from the Air?", p. 784.

Welch, D., 2014. *Propaganda, Power and Persuasion: From World War I to Wikileaks*. London: I.B. Taurus.

Wilkin, B., 2013. Aviation and Propaganda in France during the First World War. French History doi: 10.1093/fh/crt084

Winkler, J., 2009. Information Warfare in World War I. *The Journal of Military History, 73*(3), pp. 845-867.