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DESCRIPTION OF WAR PHOTOGRAPHS: DESIGNING A LIST OF SUBJECT HEADINGS

By

Marc D. Boulay

B.F.A. Ryerson University, 2001.

A Professional Practice Project

Presented to the School of Graduate Studies of Ryerson University

and

George Eastman House International Museum of Photography and Film
In Partial Fulfillment of the Requirements
for the Degree of

Master of Arts

In the Program of

Photographic Preservation and Collections Management

Toronto, Ontario, Canada and Rochester, New York, USA.

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Ву

Marc D. Boulay
B.F.A. Ryerson University, 2001.

A Professional Practice Project

Approved on

July 12th, 2006

By the Following Reading and Examination Committee

Alison Nordström, Ph.D.

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AUTHOR'S DECLARATION

I hereby declare that I am the sole author of this professional practice project.

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ABSTRACT

Description of War Photographs: Designing a List of Subject Headings

Master of Arts, 2006

Bv

Marc D. Boulay

Photographic Preservation and Collections Management

Ryerson University and George Eastman House International Museum of Photography and Film

This project is focused on the research and practical design of a list of subject headings which describes topical subjects visually represented in war photographs. To increase access to this type of cultural heritage, this list is a user-friendly tool for the efficient description of war photographs which does not require specialized knowledge in the subject of war for its implementation. Three main strategies are employed to this end: The implementation of a strictly controlled vocabulary; the use of a streamlined multitiered hierarchical arrangement; and the placement of specific subject headings within the hierarchical structure of terminology that function as key access points to war photography collections. The basis of development of this project is the approach to the description of war photographs of three institutions. These are: George Eastman House Museum of Photography and Film, the Canadian War Museum's Military History Research Centre, and Ryerson University's Black Star Historical Black & White Photography Collection.

ACKNOWLEDGMENTS

There are several people to whom I am greatly indebted, and without whom I could never have realised my goals. I am enormously grateful to Alison Nordström for her unwavering guidance and motivation, her long hours of revision, and tireless attention to detail. Special thanks are extended to David Wooters and Laurie Soures who endured long meetings, and contributed much of their time to aiding in the development of my ideas and the practical structure of the list. I'm indebted to Peter Higdon for his generous insights towards collections management and subject description, and his kind support in the further refinement of this project. I am very grateful to Maggie Arbour-Doucette who took the time to meet with me and provided access and insight into the cataloguing practices of the MHRC. Heartfelt thanks are extended to Don Snyder and Bob Burley for their tireless efforts in advancing the program, and always making time for the students. Finally, none of this would be possible without the love, heartfelt encouragement and strength of Kristen Adlhoch; Gail and Gérard Boulay who are my greatest role models and have never doubted me; and the foresight and generosity of my loving grandparents Louis et Suzanne Boulay.

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"vocabulary control. The process of organizing a list of terms [...] to indicate hierarchical and associative relationships among terms in the context of a thesaurus or subject heading list."

1. Introduction

This project encompasses the research and development of a new approach to the selection and application of descriptive terminology for photographs. As a case study its focus is limited to the subject of the description of war photography.

For this project, a war photograph is described as: a photographic representation that depicts actions, things, people, or places, which through its content or accompanying contextual information is associated with activities resulting from war or conflict.

Military subjects photographed in peacetime are included within the scope of this project.

1.1 Contextual Overview

Photographs can be unclear in what they communicate. People looking at photographs may interpret what they see in the form of concepts such as symbols, metaphors, emotions, and aesthetic experience. Others may interpret what they see as an action, and others still the representation of an object. All three kinds of observers would be right in their assessments, yet if asked to communicate what they saw through oral or written language, each of their observations would be incomplete and biased. Words are ill-suited for describing a photograph's subject due to the ambiguous nature of language.

The results of this project offer a means to overcome the challenges inherent in describing photographs by addressing the language which is at the heart of the descriptive

¹ Guidelines for the Construction, Format, and Management of Monolingual Thesauri: ANSI/NISO Z39.19-2003, 38.

process. Control over the content and structure of descriptive language is a process known as "vocabulary control".

The application of vocabulary control in this list of subject headings relating to war depends on organisational principles which do not represent the emotional aspects of this subject. Access to subjects is facilitated through the implementation of particular terminology which is less affected by emotional response, prejudice, or other forms of interpretation. Standardised, appearing cold and unemotional in its implementation, this controlled vocabulary appears dehumanising at first glance, seeming to not acknowledge the impact or human tragedy of war. This characteristic of accurately describing war photographs is not to be mistaken for negligence or insensitivity towards the subject. On the contrary, it is a means to provide greater access to the cultural heritage and stories of the people affected by war, so that careful and sensitive attention may be given to the subject. This list serves to catalogue and provide access to one of the most important aspects of human history, and the most personal stories of tragedy and human endurance.

2. Research Methodology

The development of this list of terms and a concurrent hierarchical arrangement is the result of a multiple step process which emphasised a hands-on approach. Focused on experiential learning, it was through the process of development and then implementation of subject headings, rather than extensive research into the history or theories regarding descriptive terminology, which drove the creative process in this endeavour.

To familiarize myself with the subject matter, I conducted case studies of the photographic cataloguing practices of three institutions: George Eastman House International Museum of Photography and Film (GEH), a world class photography museum located in Rochester, New York; Ryerson University's Black Star Historical Black & White Photography Collection (Black Star), an extensive photojournalism archive in Toronto, Canada; and The Canadian War Museum's Military History Research Centre (MHRC) which encompasses a specialized national collection of war photography located in Ottawa, Canada. This third institution was selected as an authority on the subject of war and was used as a reference point during the study.

The analysis of the effectiveness of the cataloguing of these three institutions' war photography collections was focused on the terminology they employed, and did not enter into the realm of database software or technology. The study focused on the subject heading lists employed by each institution. This focus provided an understanding of the reasoning behind their original inception as well as their continued application.

Interviews conducted with the Collection Managers of each of these institutions provided further context for the history of the collections, their use by researchers, and the nature of their cataloguing practices.

Following this step, the examination of each institution's subject headings narrowed specifically to those lists of local subject headings that related to war. The MHRC and George Eastman House both used elements of internationally standardised terminologies, so a concurrent examination of the Library of Congress Subject Headings, and the Thesaurus for Graphic Materials was also undertaken. The goal of gathering war terminology from these various sources was two-fold. Firstly, the aim was to highlight all those terms utilized by each institution in their description of war photographs. The secondary goal was to observe the logic of arrangement of the subject heading lists made available to the cataloguer/researcher in such an institution so as to ascertain if it was well suited to this unique descriptive task.

The next task was that of developing criteria for the selection of terms and establishing a foundation of hierarchical principles of arrangement for the proposed list of subject headings. The terms identified as relevant to the subject of war photography were placed on to this theoretical framework of arrangement in order to construct methodically the end product of a hierarchically arranged list of subject headings. Since it is standardization that bridges understanding within the community of collections managers, the further challenge of adhering (when possible) to the ANSI guidelines for the construction of monolingual thesauri was also necessary.²

Adhering to the ANSI guidelines was not always possible. Some of the characteristics of this approach to lists of subject headings are in fact contrary to the ANSI guidelines. However, it should be taken into consideration that these guidelines are intended as strict design parameters necessary for the construction of thesauri. This

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² Guidelines for the Construction, Format, and Management of Monolingual Thesauri: ANSI/NISO Z39.19-2003. (Bethesda: NISO Press, 2003).

project being focused on the construction of a type of subject heading list does not fall perfectly into the parameters of the ANSI guidelines. For our purposes, the ANSI guidelines serve as a guide for the implementation of organizational principles, and as a reminder of the need to adhere as closely as possible to established standards.

The final stage of refinement of the list, undertaken to maintain the focus of the project towards practical applicability, manifested itself through the process of a series of mock cataloguing exercises. Random images from a variety of photographic publications on the subject of war were catalogued according to the newly designed terminology.³

With the list and its hierarchical arrangement complete, and the refinement through mock cataloguing concluded, the final stage necessary to make this list serviceable and ready for public scrutiny was the writing of a brief manual for its implementation containing an explanation of the scope and purpose of the subject heading list.⁴

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³ See Appendix C for examples of mock cataloguing.

⁴ See Appendix A for the List of Subject Headings for the Description of War photographs and its accompanying manual.

3. Purpose

These descriptive terms can be more precisely described as a variation of a "subject heading list". They are not intended as a complete system for the cataloguing of war photographs, but as a subsection of a pre-existing software application such as the Museum System (TMS), or that of an accepted cataloguing standard such as Machine Readable Cataloguing (MARC).

The goal of this research and development is the creation of a subject heading list and an associated hierarchical arrangement of its component terms, in order to streamline the process of describing the subject content of photographs within a collection database. The main impetus for this work is based upon the understanding that the manner of a collection's access and use has a profound impact on its longevity and effectiveness as cultural heritage. More specific to our interests, there is a direct relationship between the effective description of subjects in the cataloguing of photographs and the physical preservation of a photographic collection as a whole. Streamlining the effectiveness of lists of subject headings leads to increased ease of application in data entry, and provides immediate benefits to the cataloguing staff. The parallel result is an increased effectiveness of image retrieval by internal staff and external researchers. An increased efficiency of searches, and the reduction of "false drops" in database searches, reduces harmful manual searching through collections. Reduced handling of photographs can greatly extend their life expectancy and hence the long term accessibility of this form of cultural heritage.

⁵Guidelines for the Construction, Format, and Management of Monolingual Thesauri: ANSI/NISO Z39.19-

 $^{^6}$ Guidelines for the Construction, Format, and Management of Monolingual Thesauri: ANSI/NISO Z39.19-*2003*, 35.

In addition to concerns of physical conservation, a second motivating factor is one of encouraging intellectual discourse amongst the different branches of the photographic community. It is not the physical life of photographic objects that is being addressed here, but the preservation of their intellectual one. For a collection to live is for it to be accessible, researched, discussed in academic forums, and finally presented to a greater audience. Without clear descriptions nor the use of subject headings that are free from ambiguity and limited in personal interpretation, it is difficult to maintain a dialogue between the objects in a collection, their catalogue records, and the researchers who are attempting to make use of this unique form of cultural heritage. The motivation for this project is thus extended out of the archive and into the realm of both the academic and public communities who will benefit from improvements in access.

4. Research Findings

Written language is not always effective as a medium of communication, since, like photography, personal bias and interpretation are also characteristic features of its use. We must therefore partake in a communally standardised language in order to communicate clearly. However, individuals working in the field of cataloguing photographic media generally assert that the established standards of descriptive language employed by libraries and archives, such as the Library of Congress Subject Headings (LCSH), are ill-suited to a visual medium. In response to this, the Library of Congress issued the first edition of the Thesaurus for Graphic Materials (TGM) in 1987.

Cataloguing is by its very nature an act of interpretation, and, as such, it is inevitable that even twenty years after the inception of the TGM, the cataloguing of photographs continues to suffer problems of consistency and clarity. Preferring to adhere to an extensively cross-referenced web of logic in the representation of subjects, the TGM, as in any thesaurus, relies heavily on similar and "related terms". Because of these, the TGM lacks obvious or self-evident clarity, allowing for varied and inconsistent interpretation of its subject headings by its multiple users.

The key discovery of the case studies was that the majority of the problems encountered in each institution's cataloguing practices resulted from difficulties in implementation. These arose, often because of the lack of specialized knowledge in the subject of war that was required for proper cataloguing in their systems. More specifically, complications often arose due to a redundancy of similar terms combined with the inability of a cataloguer or researcher to differentiate the meanings of related,

⁷ Peter Higdon (Curatorial Manager, Mira Godard Study Centre, Ryerson University), in discussion with the author, February, 2006.

⁸ David Wooters (Photo Archivist, George Eastman House), in discussion with the author, April, 2006.

synonymous, or ambiguous terms. This problem of differentiation of terms is often compounded by an impractical arrangement of terms and/or their adherence to established standards of arrangement designed for literary or broadly natured graphic works (such as those of the LCSH and the TGM). Since the theoretical framework of such established lists of terminology is extremely complex, it is difficult for those not intimately familiar with them to glean the differences in meaning between terms based on their arrangement. If the terms require specialized knowledge for their full comprehension, and their arrangement is so sophisticated as to impede the ability to intimate meaning through the relationships created by their intellectual arrangement, then this present system is far from user friendly and quite exclusive.

The same problem occurs with the opposite approach, where an institution applies no standards of terminology or arrangement, and is, therefore, without any point of reference for meaning or interpretation. A compromise between these two extremes would be a logical solution. In the case studies however, rather than compromising literally, two of the three institutions utilised both extremes simultaneously, neither attempting an advantageous medium.

The range of cataloguing challenges is divided into three main areas of concern.

The key obstacles encountered in the case studies are: the ambiguity of terminology employed in description; the length of subject heading lists and their arrangement; and an inability to catalogue properly. Each of these is addressed separately in this essay.

4.1 Ambiguous Terminology

A "controlled vocabulary" is, by definition, "a list of preferred [...] terms produced by the process of vocabulary control." A main point of contention with all three of the collections is their lack of a strictly controlled vocabulary. This has caused a degradation of their lists over time, affecting the consistency and efficacy of the terminology employed in the description of these institutions' photographic holdings.

Black Star, as a photographic stock agency, used and created its terminology as its individual employees saw fit, its subject heading list growing "organically" through its usage from its creation in the 1930s to the period in which the collection ends in the 1980s. Although time efficient and serving those individuals who created it, this technique of developing subject headings has many drawbacks associated with it once it is removed from its original context of use. Such a system is problematic as its effectiveness is heavily based on collective memory of employees and not on any standard of procedure or controlled vocabulary.

George Eastman House makes use of a combination of both a short list of controlled subject headings and a much larger second tier of uncontrolled, narrower terminology. The first and shorter controlled list of terms is internally referred to as "Primary Subject Headings" and is mostly sourced from the LCSH. GEH's list of uncontrolled subject headings is found in the second tier of its hierarchical arrangement. These uncontrolled subject headings were created (or at least vastly expanded upon) as a

⁹ Guidelines for the Construction, Format, and Management of Monolingual Thesauri: ANSI/NISO Z39.19-2003, 35.

¹⁰ This process could most readily be compared in cataloguing terms as the selection of terms due to "literary warrant".

¹¹ The clarification should be made that Ryerson's Black Star Historical Black & White Photography Collection has, to date, adopted a digital representation of Black Star's (N.Y.C.) physical filing system which it employed up until the 1980s. It is this which serves as an interim database employed by Ryerson University, and which was used as the source of this study.

result of open access to the database in its earlier form (known as the VAX), where any staff using the system could add new terms.

The Canadian War Museum's Military History Research Centre (MHRC), uses a combination of Library of Congress Subject Headings, as well as local authorities. 12 Their cataloguing is implemented through the structure of the MARC system. The uncontrolled local authorities which they employ are susceptible to the same problems of added terminology as that of GEH, and as such their subject heading lists are populated with many redundant, synonymous, or related terms.

A compound problem with the MHRC is that its lists of terms are made further redundant by the duplication of information in the multiple fields provided in the museum's MARC run database known as the GEAC System. It appears that several MARC fields within their GEAC database (those I am referencing are of the MARC 6XX series 13 and field 710) are using separate subject heading lists, which, as a result of their uncontrolled nature, do not take into consideration the full content of adjacent complementary lists.

The problem with duplication of terms or the presence of synonymous or similar subject headings and the use of multiple subject heading lists is that it hinders the efficiency of cataloguing or research, necessitating the repetition of entries. Such multiplicity affects the user's comprehension of subject headings since there can be

¹² A local authority is a list of terms or a subject heading list which is not standardised outside of a given institution and can be utilised as either a controlled authority or an uncontrolled authority depending on the restriction placed upon it. (See Glossary for more details.)

¹³ Of specific concern in regards to redundancy is the use of the LCSH in the 650 field in tandem with the combined use of multiple uncontrolled local authorities in fields 656 (Occupation / Rank) and 690 (Cultural Context). Also of concern is the disuse in the GEAC System of the very applicable fields 651 (LCSH -Geographic Name) and 691 (Place of Research) which function with far less margin for error in regards to location than field 690 (cultural context).

differing preferences between the types of terminology utilised in each of the subject heading lists, confusing the cataloguer/researcher.

4.2 Lengthy Subject Heading Lists, with Shallow Degrees of Hierarchical Division

Lists of terms such as those local authorities in use by Black Star, GEH, and the MHRC do not allow for deep hierarchical relationships of subject headings from broad terms to a subsequent string of narrower terms. The existing lists are often long, requiring exhaustive searching. They are as also shallow ¹⁴ in hierarchical depth, making it difficult to employ the most appropriate terms, thus leaving a great deal of room for the misinterpretation of the context or meaning of terms by individual cataloguers or researchers.

The Black Star collection has a list of ninety-five primary subject headings dealing with the subject of war, with its largest secondary subject heading (second tier) being approximately two-hundred terms long. The MHRC has a list of terms for MARC field "690 (cultural context)" which is eight pages long, with no subdivision or hierarchy of terminology. In either of these cases, a cataloguer/researcher would quickly grow very tired and frustrated of this time intensive process, opting (consciously or not) to limit searches, which would affect the thoroughness of the cataloguing or research process. In such shallow lists of terms, accessing content is like searching a dictionary, due to their alphabetical arrangement. This loses the potential, which is present in all

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¹⁴ The use of the word "shallow" is in reference to lists with limited hierarchical division into narrower terms with perhaps only one or two (lower) tiers of depth of division into narrower terminology. To illustrate this concept consider the comparison to the arrangement of "family trees". The number of generations a family tree covers is the same principle as the depth of hierarchical division of terms.

¹⁵This field is utilized by MHRC for the identification of "elements which are indicative of country, event or theater of war…" but have also been cited as representing differing degrees of geographic specificity, elements of military division and service, international organizations and unions, and names of operations. "CMCC Data Dictionary: Geac (GESICA) System," 79.

hierarchically arranged subject headings, to serve the secondary function of educating its users to understand the subject matter. 16 Furthermore, if a subject heading list does not adhere to a clear arrangement, the user stands to be denied the valuable knowledge of understanding the logic employed in arranging and thus providing the identity of a collection.

4.3 Impediments to Proper Cataloguing

Lack of funding often makes it impossible to employ specialized cataloguers or war historians. 17 Consequently, proper cataloguing of war photography collections is limited due to the specialized nature of ideal terminology. As a result, records are catalogued at a skeletal level only, raising serious questions about their accessibility and hence their appreciable value as a cultural or historical resource. According to the MHRC. one of the obstacles affecting the efficiency of searches for war photographs in their GEAC System is that the fields are at times not populated. 18 If fields are left empty within a cataloguing system, searches are automatically ineffective. Consequently, the collections managers' collective memories become the finding aids utilised to locate and retrieve photographs. Such methods of accessing collections exhaust resources, are less dependable or accurate as finding aids, and as stated previously, affect the preservation of the collection as whole due to the higher degree of manual searching required.

¹⁶ Perhaps such realizations could afford budgetary allocations to be transferred from the education department to that of collections management departments? All joking aside, this comment is directed to museum administrators who over-compartmentalize museum operations, not admitting to the profound interconnected nature of roles within cultural heritage institutions.

¹⁷Maggie Arbour-Doucette (Collections Manager, Image Archives & Reproduction Service, MHRC), in discussion with the author, February 22nd, 2006. 18 Ibid.

5. Development & Implementation

All collections are different, and the demands put on them by their staffs and communities of researchers differ from one institution to another. Because of this, the development of this particular list of terminology is designed to aid in the cataloguing and accessing of the war photography holdings of extensive photographic collections. The photography collection at George Eastman House International Museum of Photography (GEH) served as the foil for the development of this project, and was also the geographic and intellectual base for the research towards this subject heading list. As a result, the end product is suited for an institution like GEH in Rochester, New York. Similar institutions, that are not specialized in, but do have significant holdings of war photographs, would also be fine candidates for adopting an identical or similar approach.

So as to limit the scope of this practical project, the breadth of subject headings to be examined and developed is being limited to the subject of war. More specifically, the scope of this project is the subject of war *as it is represented in photographs*. This distinction is a key point in the reasoning behind my theoretical approach, underlining that most communication is based on an assumption of contextual information. One of the important characteristics of photographs is that although they are a visual medium, as a mode of communication they remain physical objects ¹⁹ which are often removed from their supporting contextual information ²⁰ (or documentation). ²¹ Aside from the solution of undertaking the expenditure of time and resources towards the research and

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¹⁹ Or in the case of digitized images or digital born images, they are most often tied to physical objects such as digital storage media.

²⁰ Maggie Arbour-Doucette (Collections Manager, Image Archives & Reproduction Service, MHRC), in discussion with the author, February 22nd, 2006.

²¹ Arguments can be made for the merits of meta-data, but I will not enter the debate at this point as the focus of this project is on historical collections of photographic objects.

rediscovering of lost elements of their original context, we are more often than not left with photographic objects which provide us subject matter only through their content and not their context.

How then is a cataloguer to overcome the hurdle of describing their collection if a large part of the standardised subject headings in practical use²² are relating to conceptual subjects which a cataloguer must usually obtain from a photograph's accompanying contextual information? Instead of trying to overcome the lack of contextual information. I propose to shift the analytical approach by emphasising the examination of a photograph's content. In this list of subject headings the focus of subject description is thus shifted from what a photograph is about to what the photograph is of. Such an approach alters the description of subjects from having to rely on the inconsistent presence of contextual information, to a predictable, standardised, and consistent communication of present and known quantities of a photograph's subject matter.

5.1 Selection of Vocabulary

A solution to the problem of empty fields resulting from cataloguers' lack of specialized knowledge is to render the variety of subject headings less redundant and more streamlined. These permit the efficient population of subject heading fields by existing staff. To accomplish this, the number of terms must be strictly limited so that they can be selected easily in a timely manner, and without much research.

With the representation of the subject matter almost exclusively based on the content of war photographs, this list of subject headings has a bias towards terminology that favours what is visually identifiable in war photographs, such as: types of equipment.

²² Such as LCSH or TGM

technologies, weapons, transportation equipment that was implemented in war, structures and facilities, people, behaviour, and types of observable actions or activities that take place within a war.

This list also intentionally omits certain terminology. Subjects of war not visually accessible in photographs, such as military strategies, theoretical concepts relating to war, aspects of logistics, stocks, inventory, or detailed information specific to particular campaigns, are not part of the list. So, terms such as "guerrilla warfare" or "war of attrition" have intentionally been omitted, as these are types or qualities of combat which are not visually observable and are concepts which would have to be sourced from contextual documentation. Similarly, the names or titles of specific military bases, regiments, or units, are not permitted within this terminology framework, as they require expert historians, or the good fortune of having proper documentation present, to be properly catalogued into the collection.

This is an important point of differentiation from war museums, as these are centred on such types of description and classification. This list of subject headings is not intended for a war museum. Rather, this list's design is tailored to a more general museum which wishes to increase access to its holdings of war photographs.

²³ A further example of the types of conscientious omissions which distinguish this list of subject headings from that of established lists can for example be found under the heading of "soldiers" in the LCSH which provides such narrower terms as: Jewish soldiers, military dependents, military unions, and missing in action.

5.2 Establishment of the Framework of Hierarchical Arrangement

An established logic of arrangement is of critical importance to the list of subject headings. An effective solution to the three main challenges observed in the case studies, ²⁴ is the design of a subject heading list with a clear and self-evident logic and hierarchical arrangement. A clear logic and concurrent arrangement eliminates ambiguity of meaning, enhances comprehension of subject matter, and once again does not require a researcher's or cataloguer's specialized knowledge in military history.

To this end, the proposed subject heading list adheres to a fixed and unchanging hierarchy of *controlled* vocabulary, ²⁵ employing only broader and narrower terms (and not related terms such as in LCSH or other thesauri). The goal behind this kind of structural restriction is to ensure that any one subject's chosen descriptive terminology is not repeated by being employed in differing contexts. This structure also prevents the ambiguity of meaning created by the presence of related, similar, or synonymous terms found throughout a list. The restricted structural arrangement accomplishes this by making the context of a subject heading easily recognisable, and thus distinguishing it from like headings. Clearly placed within a linear string of directly related broader and narrower terminology, ²⁶ and denied the diversion of a multiplicity of like-terms, subject headings are identifiable and easily understood. This kind of structural restriction of relationships between subject headings is not always possible. But if every effort is made

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²⁴ These are: ambiguous terminology, lengthy list with shallow hierarchical division, and the inability to catalogue properly.

²⁵ Restricting access to the addition or editing of the subject heading list is a necessity which will avoid the potentially harmful population of the list by unqualified personnel.

As a simplified example of this concept, consider that when confronted with the subject heading "train", one is left wondering is this a form of transportation, or is this a method of instruction? By looking at which terms are listed as broader and narrower, very quickly one can discern the intended meaning of a subject heading.

to adhere to this, there is much less potential for problems stemming from repetition of terms, redundancy, acronyms, synonyms, and spelling errors.

This list's structural design emphasises multiple short lists of terms with a greater number of tiers of hierarchical division. Since each subject heading is placed in a hierarchy of broader to narrower terms, the length of individual lists under single broader headings are reduced in exchange for a greater number of subsequent narrower subdivisions. Instead of the list being long, it favours greater hierarchical depth, using multiple tiers of division (up to seven in this list) of broader to narrower subject headings. The use of multiple tiers of subject headings greatly advances cataloguing by providing degrees of description instead of being restricted to either having or not having the ability to describe a subject. When describing a subject, cataloguers can follow the logic of arrangement of a given subject's string of headings to the extent of their knowledge. This approach utilises the entirety of a cataloguer's knowledge on the subject of war to the benefit of the collection's description. Even if a cataloguer cannot describe a subject to its most refined level, the multiple tiers of description provided in this list communicate a great deal more detail than would otherwise be possible.

5.2.1 Mechanics of Terminology Searches, and How They Influence Arrangement and Search Results

When creating a hierarchy of terminology there are particular applications of descriptive terms which need to be considered. Those terms that are to be employed by their combination at the searching stage, a process known as "postcoordination", ²⁷ or what we could commonly refer to as an aspect of Boolean searches (See Glossary), can

²⁷ Guidelines for the Construction, Format, and Management of Monolingual Thesauri: ANSI/NISO Z39.19-2003. 37.

be employed for this purpose in two different manners. The first, more general application of the postcoordination of terms can utilize subject headings from anywhere in the list, making use of as little as two subject headings, or the search process can be refined to make use of multiple subject headings. A noteworthy variation of this kind of searching is the ability to employ not just multiple terms, but entire strings of hierarchically related terminology (a process know as "up-posting" in combination with individual terms. The second more specific application of postcoordination involves the precise use of particularly favourable subject headings which facilitate a type of search that is tailored to the unique subject matter of a collection.

To make use of any collection, there are several fields within a database that allow for the most effective searches within the collection. For example, art museums' common access points²⁹ would be: artist, medium, or date, and perhaps even school of painting or nationality. In a collection of war photographs, it follows that these access points would be different.

The employment of postcoordination in this particular and advantageous manner, which favours the efforts of the cataloguer and researcher, requires that the subject headings have a specific placement within the first tier of a hierarchy so as to facilitate their immediate access. Positioning the access point subject headings so that they are visible to the user and practical to use supersedes the logic of the hierarchical arrangement.

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²⁸ "up-posting. The automatic assignment of broader terms in addition to the specific descriptor by which a document is indexed." *Guidelines for the Construction, Format, and Management of Monolingual Thesauri:* ANSI/NISO Z39.19-2003. 38.

²⁹ Baca, Introduction to Art Image Access: Issues, Tools, Standards, Strategie, 88.

The selection and placement of subject headings as access points to a collection is dependent on the purpose and content of the collection, as well as its use by researchers. If we consider how people use different collections and to what degree their interests differ in regard to subject matter, it is easy to understand why the main access points of a war photography collection would differ considerably from those of a museum of Flemish painting.

This list of subject headings dedicated to war photography has five purposefully placed access point subject headings. They provide the cataloguer/researcher with direct access to subject headings (and their relevant narrower terms) which support the most common types of searches performed in such a collection. ³⁰ These access points include: "Period and Conflict", "Place", "Nationality of Participants", "Nationality of Equipment Origin or Implementation", and [Branch of Military] "Service". 31 Having narrowed the search field considerably with the postcoordination of these access point subject headings (and their narrower terms), the researcher/cataloguer is free to refine the search through the further postcoordination of terms from the general hierarchically arranged list of "War" subject headings. Although the technical means of searching are identical, these two approaches to the list of subject headings have different outcomes. One is utilising a particular design of the subject heading list to limit the search field with broad effect, and the other is using the strict hierarchically arranged portion of the list for the intended purpose of zeroing in on specific subjects. In combination, these two applications of postcoordination provide an extremely effective search tool.

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³⁰ See Appendix A "List of Subject Headings" to see all the narrower terms represented under each access point term.

³¹ See the Manual in Appendix A to see the Subject Heading List's major terms' hierarchical arrangement.

6. Trial Cataloguing

The exercise of trial cataloguing demonstrated the list's effectiveness and broad applicability. It served as a foil for the logic of arrangement of the list of subject headings, and, even more significantly, as a reminder of the multitude of subjects that were overlooked when selecting terminology. Applying the list to the cataloguing of nearly a hundred war photographs, from the beginning of photography to modern day conflicts, showed it to be capable of adapting itself to a broad range of subject matter.

A sample comparison of cataloguing records illustrates the effectiveness of this list of subject headings. The object of this comparison is to show the difference in approach of this list from those of the case study institutions, as well as highlighting the characteristics of description of this genre of list. (See Appendix C for cataloguing comparisons.) The sample comparison was limited to comparing the new list of subject headings for war photography to the descriptive cataloguing practices of GEH and the MHRC. The Black Star Collection did not warrant comparison since the subject heading list was considerably less sophisticated than those of the other case study institutions.

6.1 Differences in Cataloguing Approach

The main difference between the newly proposed subject heading list and the subject description implemented by the MHRC and GEH, is the extent of precise descriptive detail they employ. The MHRC implements almost no standard subject headings. Rather, their descriptions emphasise broad access points in the form of uncontrolled local authorities describing areas of military designation. George Eastman House does implement a description of subjects in a very simple and predictable manner

which serves straightforward and relatively consistent searches. If searches in either of these collections were based on subject description fields alone, the extent of their description would provide only basic or ineffective search results.

The crutch, which supports the subject description of both these institutions, is the presence of the "Title" and "Summary" fields. Through the implementation of "free text" they create the illusion of a more in-depth level of description. Free text fields present problems as tools for cataloguing or describing collections since they are intended to play only a supporting role in description, but are often used more liberally. Free text fields are not suited to extensive subject description. Their overuse leads to inconsistent data entry and object retrieval because they are subject to the whims, mood, or faults of the cataloguer or researcher.

In comparing these two institutions, free text fields are employed in a manner that attempts to accomplish the same thing (describe content) as the new list of subject headings being proposed in this essay. This suggests that cataloguers realise the need for more accurate description but don't have the user friendly tools to accomplish such a task.

The different purposes of their collections affect the institutions' approaches towards subject description. The Military History Research Centre has a specific mandate towards military subject matter. In the frequent cases where regular subject headings have not been employed, cataloguers continued to enter basic skeletal information based on certain key access points. These are: "Cultural Group" (identifying the specific war), "Place of Research", and "Military Group" (indicating the different levels of military division relevant to the photograph's content). If managed with a controlled vocabulary (as they are not), such access points could serve as an effective basis for broad

arrangement. However, these local subject headings are usually utilised at a general level only, and, as such, are limited in the descriptive capabilities they provide.

In the case of GEH, its purpose is that of a photography museum. As such, it is not specialized in any particular area of subject matter outside of the history of photography. The museum's focus on the photographic medium makes an arrangement by Artist, Maker, or Photographer the most logical way to arrange its collection. For this reason, its lack of attention to the detailed description of content fits comfortably with its mandate, and does not disrupt the majority of queries put to its collection.

This new list of subject headings, offered here, accomplishes something similar to the Title and Summary fields employed by GEH and the MHRC. It provides a level of descriptive detail that is not available to the cataloguers in either of these institutions' subject heading lists. The difference between the new list and the use of free text in the Title and Summary fields is that it accomplishes detailed description in a standardised, structured and predictable manner. More than this, it also encompasses five broad search or access points for war photography collections. These combined features make it a more flexible system of description overall, which when combined with other cataloguing fields, has the potential to exceed GEH and the MHRC in providing access to war photography collections.

7. Observations and Conclusion

The notion that, once created, a list is complete is a fallacy that has plagued past standardised lists of subject headings. The refinement of a list of subject headings or a thesaurus is a process which could easily continue for a lifetime. Language and the culture or interests it describes are ever-changing and for this reason, a list of subject headings will never be fixed or complete.

It is important to address aspects of collections management, both specific to this project and of broader consideration, which present themselves as challenges. These serve the purpose of creating greater contextual understanding for the present and perhaps future development of this project.

7.1 Developments in Approach

Two main factors shaped the design of this list of subject headings: Logic of arrangement, and practicality of use. The approach to these two factors shifted during the course of the project. As opposed to what was originally thought, these two formative principles, at times, function in opposition to each other. As such, compromises in the design of the list, favouring practicality over logic, were required.

Term placement requires arrangement and rearrangement so that adherence to the fundamental structural logic is respected. This must be balanced by practical concerns for the terms' employment. This is a priority, since one of the driving forces of this project is the cultural and institutional need to facilitate such cataloguing and research endeavours. The first instance of practicality being chosen over logic was the creation of access points, followed by the placement of a small number of qualifying terms within the hierarchy.

Changes to the list, where the logic of arrangement was set aside to streamline the functionality of the whole, were decisions necessitating subjective judgement.

Acknowledging this characteristic of the design process allowed for subsequent evolutions to the hierarchical arrangement to be taken on with more realistic expectations of compromise. This shift in mindset facilitated a logical and yet practical end design.

7.2 Researching Conceptual Subjects within a Literal Framework

The goal of this list of subject headings is to facilitate the selection of the subjects that are visually represented in a photograph without requiring the expertise of military, or accompanying contextual knowledge.

Events of a conceptual nature can be well documented or represented by the proposed list of subject headings by shifting the manner of description from a conceptual basis to a literal visual one. This framework requires a researcher to rephrase questions to conform to the employed manner of description. If interested in images representing some conceptual aspect of war such as "victory", "war of attrition", "war crimes", "bravery", or "nationalism", the questions asked of the collection need to be redirected to the researcher asking "what does concept XYZ look like?" Or perhaps, "what visual aspect of concept XYZ am I actually interested in?" Once completed, then a question which will fit the intellectual arrangement of the collection may be asked. For example: Are there any photographs of victory parades? Are there any photographs of WWI soldiers fighting in trenches? Are there any photographs of torture, or victims of sexual assault?

In the same vein, should a cataloguer have particular interest in describing a photograph as representing a particular concept, he or she must adapt descriptions to conform to the descriptive terminology. For example, describing a photograph of guerrilla warfare would involve describing it by its contents, such as the type of *people* that are represented (guerrillas), the types of *events/activities* or *warfare/combat* that are represented, the types of *equipment* that are present, and, perhaps most importantly, the *conflict/period* from which the image originates. The identification of a concept in a photograph implies a certain degree of specialized knowledge about the subject on the part of the cataloguer. It is the visual facts in the photograph which identify the image as concept XYZ that the cataloguer should enter into the descriptive record and not the concept itself.

In the end, when dealing with photographic collections, what researchers usually want is an image of *something* that illustrates what it is they have in mind. It could be argued (even outside the context of this list) that it is much more efficient to discern what the *something* is that best represents the concept a researcher is wishing to obtain a photograph of and then proceed to search for it, rather than blindly searching for a concept among image records and hoping that *something* will turn up!

7.3 The Pedagogical Role of Intellectual Arrangement

When considering terminology, a vital point is the pedagogical role of the intellectual arrangement of lists of subject headings. With a simplified system of linear hierarchical arrangement that does not employ ambiguous terms, cataloguers and researchers, even when they lack specialized knowledge in the specific area of

terminology, can learn from its use. The navigation of the subject headings' strict arrangement, and the individual terms' mutual proximity and contextual relationships to one another, can educate users about the subject they are cataloguing or researching.

Instead of looking at the theoretical constructs of an arranged list of subject headings as being simply a tool for finding something, it should be acknowledged that it is more than a crude instrument, and is, in reality, a language of interpretation and comprehension. As such, its implementation forms strong cultural perceptions in its users about the subject matter it is representing.

Another pedagogical aspect of the arrangement of lists of subject headings to consider is specifically concerned with the demographics of its use. Although not as sophisticated as LCSH, TGM or the Getty's Art and Architecture Thesaurus (AAT), simplistic arrangements such as this one with straightforward broader-to-narrower terms are far more democratic and proactive in expanding the range of audience that can benefit from the cultural heritage described by these means.

More research should be conducted towards this subject, as a greater comprehension of the implications of the arrangement of subject heading lists could do much for the advancement of collections' management.

7.4 New Directions

The advancement of lists of subject headings lies in the tailoring of lists to specific areas of subject matter. Instead of focusing on how to be inclusive and making sure that every subject is equally described in a single standardised list of general scope, the discipline of visual description could be furthered by employing the alternative of

multiple specialized lists. The visual representation of art for example is far too broad to be successfully described in a single list of subject headings. If broken down into individual lists, each specialized in separate disciplines, these subject descriptions would be an enormous improvement.

The scope of subject heading lists such as the one proposed here cannot be ideal for all individual or institutional purposes. Although the end product of the catalogued subject description field would be less in-depth than those resulting from the efforts of a specialist in a particular field, consistent cataloguing of this nature would provide a more accessible resource than is presently available in many institutions. This would enhance access and research into photography (or other visual media), and nourish the development and interest in the field as a resource of cultural heritage.

7.5 Conclusions

A creative process, this project is best summarised as the forming of a hybrid system for describing war photographs. The most successful aspects of each approach to description was learned from and applied to this project's development.

There are three main organisational strategies implemented in this list of subject headings, each having profound influence on the effectiveness of the terminology employed for the description of war photographs. First there is the elimination of almost all conceptual terms. Secondly, there is the implementation of access points in the first tier of the list, providing the efficient utilisation of key subject headings for postcoordination to dramatically limit the scope of searches. And thirdly, there is the general employment of deep multi-tiered strings of terminology with strict parameters for

vocabulary control which eliminate the ambiguity of meaning of individual subject headings.

Standardised thesauri are not always the best source of subject headings for cataloguing the subjects visually represented in photographs. In a perfect world with endless resources, time, and expertise, perhaps these types of standardised lists could be adapted to function efficiently. Museums and archives however, particularly in these times of budgetary constraints, are not permitted the luxury of ideal conditions and are environments of compromise and of making do. Aside from budgetary constraints, institutional administrations seldom recognise the importance of maintaining such *hidden* aspects of a collection's functionality. Such upkeep lacks the glamour and visibility of other initiatives such as expansions, renovations, or acquisitions, and is regarded as a low priority. Regardless of the temperament of prevailing government or institutional administrations, it remains our obligation (perhaps more than ever) to maintain and even further the extent and sophistication of the access provided to collections of cultural importance. As such, it is more and more necessary that projects like these propose solutions that are tailored to be fruitful within the context of less than ideal circumstances.

There is no perfect solution for all collections; this encompasses both the strength and weakness of the approach taken here to developing terminology. The complication of such a cataloguing and research tool is that it has to be painstakingly tailored to each area of subject specialization prior to its implementation. The question for the end user is whether or not the benefit of access outweighs the initial investment of resources, and if this investment is in the long run less than the financial or cultural costs incurred as a result of an imperfect system.

³² David Wooters (Photo Archivist, George Eastman House), in discussion with the author, April, 2006.

APPENDIX-A

Subject Headings for the Description of War Photographs

This list of subject headings describes the topical subjects that are visually represented in war photographs. To increase access to this type of cultural heritage, this list is designed as a specialized yet user-friendly tool for the efficient description of war photographs which does not require expertise in the subject of war.

For the purpose of this list, a war photograph is described as a photographic representation that depicts actions, things, people, or places, which through its content or accompanying contextual information is associated with activities resulting from a particular war or conflict.

This list is restricted to the description of subject matter, and, as such, does not replace the role of such cataloguing fields as: form (of media), medium, functional type, name, author, title, text based descriptions, or notes. The controlled vocabulary within this subject heading list is restricted as much as possible to visually discernable subjects, and avoids the use of contextually based conceptual subject headings.

This list implements a hierarchical structure and strictly controlled vocabulary, minimising ambiguous, repetitive, or synonymous subject headings. Five subject headings have been singled out as access points to war photography collections and are placed in the first tier of the list to provide efficient narrowing of scope for searches or cataloguing. These are: "Period and Conflict", "Place", "Nationality of Participants", "Nationality of Equipment Origin or Implementation", and "Service". The use of the headings "Place" and "Nationality of Participants" is to be restricted to descriptions which are contemporaneous with the war or conflict in question. The terms "War (military aspects)" and "War (civilian aspects)", located in the first tier, provide access through the narrowing of terminology to specific subjects found in war photographs.

This list of subject headings was designed to be implemented at George Eastman House in Rochester, New York. It is comprised of subject headings from the war photography collections of George Eastman House, the Military History Research Centre in Ottawa, and Ryerson University's Black Star Historical Black & White Photography

Collection in Toronto. As well, headings for subjects were sourced from the Library of Congress Subject Headings and the Thesaurus for Graphic Materials.

This list, particularly in regards to "Period and Conflict" and "Nationality", is not intended to be finite. To remain relevant to a collection's content and growth, the list should undergo careful expansion under direct supervision of the collection manager.

The hierarchical list is structured so that broader subject headings begin on the left progressing with consecutive narrower terms located below and to the right. To familiarize the user with the general structure of the list, a reference diagram that illustrates the main subject headings and their hierarchical arrangement is provided on the following page.

Arrangement of Main Subject Headings

Reference Diagram

Period and Conflict			
Place			
Natio	nality of Participants	\geq	Access Points
Natio	nality of Equipment Origin or Implementation		
Service		J	
War (r	military aspects) activities / specific actions (military)		
	equipment & supplies (military)		
	events (broad societal context)		
	landscapes / terrain		
)	people (military)		
<u> </u>	personages (military)		
Y	structures / facilities / architecture (military)		Refined Searches or cataloguing
War (civilian aspects)		
	activities / specific actions (civilian)		
	equipment & supplies (civilian)	į	
	memorial sites (places)		
_ \	people (civilian)		
L/	personages (civilian)		
γ	structures / facilities / architecture (civilian)		

Subject Headings for the Description of War Photographs

Period and Conflict

1846-1848 Mexican-American War

1853-1856 Crimean War

1856-1860 Second Opium War / Arrow War

1861-1865 American Civil War

1870-1871 Franco Prussian War

1871 Paris Commune (France)

1879-1884 War of the Pacific (Bolivia, Chile, Peru)

1898 Spanish-American War

1899-1902 Anglo-Boer War (2nd)

1914-1918 World War I

1917-1918 Russian Revolution

1918-1922 Russian Civil War

1927-1950 Chinese Civil War

1928-1931 Congo War

1936-1939 Spanish Civil War

1937-1945 Second Sino-Japanese War

1939-1945 World War II

1945-1954 French Indochina War

1948-1949 Arab-Israeli War

1950-1953 Korean Conflict

1954-1975 Vietnam War (Second Indochina War)

1956-1957 Suez Crisis (The Sinai War)

1967 Arab-Israeli War (Six Day War)

1979-1989 Soviet Afghanistan War

1980-1988 Iran-Iraq War

1980-1992 El Salvador Civil War

1982 Falklands War

1990-1991 Gulf War (Desert Storm)

1992-1995 Bosnian War

1994 Rwanda Genocide

1996-1999 Kosovo War

ΡI

lace		
	Africa	
		Algeria
		Egypt
		Ethiopia
		Kenya
		Libya
		Morocco
		Nigeria
		Senegal
		South Africa
		Sudan
		Tunisia
	Asia	
		Burma
		China
		India
		Japan
		Korea
		Malaysia
		Nepal
		Pakistan
		Philippines
		Russia (Eurasian)
		Thailand / Siam
		Turkey (Eurasian)
		Vietnam
	Caribbean / Antilles Islands	
		Cuba
		Dominican Republic
		Haiti
	Central	America
		El Salvador
		Guatemala
		Honduras
		Nicaragua

Panama

Place (continued)

Europe

Albania

Austria

Belgium

Bosnia and Herzegovina

Bulgaria

Croatia

Czechoslovakia

Denmark

Finland

France

Germany

Greece

Holland

Hungary

Italy

Latvia

Lithuania

Norway

Poland

Portugal

Romania

Russia (Eurasian)

Serbia

Slovenia

Spain

Switzerland

Turkey (Eurasian)

Ukraine

United Kingdom of Britain

England

Ireland

Scotland

Wales

Yugoslavia

Place (continued)

Middle East

Armenia

Iran

Iraq

Israel

Lebanon

Palestine

Syria

North America

Canada

Mexico

United States

Oceania

Australia

East Timor

Indonesia

Micronesia

New Guinea

New Zealand

Papua New Guinea

Polynesia

South America

Argentina

Brazil

Chile

Peru

Uruguay

Nationality of Participants

Albanian

Algerian

American

Andorran

Argentinean

Armenian

Australian

Nationality of Participants (continued) Austrian Austro-Hungarian (1867-1918) Belgian Bosnian Brazilian British English Irish Scottish Welsh Bulgarian Burmese Canadian Chilean Chinese Costa Rican Croatian Cuban Czechoslovakian Danish Dominican Dutch Egyptian Ethiopian Filipino Finnish French German Greek Guatemalan Haitian Honduran Hungarian

Indonesian Iranian

Indian

Nationality of Participants (continued) Iraqi Israeli Italian Japanese Kenyan Korean North Korean South Korean Latvian Lebanese Liberian Libyan Lithuanian Malaysian Mexican Moroccan Nepali New Zealander Nicaraguan Nigerian Norwegian Pakistani Palestinian Panamanian Peruvian Polish Portuguese Romanian Russian Salvadoran

Senegalese Serbian Slovenian

Nationality of Participants (continued) Sudanese **Swiss** Syrian Thai / Siamese Tunisian Turkish / Ottoman Turkish Ukrainian Uruguayan Vietnamese North Vietnamese South Vietnamese Yugoslav Nationality of Equipment Origin or Implementation Albanian Algerian American Andorran Argentinean Armenian Australian Austrian Austro-Hungarian (1867-1918) Belgian Bosnian Brazilian **British** English Irish Scottish Welsh

Bulgarian Burmese Canadian Chilean

Nationality of Equipment Origin or Implementation (continued) Chinese Costa Rican Croatian Cuban Czechoslovakian Danish Dominican Dutch Egyptian Ethiopian Filipino Finnish French German Greek Guatemalan Haitian Honduran Hungarian Indian Indonesian Iranian Iraqi Israeli Italian Japanese Kenyan Korean North Korean South Korean Latvian

Lebanese Liberian Libyan Lithuanian Malaysian

Nationality of Equipment Origin or Implementation (continued) Mexican Moroccan Nepali New Zealander Nicaraguan Nigerian Norwegian Pakistani Palestinian Panamanian Peruvian Polish Portuguese Romanian Russian Salvadoran Senegalese Serbian Slovenian South African Spanish Sudanese **Swiss** Syrian Thai / Siamese Tunisian Turkish / Ottoman Turkish Ukrainian Uruguayan

South Vietnamese

North Vietnamese

Yugoslav

Vietnamese

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Service
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air (branch of military service)
        civil (branch of military service)
        combined / amphibious operations
        land (branch of military service)
        sea (branch of military service)
War (military aspects)
        activities / specific actions (military)
                blockades
                construction
                crying (military personnel)
                destruction & pillage
                         burning
                digging
                eating & drinking (military)
                         picnicking
                executions
                forced labour (prisoners of war)
                formation (aerial, cavalry, naval, troop)
                guard duty
                judicial proceedings
                         court martial trials
                         war crime trials
                loading / arming (ammunition, bombs, shells)
                maintenance / repair
                         mechanical work
                         painting
                         welding
                medical
                         convalescing (military)
                         medical treatment / first aid / surgery
                                 medical rehabilitation therapy
                meetings / talks / conferences / briefings (military)
                military inspections
                military interrogations
                military training
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military training (continued)
        drills / parade
                cavalry drills
                naval parades
        flight training
        military exercises / manoeuvres / war games
        physical training
        shooting (training)
mine clearing / sweeping
movement
        convoys
        deployment
                airdrop (equipment & supplies)
                airlift / airmobile operations
                ground (deployment)
                landing operations (amphibious operations)
                military sealift (equipment & supplies)
                parachuting (troops)
        deportations
        embarkations
        marching (military movement)
                forced march
        patrolling
        withdrawal / evacuations
                airlift / airmobile operations
                ground (evacuations)
personal care / hygiene & appearance
        grooming
                shaving
                shining shoes / boots
        washing / bathing
piloting
punishment & torture
recreation / socialising
        card games
        celebrations (in military context)
                victory celebrations (military)
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recreation / socialising (continued)
        dancing
        entertainment / shows / performances
        fraternization (with troops or inhabitants in occupied territory)
        kissing
        playing musical instruments (soldiers)
        reading
        sports
        sunbathing
        writing
recruiting & enlistment
refuelling
religious practices (military)
        confessions (military)
        mass (military)
        praying
rescues
rites & ceremonies
        flag raising
        funeral rites & ceremonies
                burials
                burials at sea
        military decorations (ceremonies)
salvage of equipment
starvation (military)
surrendering / capturing
terrorism (acts of terror)
        bombings (terrorism)
        hijackings
testing
        flight testing
        ordnance testing (weapons testing)
                nuclear weapons testing
warfare / combat
        air warfare
                dogfighting
                kamikaze / suicide attacks
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warfare / combat (continued)
                bombardment (the act of firing artillery or releasing bombs)
                         aerial bombardment
                        artillery bombardment
                                 antiaircraft fire
                                 rocket launch
                charging / running (combat)
                        cavalry charge
                chemical warfare
                        poison gas attack
                explosions
                        demolitions, military
                        nuclear explosions (warfare)
                night warfare
                naval warfare
                        scuttling of warships
                        sinking of naval ships
                        submarine warfare
                shooting (warfare / combat)
equipment & supplies (military)
        arms & armament
                artillery (weaponry)
                        antiaircraft artillery
                        cannons
                                cannon barrels
                        batteries
                                floating batteries (platforms)
                        mortars
                        railway artillery
                biological weapons
                bombs (aerial)
                bullets
                cannon balls
                chemical weapons
                        agent orange
                        poison gas
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poison gas (continued)
                        chlorine gas
                        mustard gas
                        nerve gas
        edged weapons
                bayonets
                swords
                trench knives / daggers
        explosives, military
                depth charges
                grenades (explosives)
                        hand grenades
                                fragmentation grenades
                        rifle grenades
                                antitank grenades
                mines
                        land mines
                        naval mines / submarine mines
        firearms
                handguns
                        automatic handguns
                       revolvers
                machine guns
                muskets
                rifles, and assault rifles
                submachineguns
        flame throwers
        nuclear weapons
        rockets / missiles
               cruise missiles
        shells (artillery)
        slings
        torpedoes
               aerial torpedoes (launched from aircraft)
clothing
        camouflage
        footwear
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footwear (continued)
                 boots
                 shoes
        insignia
                 badges of rank
                 shoulder patches
        military decorations (adornment)
        protective clothing
                 body armour
                 gasmasks
                helmets
                         flight helmets
        uniforms
                dress uniforms
                flight suits
                navy uniforms
                hats / caps
communications (military)
        bugles
        carrier pigeons
        code machines
                Enigma
        flags
                national flags
                regimental banners
                signal flags
        leaflets
        mail / letters / packages (military)
        maps
        photographs (subject)
        posters / billboards
        radars
        radios (military)
        signal flares
       signal lights
       sirens / alarms
                air raid sirens
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communications (military) (continued)
        smoke grenades
        telegraphs (military)
        telephones (military)
        televisions (military)
containers
        barrels
        boxes
        coffins
        crates
        fuel tanks
                jerrycans
destroyed / damaged / wreckage (military equipment)
food
        military rations
                chocolate
                field rations
photographic apparatus & supplies
        cameras
        motion picture devices
                motion picture cameras
transportation vehicles / mobile armament
        land (transportation)
                animals
                        horses
                                cavalry horses
                        camels
                        dead animals
                        dogs (military)
                        mules / donkeys
                        oxen
                horse drawn vehicles
                        wagons
                motor vehicles
                        ambulances (military)
                        armoured vehicles
                                armoured personnel carriers
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armoured vehicles (continued)
                         tanks
                 jeep automobiles
                 motorcycles
                 military trucks
                 trains (military)
                         armoured trains
                         hospital trains
                         railroad cars
sea vessels
        landing craft
        merchant ships
                armed merchant ships
        military sealift (cargo ships)
        naval convoys
        shipwrecks
        submarines / u boats
        warships
                aircraft carriers
                armed yachts
                armoured vessels (mid 19th century)
                battleships
                cruisers
                patrol boats / gunboats / torpedo boats
aircraft
        airplanes (military)
                airlift, military (cargo transport)
                airtankers
                attack planes / fighter planes
                biplanes
                bombers
                        machinegun turrets
                aliders
                reconnaissance aircraft
                seaplanes
                training planes
       airships
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aircraft (continued)
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helicopters (military)

attack helicopters

transport helicopters

decorations (artistic)

events (broad societal context)

aid to civil powers

annexations

armed forces demobilization

armed forces mobilization

armistices

civil war

colonialism

humanitarian aid

martial law

military occupations

peace keeping

postwar

religious wars

jihad

revolutions

landscapes / terrain

bodies of water

lakes

oceans / seas / open water

rivers

coasts

beaches

craters

croplands

deserts

jungles

mountains

muddy

snowy

urban

```
urban (continued)
                ghetto
people (military)
        casualties (military)
                dead persons (military)
                        dismembered / skeletal remains
                wounded (military)
                        burn victims (military)
                                 napalm victims (military)
                        handicapped persons (military)
                                 amputees (military)
                        nuclear weapons victims (military)
        chaplains (military)
        executioners
                firing squads
        medical personnel
                doctors
                field medics
                nurses
       military police
       military scientists
       musicians (military)
                military bands
       officers (people)
       paramilitary groups
                military cadets
                        Hitler youth
                militias
               salvation army (civilian group)
               scouts and scouting (civilian group)
       prisoners of war
       resistance fighters
       revolutionaries
       soldiers
               airborne troops
                        parachute troops
```

```
soldiers (continued)
                airmen
                        air pilots
                                 fighter pilots
                                 test pilots
                        bombardiers
                        flight crews
                artillerymen
                cavalrymen
                children as soldiers
                engineers
                garrison (soldiers)
                guerrillas
                infantrymen
                        ski troops
                mercenary troops
                military deserters
                radio operator
                sailors
                        deck crews
                        helmsmen
                        ship captains
                scouts (military role)
                tank crews
                women soldiers
        terrorists
        war correspondents (military)
                war photographers (military)
personages (military)
        high ranking officers (personages)
                [list of names to be populated by collection manager]
        military leaders
                [list of names to be populated by collection manager]
        war criminals (at trial or post prosecution)
                [list of names to be populated by collection manager]
```

```
structures / facilities / architecture (military)
        air raid shelters / bomb shelters (military)
        barracks
        bases (military)
                air bases
                navy-yards and naval stations
        crew quarters (naval)
        decoys / false structures representing equipment
        destroyed / damaged (military)
                bullet holes (damage in military context)
                fire damaged (military context)
        detention facilities
                concentration camps (political / racial / religious)
                internment / relocation camps (foreign nationals)
                military prisons (military law)
                        brig (navy)
                prisoner of war camps (soldiers)
        factories
                assembly lines
        fortifications
                barbed wire
                barricades
                bunkers
                castles
                entrenchments
                        foxholes (U.S.) / firetrenches (Brit.)
                forts
                        garrisons (forts)
                gun turrets
               tunnels (underground fortifications)
               walls / ramparts
                        city walls
               watch-towers / guard towers / lookout posts
       graves (field burial / non-official / unmarked)
               mass graves
       hangars
       mess halls (cafeterias)
```

```
structures / facilities / architecture (military) (continued)
                 military camps (soldiers)
                          military training camps
                 military headquarters
                         war room (strategy meeting room)
                 military hospitals
                         field hospitals
                         veterans' hospitals
                 military schools / colleges
                 missile silos
                 officers' clubs
                 officers' quarters
                 rifle ranges
                         shooting galleries (indoor or covered)
                 stables (cavalry)
                 storage facilities
                         armouries / arsenals
                         magazines
                 transportation (structures / infrastructure)
                         bridges
                                  military bridges
                                          pontoon bridges
                                  railroad bridges
                         canals / locks
                         railroad stations
                         railroad tracks
                         roads
                         road signs
                         tunnels (transportation)
                 tents
War (civilian aspects)
        activities / specific actions (civilian)
                 air raid drills
                 air shows
                 celebrations (civilian)
                         victory celebrations (civilian)
```

```
activities / specific actions (civilian) (continued)
        commemorations (activities)
                 armed forces day (US)
                 historical reenactments
                 memorial day, decoration day (US)
                remembrance day, veterans day, armistice day
        convalescing (civilian)
        crying (civilian)
        eating & drinking (civilian)
        evacuations (civilian)
        fires (destructive)
        food relief
                bread & soup lines
        homecomings / reunions
        meetings / talks / conferences / briefings (civilian )
                 summit meetings (political)
        prostitution
        public gatherings
                 public rallies
                         peace rallies / war protests
                         war rallies (pro war)
        reconstruction (civilian)
        religious practices (civilian)
                 confessions (civilian)
                 mass (civilian)
                 praying (civilian)
        ridicule / chastisement / harassment
        scrap drives
        starvation (civilian)
        war work (civilian war effort)
equipment & supplies (civilian)
        cameras (civilian)
        communications (civilian)
                 mail / letters / packages (civilian)
                 newspapers (subject)
                 radios (civilian)
```

```
communications (civilian) (continued)
                 telegraphs (civilian)
                 telephones (civilian)
                 televisions (civilian)
        prosthetic limbs
        transportation (civilian vehicles)
                 airplanes (civilian)
                 airships
                 ambulances (civilian)
                 buses
                 cars
                 helicopters (civilian)
                 trains (civilian)
                         elevated trains
                         subways / underground
                         trolleys / street cars
                trucks
memorial sites (places)
        battlefields (postwar)
        military parks
        cemeteries
                military cemeteries
people (civilian)
        activists / protestors
        aid workers (non partisan)
                red cross
        casualties / victims (civilian)
                dead persons (civilian)
                sexual assault / rape victims
                wounded (civilian)
                         burn victims (civilian)
                                 napalm victims (civilian)
                         handicapped persons (civilian)
                                 amputees (civilian)
                         nuclear weapons victims (civilian)
```

```
people (civilian) (continued)
         children
                 infants
                 war orphans
         collaborators
         farmers
         fire fighters
         hostages
         men
         older people
         people associated with religion
                 clergy
                 missionaries
                 monks
                 nuns
         physicians
         police
        refugees
        veterans
        war correspondents (civilian)
                 war photographers (civilian)
        women
                 prostitutes
                 war brides
                war widows
personages (civilian)
        actors / artists / entertainers / musicians
                [list of names to be populated by collection manager]
        politicians (non-military)
                [list of names to be populated by collection manager]
        spiritual leaders
                [list of names to be populated by collection manager]
structures / facilities / architecture (civilian)
        air raid shelters / bomb shelters (civilian)
        airports (civilian)
```

structures / facilities / architecture (civilian) (continued)

churches / cathedrals / chapels

destroyed / damaged (civilian)

bullet holes (damage in civilian context)

fire damaged (civilian context)

ruins

embassies

dwellings

dormitories

houses

industrial facilities (civilian)

agricultural

transportation manufacture

legion halls (veteran organisations)

military towns

refugee camps (civilian)

war memorials / soldiers' monuments

APPENDIX-B

Controlled Vocabulary for the Description of War Photographs

1846-1848	Mexican-American	War.
1070 1070	IVICALCALI-ALLELICALI	vvai

1853-1856 Crimean War

1856-1860 Second Opium War / Arrow War

1861-1865 American Civil War

1870-1871 Franco Prussian War

1871 Paris Commune (France)

1879-1884 War of the Pacific (Bolivia, Chile, Peru)

1898 Spanish-American War

1899-1902 Anglo-Boer War (2nd)

1914-1918 World War I

1917-1918 Russian Revolution

1918-1922 Russian Civil War

1927-1950 Chinese Civil War

1928-1931 Congo War

1936-1939 Spanish Civil War

1937-1945 Second Sino-Japanese War

1939-1945 World War II

1945-1954 French Indochina War

1948-1949 Arab-Israeli War

1950-1953 Korean Conflict

1954-1975 Vietnam War (Second Indochina War)

1956-1957 Suez Crisis (The Sinai War)

1967 Arab-Israeli War (Six Day War)

1979-1989 Soviet Afghanistan War

1980-1988 Iran-Iraq War

```
1980-1992 El Salvador Civil War
1982 Falklands War
1990-1991 Gulf War (Desert Storm)
1992-1995 Bosnian War
1994 Rwanda Genocide
1996-1999 Kosovo War
activists / protestors
activities / specific actions (civilian)
activities / specific actions (military)
actors / artists / entertainers / musicians
aerial bombardment
aerial torpedoes
 Here are entered works depicting torpedoes to be launched from aircraft.
Africa
 Here are entered works depicting countries located in the continent of Africa with the
exception of countries considered as part of the Middle East.
agent orange
agricultural
aid to civil powers
aid workers
  Here are entered works depicting non-partisan aid workers.
air (branch of military service)
air bases
air pilots
air raid drills
air raid shelters / bomb shelters (civilian)
air raid shelters / bomb shelters (military)
air raid sirens
air shows
air warfare
airborne troops
```

```
aircraft
 aircraft carriers
airdrop (equipment & supplies)
airlift / airmobile operations (deployment)
airlift / airmobile operations (withdrawal / evacuations)
airlift, military (cargo transport)
airmen
airplanes (civilian)
airplanes (military)
airports (civilian)
airships (civilian)
  Here are entered works depicting civilian balloons, dirigibles,
blimps, and zeppelins.
airships (military)
  Here are entered works depicting military balloons, dirigibles,
blimps, and zeppelins.
airtankers
Albania
Albanian
Algeria
Algerian
ambulances (civilian)
ambulances (military)
American
amputees (civilian)
amputees (military)
Andorran
animals
annexations
antiaircraft artillery
antiaircraft fire
```

antitank grenades Argentina Argentinean armed forces day (US) armed forces demobilization Here are entered works depicting events surrounding military demobilization at the conclusion of a war. armed forces mobilization Here are entered works depicting events surrounding military mobilization at the onset of war. armed merchant ships armed yachts Armenia Armenian armistices armoured personnel carriers armoured trains armoured vehicles armoured vessels Here are entered works depicting mid 19th century warships. armouries / arsenals arms & armament artillery (weaponry) artillery bombardment Here are entered works depicting the act of firing artillery. artillerymen Asia assembly lines

attack planes / fighter planes

attack helicopters

Australian

Austria
Austrian
Austro-Hungarian (1867-1918)
automatic handguns
badges of rank
barbed wire
barracks
barrels
barricades
bases (military)
batteries
battlefields (postwar)
battleships
bayonets
beaches
Belgian
Belgium
biological weapons
biplanes
blockades
bodies of water
body armour
bombardiers
bombardment
Here are entered works depicting the act of firing artillery or releasing bombs.
bombers
bombings (terrorism)
bombs (aerial)
boots
Bosnia and Herzegovina
Bosnian

boxes
Brazil
Brazilian
bread & soup lines
bridges
brig (navy)
British
bugles
Bulgaria
Bulgarian
bullet holes (damage in civilian context)
bullet holes (damage in military context)
bullets
bunkers
burials
burials at sea
Burma
Burmese
burn victims (civilian)
burn victims (military)
burning
buses
camels
cameras (civilian)
cameras (military)
camouflage
Canada
Canadian
canals / locks
cannon balls
cannon barrels

cannons card games Caribbean / Antilles Islands carrier pigeons cars castles casualties (military) casualties / victims (civilian) cavalry charge cavalry drills cavalry horses cavalrymen celebrations (civilian) celebrations (in military context) cemeteries Central America chaplains (military) charging / running (combat) chemical warfare chemical weapons children children as soldiers Chile Chilean China Chinese chlorine gas chocolate churches / cathedrals / chapels city walls

civil (branch of military service)

civil war clergy clothing coasts code machines coffins collaborators colonialism combined / amphibious operations Here are entered works depicting amphibious operations involving the combined efforts of both naval and land branches of military service. commemorations (activities) communications (civilian) communications (military) concentration camps (political / racial / religious) confessions (civilian) confessions (military) construction containers convalescing (civilian) convalescing (military) convoys Costa Rican court martial trials craters crates crew quarters (naval) Croatia Croatian croplands cruise missiles

cruisers crying (civilian) crying (military personnel) Cuba Cuban Czechoslovakia Czechoslovakian dancing Danish dead animals dead persons (civilian) dead persons (military) deck crews decorations (artistic) decoys / false structures representing equipment demolitions, military Denmark deployment deportations depth charges deserts destroyed / damaged (civilian) destroyed / damaged (military) destroyed / damaged / wreckage (military equipment) destruction & pillage Here are entered works that depict the action or process of destroying or pillaging property. detention facilities digging dismembered / skeletal remains doctors

dogfighting dogs (military) Dominican Dominican Republic dormitories dress uniforms drills / parade Dutch dwellings eating & drinking (civilian) eating & drinking (military) edged weapons **Egypt** Egyptian El Salvador elevated trains embarkations Here are entered works depicting the embarkation process of troop transports. embassies engineers **England English** entertainment / shows / performances entrenchments equipment & supplies (civilian) equipment & supplies (military) Ethiopia Ethiopian Europe evacuations (civilian) events (broad societal context)

executioners
executions
explosions
explosives, military
factories
farmers
field hospitals
field medics
field rations
fighter pilots
Filipino
Finland
Finnish
fire arms
fire damaged (civilian context)
fire damaged (military context)
fire fighters
fires (destructive)
firing squads
flag raising
flags
flame throwers
flight crews
flight helmets
flight suits
flight testing
flight training
floating batteries (platforms)
Here are entered works depicting floating artillery platforms distinct from warships.
food
food relief

footwear forced labour (prisoners of war) forced march formation (aerial, cavalry, naval, troop) fortifications forts foxholes (U.S.) / firetrenches (Brit.) fragmentation grenades France fraternization Here are entered works that depict the socialising of soldiers with enemy troops or enemy civilians in occupied territories. French fuel tanks funeral rites & ceremonies garrison (soldiers) garrisons (forts) gasmasks German Germany ghetto gliders graves (field burial / non-official / unmarked) Greece Greek grenades (explosives) grooming ground (deployment) ground (evacuations) guard duty Guatemala

Guatemalan guerrillas gun turrets Haiti Haitian hand grenades handguns handicapped persons (civilian) handicapped persons (military) hangars hats / caps helicopters (civilian) helicopters (military) helmets helmsmen high ranking officers (personages) hijackings historical reenactments Hitler youth Holland homecomings / reunions Honduran horse drawn vehicles horses hospital trains hostages houses humanitarian aid Hungarian Hungary India

Indian
Indonesian
industrial facilities (civilian)
infantrymen
infants
insignia
internment / relocation camps (foreign nationals)
Iran
Iranian
Iraq
Iraqi
Ireland
Irish
Israeli
Italian
Italy
Japan
Japanese
jeep automobiles
jerrycans
jihad
judicial proceedings
jungles
kamikaze / suicide attacks
Kenya
Kenyan
kissing
Korea
Korean
lakes
land (branch of military service)

land (transportation) land mines landing craft landing operations (amphibious operations) landscapes / terrain Latvia Latvian leaflets Lebanese Lebanon legion halls (veteran organisations) Liberian Libya Libyan Lithuania Lithuanian loading / arming (ammunition, bombs, shells) machine guns machinegun turrets magazines mail (letters / packages) (civilian) mail (letters / packages) (military) maintenance / repair Malaysia Malaysian maps marching (military movement) martial law mass (civilian) mass (military) mass graves

mechanical work

medical

medical personnel

medical rehabilitation therapy

medical treatment / first aid / surgery

meetings / talks / conferences / briefings (civilian)

meetings / talks / conferences / briefings (military)

memorial day, decoration day (US)

memorial sites (places)

men

mercenary troops

merchant ships

mess halls (cafeterias)

Mexican

Mexico

Middle East

military bands

military bridges

military cadets

military camps (soldiers)

military cemeteries

military decorations (adornment)

military decorations (ceremonies)

military deserters

military exercises / manoeuvres / war games

military headquarters

military hospitals

military inspections

military interrogations

military leaders

military occupations

military parks

military police

military prisons (military law)

military rations

military schools / colleges

military scientists

military sealift (cargo ships)

military sealift (equipment & supplies)

military towns

military training

military training camps

military trucks

militias

mine clearing / sweeping

mines

missile silos

missionaries

monks

Moroccan

Morocco

mortars

motion picture cameras

motion picture devices

motor vehicles

motorcycles

mountains

movement

muddy

mules / donkeys

musicians (military)

muskets

mustard gas

napalm victims (civilian)

napalm victims (military)

national flags (emblems)

Nationality of Equipment Origin or Implementation

Nationality of Participants

naval convoys

naval mines / submarine mines

naval parades

naval warfare

navy uniforms

navy-yards and naval stations

Nepal

Nepali

nerve gas

New Guinea

New Zealand

New Zealander

newspapers (subject)

Nicaragua

Nicaraguan

Nigeria

Nigerian

night warfare

North America

North Korean

North Vietnamese

Norway

Norwegian

nuclear explosions (warfare)

nuclear weapons

nuclear weapons testing

nuclear weapons victims (civilian)

nuclear weapons victims (military)

nuns

nurses

Oceania

oceans / seas / open water

officers (people)

officers' clubs

officers' quarters

older people

ordnance testing (weapons testing)

oxen

painting

Pakistan

Pakistani

Palestine

Palestinian

Panama

Panamanian

parachute troops

parachuting (troops)

paramilitary groups

patrol boats / gunboats / torpedo boats

patrolling

peace keeping

peace rallies / war protests

people (civilian)

people (military)

people associated with religion

Period and Conflict

```
personages (civilian)
personages (military)
personal care (hygiene / appearance)
Peru
Peruvian
Philippines
Philippino
photographic apparatus & supplies
photographs (subject)
physical training
physicians
picnicking
piloting
Place
playing musical instruments (soldiers)
poison gas
poison gas attack
Poland
police
Polish
politicians (non-military)
pontoon bridges
Portugal
Portuguese
posters / billboards
postwar
praying (military)
praying (civilian)
prisoner of war camps (soldiers)
prisoners of war
prosthetic limbs
```

prostitutes

prostitution

protective clothing

public gatherings

public rallies

punishment & torture

radars

radio operator

radios (civilian)

radios (military)

railroad bridges

railroad cars

railroad stations

railroad tracks

railway artillery

reading

reconnaissance aircraft

reconstruction (civilian)

recreation / socialising

recruiting & enlistment

red cross

refuelling

refugee camps (civilian)

refugees

regimental banners

religious practices (civilian)

religious practices (military)

religious wars

remembrance day, veterans day, armistice day

rescues

resistance fighters

revolutionaries revolutions revolvers ridicule / chastisement / harassment rifle grenades rifle ranges rifles, and assault rifles rites & ceremonies rivers road signs roads rocket launch rockets / missiles Romania Romanian ruins Russia Russian sailors Salvadoran salvage of equipment salvation army (civilian group) Scotland Scottish scouts (military role) scouts and scouting (civilian group) scrap drives scuttling of warships

sea (branch of military service) sea vessels seaplanes

Senegal Senegalese Serbia Serbian Service sexual assault / rape victims shaving shells (artillery) shining shoes / boots ship captains shipwrecks shoes shooting (training) shooting (warfare / combat) shooting galleries (indoor or covered) shoulder patches signal flags signal flares signal lights sinking of naval ships sirens / alarms ski troops slings Slovenia Slovenian smoke grenades

snowy

soldiers

South Africa

South African

South America

South Korean South Vietnamese Spain Spanish spiritual leaders sports stables (cavalry) starvation (civilian) starvation (military) storage facilities structures / facilities / architecture (civilian) structures / facilities / architecture (military) submachineguns submarine warfare submarines / u boats subways / underground Sudan Sudanese summit meetings (political) sunbathing surrendering / capturing **Swiss** Switzerland swords Syria Syrian tank crews tanks telegraphs (civilian)

telegraphs (military)

telephones (civilian)

telephones (military) televisions (civilian) televisions (military) tents terrorism (acts of terror) terrorists test pilots testing Thai / Siamese Thailand / Siam torpedoes training planes trains (civilian) trains (military) transport helicopters transportation (structures / infrastructure) transportation (civilian vehicles) transportation manufacture transportation vehicles / mobile armament trench knives / daggers trolleys / street cars trucks Tunisia Tunisian tunnels (transportation) tunnels (underground fortifications) Turkey Turkish / Ottoman Turkish Ukraine Ukrainian

uniforms

United Kingdom of Britain **United States** urban Uruguay Uruguayan veterans veterans' hospitals victories (end of war) victory celebrations (civilian) victory celebrations (military) Vietnam Vietnamese wagons Wales walls / ramparts War (military aspects) war brides war correspondents (civilian) war correspondents (military) war crime trials war criminals (trial or post prosecution) war memorials / soldiers' monuments war orphans war photographers (civilian) war photographers (military) war rallies (pro war) war room (strategy meeting room)

warfare / combat warships

war work (civilian war effort)

war widows

washing / bathing

watchtowers / guard towers / lookout posts

welding

Welsh

withdrawal / evacuations

women

women soldiers

wounded (civilian)

wounded (military)

writing

Yugoslav

Yugoslavia

APPENDIX-C

Trial Cataloguing Comparison

To illustrate differences in approach towards subject description, this Appendix provides a side by side comparison of the descriptive practices of the Military History Research Centre in Ottawa, George Eastman House in Rochester, N.Y., and the application of subject headings proposed in this project.

Twelve images are accompanied by the current descriptions used by the institutions from which they originate. On the adjacent page, are located descriptions of the same photographs utilising the subject heading list developed for this project. As well as providing the descriptive end terms, this exercise in cataloguing illustrates the strings of broader to narrower subject headings from the new list. This is done to demonstrate the cataloguing potential of "up-posting" to the photograph's description. The cataloguing of subject descriptions begins with the application of the five access points (if they are relevant), followed by the subject headings "War (military aspects)", and "War (civilian aspects)", which describe the more specific aspects of war.

In scrutinizing these examples it is important to remember that this project concerns itself only with the "Subject" field(s) of a catalogue record, and does not take into consideration fields such as "Date" (outside of the context of identifying a war or conflict), "Title", "Summary", "Description", "Functional Type", and the like. This being said, it is necessary to recognise that information about subject matter can be communicated through variant subject cataloguing fields such as: "Date"(if it is employed as a compound term to identify a war or conflict), "Cultural Group", "Military Group" and "Place of Research". A comparative analysis of these descriptive practices is found in the main body of the report.

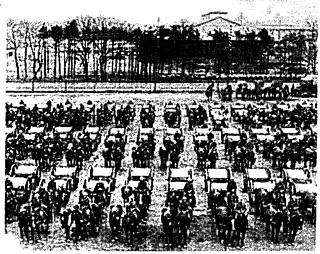
Original Subject Description from the Military History Research Centre, Ottawa, Canada³³

Title WWI ammunition column assembled on homefront field [graphic material]

Publisher/Date [1914-1919]

Description 1 photograph.

Image



Notes Title based on content.

Summary Photo is a head-on view of soldiers and horse-drawn ammunition wagons, assembled in formation on a large field (parade grounds). Appears to be homefront. Copy of Public Archives photo C-61653.

Year of Research 1918

1919

Subjects Artillery

Ammunition Column

Cultural Group 1914-1918

Military Group Land

Control No. 19730122-002

³³ Catalogue of the Libraries and Archives of the Canadian Museum of Civilization and the Canadian War Museum, http://geoweb.civilisations.ca:8001/html/geaclogin/geaclogin.html (accessed June, 2006).

Description Using New Subject Heading List:

- Period and Conflict→1914-1918 World War I
- •Service → land (branch of military service)
- •War (military aspects) →activities / specific actions (military)→formation (aerial, cavalry, naval, troop)
- •War (military aspects)→military training→drills / parade→cavalry drills
- •War (military aspects)→ equipment & supplies (military)→arms & armament
- •War (military aspects)→ equipment & supplies (military)→transportation vehicles / mobile armament→land (transportation)→ animals→horses→cavalry horses
- •War (military aspects)→ equipment & supplies (military)→transportation vehicles / mobile armament→land (transportation)→ horse drawn vehicles→wagons
- •War (military aspects)→ equipment & supplies (military)→ transportation vehicles / mobile armament→land (transportation)→ motor vehicles
- •War (military aspects)→people (military)→soldiers→cavalrymen

Original Subject Description from the Military History Research Centre, Ottawa, Canada³⁴

Title Students and friends at the Wright School of Flying, Dayton, Ohio [graphic material]

Publisher/Date Aug. 1914

Description 1 photograph.

Image



Notes Title based on content. Copied by National Archives as C-48920.

Summary Photo depicts three women and four men, casually seated outdoors, outside of what looks like a barn.

Year of Research 1914

Cultural Group 1914-1918

Military Group Air

Land

Control No. 19720244-001

Artifact No. 55-2-4

³⁴ Catalogue of the Libraries and Archives of the Canadian Museum of Civilization and the Canadian War Museum, http://geoweb.civilisations.ca:8001/html/geaclogin/geaclogin.html (accessed June, 2006).

Description Using New Subject Heading List:

- Period and Conflict→ 1914-1918 World War I
- Place→ North America→ United States
- Nationality of Participants→ American
- Service → air (branch of military service)
- War (civilian aspects)→ people (civilian)

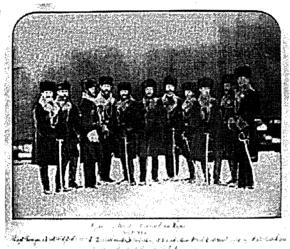
Original Subject Description from the Military History Research Centre, Ottawa, Canada³⁵

Title Officers of the Royal Canadian Rifles, about 1858 [graphic material]

Publisher/Date ca. 1858

Description 1 photograph: b&w.

Image



Summary Photograph depicts eleven officers, standing outdoors in the snow, all of whom are identified on the bottom portion of the matt that surrounds the photo.

Year of Research 1858

Military Group Land

Canadian Army

Control No. 19680249-004

Artifact No. 53-1-3

⁻

³⁵Catalogue of the Libraries and Archives of the Canadian Museum of Civilization and the Canadian War Museum, http://geoweb.civilisations.ca:8001/html/geaclogin/geaclogin.html (accessed June, 2006).

Description Using New Subject Heading List:

- Nationality of Participants→ Canadian
- Service → land (branch of military service)
- War (military aspects)→ equipment & supplies (military)→ arms & armament→ edged weapons→ swords
- War (military aspects)→ equipment & supplies (military)→ clothing→uniforms→hats /
 caps
- War (military aspects)→ landscapes / terrain→snowy
- War (military aspects)→ people (military)→officers

Original Subject Description from the Military History Research Centre, Ottawa, Canada³⁶

Title Boer War photograph collection [graphic material]

Publisher/Date 1895-1899

Description 20 photographs: b&w.

Image 🔭



Notes #14 to #20 missing June 14, 2000. Copied by the National Archives as #1 C-9695, #2 C-9694, #3 C-9696, #5 C-9697

Summary #1 Pte. F. Coombes, 5th Royal Scots in highland dress.
#2 C Company 5th Royal Scots in highland dress, June
27, 1896 in Montreal, #3 F. Coombes, 5th Royal Scotts in
Khaki uniform, #4,#5 monument to Canadians at
Bloemfontein July 1948, #6-#20 modern reproductions
from the South-African War with inscriptions on back

Cultural Group 1899-1902; Anglo-Boer War

Military Group Land

Canadian Army

Control No. 19630044-014

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³⁶ Catalogue of the Libraries and Archives of the Canadian Museum of Civilization and the Canadian War Museum, http://geoweb.civilisations.ca:8001/html/geaclogin/geaclogin.html (accessed June, 2006).

Description Using New Subject Heading List:

- Period and Conflict→ 1899-1902 Anglo-Boer War (2nd)
- Place → Africa → South Africa
- Nationality of Participants → Canadian
- Service → land (branch of military service)
- War (military aspects)→ activities / specific actions (military)→ medical
- War (military aspects)→equipment & supplies (military)→ transportation vehicles / mobile armament→land (transportation)→ horse drawn vehicles→wagons
- War (military aspects)→ events (broad societal context)→ colonialism
- War (military aspects)→ people (military)→ casualties (military)→ wounded
 (military)→ handicapped persons (military)
- War (military aspects)→ people (military)→ medical personnel→field medics
- War (military aspects)→ people (military)→ soldiers→infantrymen

Original Subject Description from the Military History Research Centre, Ottawa, Canada³⁷

Title Halifax Garrison Artillery crossing a stream, Swift Current, North West Field Force, May 1885 [graphic material]

Publisher/Date May 1885

Description 1 photograph: b&w;

Image



Summary Photo depicts members of the Halifax Garrison Artillery, halfway across a stream, artillery equipment in tow.
Caption beneath image reads: Halifax Garrison Artillery crossing a stream "Swift Current" North West Field Force May 1885.

Military Group Land

Canadian Army

Control No. 19610047-003

Other Names Halifax Artillery

³⁷Catalogue of the Libraries and Archives of the Canadian Museum of Civilization and the Canadian War Museum, http://geoweb.civilisations.ca:8001/html/geaclogin/geaclogin.html (accessed June, 2006).

- Place → North America → Canada
- Nationality of Participants→ Canadian
- Service → land (branch of military service)
- War (military aspects)→ activities / specific actions (military)→ military training
- War (military aspects)→ activities / specific actions (military)→ movement
- War (military aspects)→equipment & supplies (military)→ arms & armament→
 artillery (weaponry)
- War (military aspects)→landscapes / terrain→bodies of water→rivers
- War (military aspects) → people (military) → soldiers → artillerymen
- War (military aspects)→people (military)→ soldiers→garrison (soldiers)

Original Subject Description from the Military History Research Centre, Ottawa, Canada 38

Title Digby Battery, G.A. [graphic material]

Publisher/Date 1885

Description 1 photograph: b&w; 20 x 25.5 cm.

Image



Summary Group photo of artillery men with rifles and 2 cannons.

Cultural Group 1867-1899;Canada

Place of Research Canada

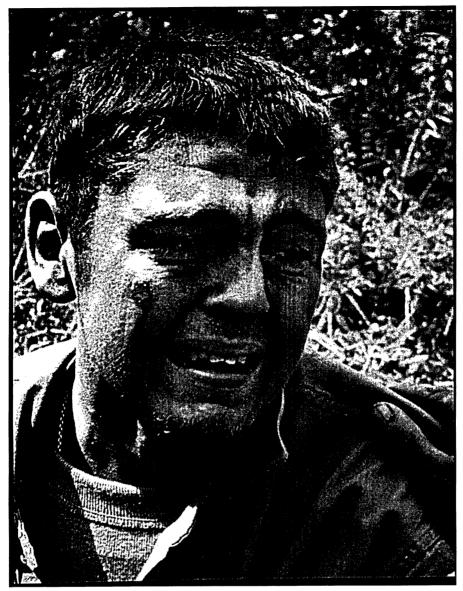
Military Group Land

Control No. 19390002-216

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³⁸ Catalogue of the Libraries and Archives of the Canadian Museum of Civilization and the Canadian War Museum, http://geoweb.civilisations.ca:8001/html/geaclogin/geaclogin.html (accessed June, 2006).

- Place→ North America→ Canada
- Service → land (branch of military service)
- War (military aspects)→ equipment & supplies (military)→ arms & armament→ artillery
 (weaponry)→ cannons
- War (military aspects)→ equipment & supplies (military)→ arms & armament→ artillery
 (weaponry)→ batteries
- War (military aspects)→ equipment & supplies (military)→ arms & armament→fire arms→rifles, and assault rifles
- War (military aspects)→ people (military)→ soldiers→artillerymen



Original Subject Description from George Eastman House, Rochester, N.Y., USA.

Accession No.: 1980:0137:0005

Maker: Duncan, David Douglas

Title: Combat, Korea

Date: 1950

Functional Type: photojournalism

War photography

General & Proper Subjects: portrait, military

occupation, soldier

- Period and Conflict
 → 1950-1953 Korean Conflict
- Place → Asia → Korea
- Service→ land (branch of military service)
- War (military aspects)→ activities / specific actions (military)→ crying (military personnel)
- War (military aspects)→people (military)→ soldiers



Original Subject Description from George Eastman House, Rochester, N.Y., USA.

Accession No.: 1981:3060:0050 Maker: Karsh, Yousuf

Title: General Dwight Eisenhower

Date: 1946

Functional Type: commercial portraiture

General & Proper Subjects: personage, military / Eisenhower, Dwight David

- Period and Conflict → 1939-1945 World War II
- Nationality of Participants→ American
- War (military aspects)→ equipment & supplies (military)→ clothing→ insignia
- War (military aspects) → equipment & supplies (military) → clothing → uniforms
- War (military aspects)→events (broad societal context)→ post-war
- War (military aspects)→personages (military)→ high ranking officers (personages)→
 [list of names to be populated by collection manager]



Original Subject Description from George Eastman House, Rochester, N.Y., USA.

Accession No.: 1981:0004:0083 Maker: 0'Sullivan, Timothy

Title: Quarters of men in Fort Sedgwick,

generally known as Fort Hell

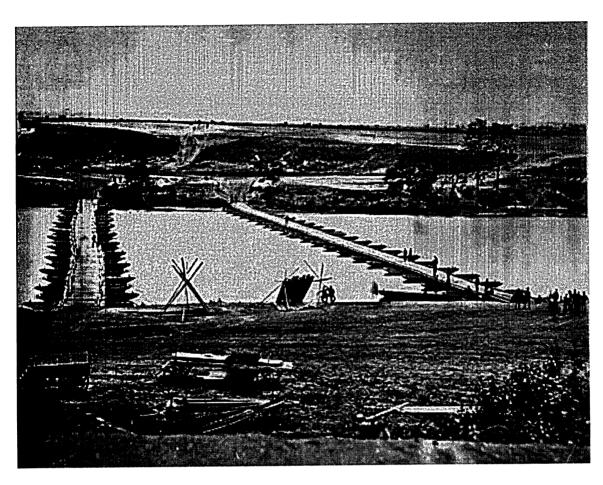
Date: 1865

Functional Type: War photography

General & Proper Subjects: architecture, military

people, military

- •Period and Conflict → 1861-1865 American Civil War
- •Place→North America→United States
- Nationality of Participants→American
- •Service → land (branch of military service)
- •War (military aspects)→ events (broad societal context)→ civil war
- •War (military aspects)→ landscapes / terrain→muddy
- •War (military aspects)→people (military)
- •War (military aspects)→structures / facilities / architecture (military)→ barracks
- •War (military aspects)→structures / facilities / architecture (military)→ fortifications→ forts



Original Subject Description from George Eastman House, Rochester, N.Y., USA.

Accession No.: 1981:0004:0032 Maker: O'Sullivan, T.H.

Title: Pontoon bridge across the Rappahannock

Date: 1863

Functional Type: war photography

General & Proper Subjects: landscape, river / Rappahannock River

architecture, bridge people, military

- •Period and Conflict→1861-1865 American Civil War
- •Place→North America→United States
- Nationality of Participants→American
- •Service → land (branch of military service)
- •War (military aspects)→equipment & supplies (military)→ transportation vehicles / mobile armament→land (transportation)→ horse drawn vehicles→wagons
- •War (military aspects)→ events (broad societal context)→ civil war
- •War (military aspects)→ landscapes / terrain→muddy
- •War (military aspects)→ landscapes / terrain→bodies of water→rivers
- •War (military aspects) → people (military) → soldiers
- •War (military aspects)→ structures / facilities / architecture (military)→ bridges→military bridges→pontoon bridges



Original Subject Description from George Eastman House, Rochester, N.Y., USA.

Accession No.: 1978:0953:0081

Maker: Hiller, L

Title: "Keep him safe buy bonds"

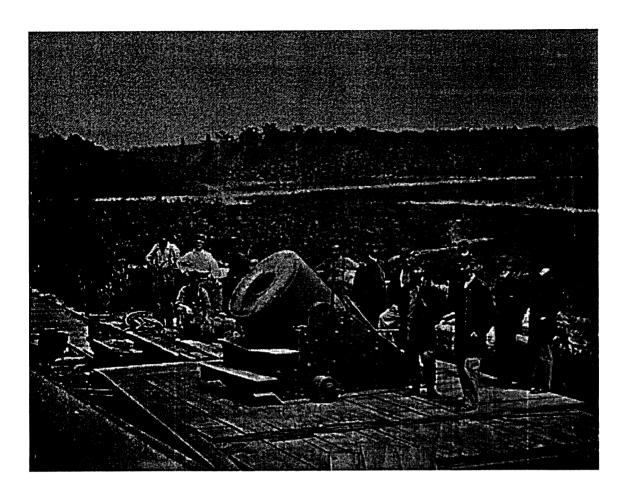
Date: ca. 1942

Functional Type: advertising photography

editorial photography

General & Proper Subjects: portrait, mother & baby

- Period and Conflict→1939-1945 World War II
- Place→North America→United States
- Nationality of Participants→American
- Service→civil (branch of military service)
- War (military aspects) → communications (military) → photographs (subject)
- War (civilian aspects)→people (civilian)→ women→war brides
- War (civilian aspects) → people (civilian) → children → infants



Original Subject Description from George Eastman House, Rochester, N.Y., USA.

Accession No.: 1981:0004:0075 Maker: Knox, David

Title: Mortar Dictator, in front of Petersburg.

Date: Oct, 1864

Functional Type: war photography

General & Proper Subjects: people, military

artefact, cannon

transportation, railroad

- Period and Conflict→1861-1865 American Civil War
- Place→North America→United States
- Nationality of Participants→American
- Service→land (branch of military service)
- War (military aspects)→ equipment & supplies (military)→ arms & armament→ artillery
 (weaponry)→ mortars
- War (military aspects)→ equipment & supplies (military)→ arms & armament→ artillery
 (weaponry)→ railway artillery
- War (military aspects)→ equipment & supplies (military)→ arms & armament→ cannon balls
- War (military aspects)→ events (broad societal context)→ civil war
- War (military aspects) → people (military) → soldiers → artillerymen
- War (military aspects)→ people (military) → officers (people)
- War (military aspects)→ structures / facilities / architecture (military)→ transportation (structures / infrastructure)→ railroad tracks

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GLOSSARY

Boolean searches:

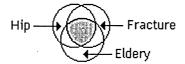
The cross referencing search of two or more terms within a given list, with the ability to encompass comparative search operators such as: AND, OR, NOT.

The Boolean AND operator.

(The grey shading represents the outcome of the Boolean operation)



When terms are combined with the AND operator, retrieved records must contain all terms.



hip AND fracture AND elderly

Multiple AND operators may be used to combine more than two terms. Only records containing all the terms will be retrieved.

Controlled Vocabulary:

A standardised list of terminology which is subject to specific criteria. "A list of preferred and nonpreferred terms produced by the process of vocabulary control." ³⁹

False Drop:

"An irrelevant reference retrieved when natural language terms or descriptors are postcoordinated." 40

Free text:

"Antonym of controlled vocabulary. Natural language terms appearing in documents, which may complement descriptors in an information storage and retrieval system."

Hierarchy:

"Generic (broader)-specific (narrower) or whole-part relationships, which are generally indicated in a thesaurus through codes or indentation."

³⁹ Guidelines for the Construction, Format, and Management of Monolingual Thesauri: ANSI/NISO Z39.19-2006, p35.

⁴⁰ Ibid.

⁴¹ Ibid., 36.

⁴² Ibid.

Local Authority: Terminology created at the host institution and not

ascribing to any standard list of terms. (these can be

controlled or uncontrolled)

The cross-referencing of two or more single terms in a Postcoordination:

search. As opposed to the use of compound terms, or terms

with specific hierarchical arrangement of meaning. Also see Boolean Searches using the "AND" operator.

"A word or phrase, or any combination of words, phrases, Subject Heading:

> and modifiers used to indicate the overall content of a document or par of a document. Precoordination of terms for multiple and related concepts is a characteristic of subject headings that distinguishes them from thesaurus

descriptors."43

Up-posting: "The automatic assignment of broader terms in addition to

the specific descriptor by which a document is indexed."44

⁴³ Guidelines for the Construction, Format, and Management of Monolingual Thesauri: ANSI/NISO *Z39.19-2006*, p37. ⁴⁴ Ibid., 38.