There is on the wall, in the northwest corner of the room, a small
gallery of watercolor paintings. Among these is one, the picture of a
young man, a mere boy of eighteen or nineteen, resting on a couch...
It is a beautiful face, almost perfect in its contour, with hazel eyes and
long, wavy, brown hair; but there is such an expression in the eyes
and features as tells oh, what a tale! of suffering, long and patiently
borne. The left arm is placed under the head, while the fingers of the
right clasp the palm-leaf fan with which [he] has been seeking to
impert coolness to his fevered cheeks. That pale, youthful face, with
the large brown eyes, sank deep into my memory; only one other face
have I seen, a painting, also, that possessed for me the same
fascination that of Guidos Beatrice Cenci.1 [Fig. 1]

The unlikely location of Louis Baggers moving experience, recounted in 1873 in
Appleton's Journal, was Washington, DCs Fords Theatre, the scene of Lincolns
assassination in 1865. Two years later the theatre became home to the Army
Medical Museum, where the public could view its array of human anatomical and
pathological specimens preserved in glass jars and stored in wooden cases, along
with its extensive collection of medical images.2 Founded in 1862 just after the
onset of the Civil War, the Army Medical Museum would become the nations
premier educational and research institution for the study of military medicine. Its
original mission was the collection and classification of all manner of battlefield
injuries, wounds, war-related illnesses and causes of death.

While illustrations like the one seen by Bagger were created for specific
educational reasons, over the next 140 years the Museum's collection of medical
images in particular its photographs were used and interpreted in ways that were
often akin to their original purpose, sometimes far removed from it. As with the
much larger corpus of Civil War photographs, which as Keith Davis asserts, become endlessly new in a continuing process of rediscovery and interpretation, 3 this subset of medical images too seemingly becomes endlessly new. As we will show through analysis of selected but representative examples from the archival collections of the successor to the Army Medical Museum,4 Civil War medical photographs became medical research materials; evidentiary documents to support disability and pension claims; a commodity to be sold or traded for personal, commercial or institutional gain; occasional worthless scraps; historical artifacts; and fine art images. Along this path of varied uses many social issues such as race and gender, personal privacy and patient anonymity, sexuality, memory and identity, nationalism, warfare and death are encountered. This exploration thus raises many emotive and perplexing issues that the images creators and original guardians could not have foreseen. Or did they? As we will argue, it seems an inescapable conclusion that, at times, the photographers and their subjects knew that they were participating in more than a simple, objective visual recording of a biomedical condition or injury. Contemporary statements were being made through the medium of photography that would survive through time and the exigencies of American culture. We are not the first to acknowledge the intellectual power and resilience of these particular medical images, thus this paper is a further contribution to the growing literature dealing with them and medicines visual culture in general. But it is our hope that this discussion will provide a more detailed and more nuanced examination of this case in support of the contention that the visual culture of medicine, like other forms of visual culture, is not merely a mirror that reflects national identity, but rather a complex venue for its interpretation.

I. Medical Specimens as National Icons

The extensive clinical specimens and images from both Union and Confederate troops as well as some civilians, were, generally speaking, understood to be collected, studied, preserved and exhibited for scientific and medical purposes. But that these human remains, paintings, photographs, and other reproductions originated from the tumultuous era of the Civil War also imbued them with a totemic significancecollectively and individually, the Museum’s holdings of smashed skulls, amputated limbs, deformed bone, and diseased tissue were iconic symbols of a battle-worn and badly injured American nation.

The image Bagger saw must have been Hermann Faber’s arresting painting of Eben Smith, now surviving only as a lithograph. Smith’s picture is one example of the Museum’s recording activities. Smith was of especial interest due to his survival
of the surgery that removed his entire leg at the hip. He was the subject of three paintings and a photograph. An earlier painting by amateur Museum artist Peter Baumgras, now lost, was itself photographed and published as one of the earliest images available from the Museum. [Fig. 2] This picture was replaced by Faber's more accomplished lithograph in subsequent printings. Baumgras did another painting of Smith, looking decidedly less angelic than in Faber's version, which has never been published. [Fig. 3] Finally, in 1867, Dr. B.B. Breed had a photograph taken of Smith that he forwarded to the Museum. [Fig. 4] While images of Smith are perhaps the most poignant, similar examples of multiplying images can be found throughout the Museum's collection, usually demonstrating a complex surgical procedure. Faber's artwork, by far the most skilled and 'finished' of the four images of Smith, personalized Smith for Louis Bagger and the larger audience visiting the Museum. Baggers lamented for Smith, a young boy with a beautiful face, almost perfect, but whose eyes and features told a sorry tale of suffering, was one contemporary linkage of a Civil War medical image, memory and American identity.

Others, roughly contemporaneous with Bagger, made the link between national identity and the Museums flesh and bones more explicit. Two decades after the beginning of the war when there was discussion of removing the Museum to a new, permanent Washington location, Congressman Potter of New York opposed the preserving of the relics [our emphasis] and bones or wounds caused by the war at any place in our capital. Rather, he desired that they be buried and covered all over with green grass and hidden from sight forever. 6 Clearly, for Potter these relics human remains that have acquired some spiritual or iconic significance were best put to some final resting place out of sight and out of mind because they remained a tangible reminder of the strife and national disunity of an earlier era. Contrasting with this opinion was that of Dr. John Shaw Billings. Billings, after four years of medical service in the field during the Civil War, became attached to the Office of the Surgeon General; from 1883 to 1893 he headed the Army Medical Museum and Library. During this tenure he became recognized as a medical authority both nationally and internationally. 7 Writing for medical colleagues in 1888, Billings readily acknowledged that the majority of the Museums specimens were collected during a great war ostensibly for medical reasons, but that they have an interest beyond that which is purely professional. That we are physicians Billings continued, does not imply that we look upon them from a medical or scientific stand only. Owing to the passage of time since the 1860s the bitter enmity of that period had subsided within the nation, thus for Billings the Museum collections educational role was now broader than originally envisaged during the war: Those of the combatants who survive are now better friends than ever [he declared], and the museum specimens coming as they do from the sick and wounded of both armies, and contributed by both Union and Confederate surgeons, enforce the lesson of the unity of the profession and of its interests, as
well as that of our country [our italics].

Potter and Billings may have disagreed over the disposition of the Museum's Civil War relics, but their statements attest to the fact that these medical mementos mori were considerably more than simply bottled or mounted human scientific specimens. In the end it was Billings who won out. For the remainder of the nineteenth century, the twentieth and into the twenty-first centuries, tens of thousands of Americans would engage in a pilgrimage of sorts to view the bony remains of Abraham Lincoln, army generals and privates alike from both sides, as well as images of war wounded including young Eben Smith.

II. Interpreting Medicine's Visual Culture

Because during wartime, weapons produced wounds generally unseen by civilian practitioners, medical illustration-- photographs, engravings, drawings, or paintings-- could best portray, for instructional and training purposes, wounds and methods of treatment. Throughout the Civil War era, medical art remained popular even though the recently-developed medium of photography could produce a "truer" image. Professional artists Hermann Faber and Edward Stauch were supplemented with amateurs such as Peter Baumgras; professional photographers William Bell and E.J. Ward took many of the museum's photographs. Photographs were also donated to the museum in large numbers. One result of this enterprise was the six-volume, 6,000 page copiously illustrated Medical and Surgical History of the War of the Rebellion, which took over twenty-three years to complete. A product of the nineteenth-century philosophy of natural history, the History is a systematic, statistical compilation of the types of injuries and diseases a military doctor could expect to encounter, along with discussions and examples of treatment. It was not a textbook but rather a reference book, a compendium of experience.

Photography, more than any other form of illustration, made the Museum's publications possible. Fewer than two hundred pieces of artwork were made for the History, while thousands of photographs were used. Photographs were not directly reproduced though; halftone illustrations were not invented until 1880 and did not become common until after 1890. The photographs of specimens and soldiers still had to be interpreted by the engraver or lithographer. Color was only possible when an artist's work was reproduced via lithography, and the nature of some of the medical illustration required it. By using all of the techniques of medical illustration, the Museum produced a monumental work. Many of the photographs and illustrations gathered or created by Museum staff were converted to
lithographs and engravings to illustrate the *History*. Four hundred photographs were also published between 1865 and 1882 in an eight-volume series entitled *Photographs of Surgical Cases and Specimens*, or simply *Surgical Photographs*. The *Surgical Photographs* became widely distributed after the war. Museum curator Dr. George Otis had 8" x 10" photographs taken of surgical cases or specimens. Many of these photographs were taken at the Army Medical Museum in the 1860s and 1870s to illustrate the outcomes of interesting surgical operations or difficulties. Bell took approximately the first 200 photographs, while Ward shot the remainder. The photographs usually show either a damaged bone or a soldier showing his wound. As the war came to a close, the pictures began including civilians and women. The very last pictures are long-term follow-ups of specimens from two soldiers, twelve and eighteen years, after they were wounded during the war. Following a patient over the course of years is common now, but was rarely done before the Civil War.

Although the Army Medical Museum remained the central repository for the Civil War medical specimens, the Museum's pioneering commitment to medical photography permitted the images of these wounded soldiers (or their injuries) and specimens to be distributed to other parts of the nation. Illustrations based on photographs became increasingly popular in the years following the war. The *Philadelphia Photographer* noted in 1875, that it was "difficult to go into a bookstore now without seeing serious works illustrated by means of one or more of the various photomechanical processes." The Museum was no exception and used many techniques including photoengravings, woodburytypes, heliotypes, lithographs and chromolithographs to illustrate the *History*. Engravings were made from photographs taken of museum specimens to illustrate the *History*, the *Catalogue* and other publications of the Museum.

The importance of medical photography to both historians and fine art scholars alike has only recently come to be appreciated. Early studies of this visual medium focused on the technical details of photographing clinical subjects, noting the limitations and achievements of first generation operators and their equipment. More recently, medical historians who have discussed the uses and role of photographs in scholarly inquiry or teaching have been, for the most part, preoccupied with determining the truth of the pictorial representations before them. As scholars trained in a tradition of interpreting manuscripts and printed documents, a tradition which necessitates first and foremost the assessment of these materials veracity or factual content, these historians understandably apply the same rules to reading photographs. Within this paradigm it is believed to be important to differentiate and discriminate between posed and natural or candid scenes captured on plate or film. While individual or group portraits of doctors, nurses, and students staged in studios, hospitals, dissecting rooms or wherever
are interesting and have historical value, some scholars believe that they do not contain the same historical content as photographs which capture their subjects in action and unaware of the camera. It seems that in some way the latter type of photographs, as they are unstaged, are actual eyewitnesses to the event and hence more reliable. Also within this frame of reference, posed photographs of patients exhibiting injuries or manifestations of their diseases or ailments are deemed primarily of use only for the clinical content contained or revealed through this specialized visual record.18

The difficulties or ambiguities in interpreting medicine's visual culture can be seen in examples from the Museum. In spite of their creation for a clinical/educational reason, many of the Museum's images by Bell and Ward, even as the patient displays his horrific wound, look similar to Matthew Brady's portraiture. This is perhaps not surprising since some of Bell's photographs have been attributed to Brady. An example of their portrait style can be seen in Major General Barnum's pose. [Fig 6] At the same sitting, a standard traditional portrait of Barnum was taken. [Fig. 7] The photographs look very similar, as "when picturing the sick, the earliest photographers employed the conventions used in making ordinary portraits." The photograph from Barnum's pension file [Fig. 8] shows how odd early clinical photographs could look when taken by a photographer who did not use the same portrait conventions as the Museum photographers. This photographer seemed to view Barnum as a freak. 19 Other poses struck at the time may appear disturbing now. In a published photograph of admittedly poor quality, Jesse Smith [Fig. 9], a sixteen-year old African-American cattle drover, sat with a removed fragment from his skull as a mounted and numbered Museum specimen, balanced on his head. Smith's pose contrasts strikingly with Julius Fabry's more natural pose, [Fig. 10] his removed femur resting on a table alongside his chair. The charge of a generalized racism would appear to be easy to level against the Museum where it not for the fact that Smith is the only example of this pose; the Museum published more typical portrait-style photographs of blacks including a dignified image of Louisa Walters's amputation. [Fig. 11]

Adding to the variation in the Museum's collection of photographs, many doctors commissioned their own images and later sent them to the Museum. The "Contributed Photographs" collection, as it came to be known, consisted of photographs donated or contributed to the Museum. Many photographs were sent by military doctors such as Gurdon Buck 20, Reed Bontecou of Harewood Hospital in Washington, J.C. McKee of Lincoln General Hospital in Washington, and J.H. Armsby of Ira Harris General Hospital in Albany, New York, who contributed dozens of photographs at the end of the war. After the war, prosthetic maker and physician, E.D. Hudson, also worked closely with museum curators. Contributors received publications and other photographs from the Museum in
As these examples illustrate, categorizing medical photographs is difficult since they straddle different styles and purposes. In a perceptive essay, Erin O'Connor emphasizes this point, noting that medical photography consists of part portrait, part record. She argues that as portraits, they were clearly artistic but as portraits of diseased, deformed, and deranged individuals, they were frequently far from aesthetic, and occasionally hard to identify as pictures of people. Because the logic of medical photography is, O'Connor asserts, the inverse of regular portraiture, it emphasizes the human imperfections, flaws, and marks of disease as well as also anonymizing the subject—often quite literally through the technique of blocking out patients' eyes. In making a plea for the non-exclusion of medical photography from the mainstream of the history of photography, however, she believes it necessary to view this highly specialized technique as a genre unto itself. She writes:

It is to recognize the medical photographs formal complexities, to understand its continuity with portraiture and still life on the one hand; and to recognize its generic uniqueness on the other, its capacity to abstract its distressing subject so thoroughly that the person pictured comes to frame the picture of disease. When we do so, we can hardly continue to describe medical photography as simply a flawed documentary adjunct of medicines empiricist pretensions. Far from a technology of objectivity, then, medicines art of truth evinces a complex, even tortured, relationship to subjectivity. What haunts the medical photograph is the certainty that there is no object to take, only a subject to erase, only the possibility of metonymy, of surface standing in for depth, of separate faces signifying a set type.

Yet the modern issue of medical anonymity, raised by O'Connor, becomes difficult when applied retrospectively. Typically, the patient, whether soldier or civilian, was identified on the photograph, usually by name, rank, company, regiment and state. The particulars of his case, including the credit due to his doctors, were summarized. Modern notions of privacy due in clinical situations had not yet been established, although some soldiers were only identified by initials. The particulars of the case, including the battle in which the soldier was wounded, were summarized with proper credit given to the doctors concerned. Nevertheless, O'Connor's insights to medical photography as a genre, in particular her discussions on the medical inversion of regular portraiture and its connection to metaphorically and literally anonymizing the subject demand our attention. At a fairly high level of abstraction O'Connor may well be correct; but at a literal level, for the nineteenth century and early twentieth century, one only occasionally finds
examples of patients being anonymized by their eyes being blocked out or obscured in some other way.

In a rare nineteenth century example of an anonymized patient, one of only a handful out of hundreds of photographs in the Museum, most of a woman's head is blocked from view by a large scarf or towel wrapped around it. [Fig. 12] It becomes almost impossible for viewers' eyes not to alight and fix on the woman's enlarged and pendulous bosom (this is a case of extreme hypertrophy of the breasts); thus her imperfections or manifestation of disease dominate her medical portrait at the expense of her as the subject, as O'Connor would argue. Due to Western attitudes to sexuality and the female body, we would be remiss if we did not suggest that for some people this image, in certain contexts, would have had sexual overtones. However, one can stare at her without embarrassment because she cannot return our gazeindeed, the subject has no idea who might be viewing her, or by how many people, or for what reason she is being viewed. One could have photographed simply the detail of the injury or pathology to make a generic image, and made no reference to the whole person. Photographs were taken this way, but no longer hold a modern viewer's interest. In fact, in light of the infrequency of the actual anonymizing of patients (and the fact that full patient identification and history is written on the photographs themselves), and with specific reference to the case we cited we are tempted to turn the whole anonymity argument on its head by reversing the identity of who is being protected. Is it not reasonable to assume that it is not the woman's personal feelings that are being spared; rather, they are those of the viewer?

To extend this point, consider these examples of photographs of nude and semi-nude injured male Civil War soldiers. [Figs 13, 14] No attempt has been made by the photographer to anonymize them by blocking out their eyes in any way. Neither have their genitalia been hidden from view. These photographs are clearly portraits, in which the patients are presented as people, and not just as pathological conditions. What is more interesting about this series of images is what happened when they became more directly aligned as images associated with a celebration of national identity. More than decade after these photographs were first taken, they were used in the 1876 Centennial Exposition in Philadelphia. Due to this venue, at which they could be viewed by a mixed, lay audience and not exclusively by medical men, the photographs were retouched. 24 No attempt was made to shield the identity of these men by obscuring their eyes however, but artificial fig leavesappropriately placedwere carefully added to each negative, and thus each subsequent print. [Fig. 15] To be sure, prior to this event one can find photographs in which a soldier's shirt or sheet is discreetly draped around his groin, and there is at least one portrait of a soldier wearing a real leaf, [Fig. 16] but the action taken to address the social standards or mores of 1876 may have been a
turning point in American medical photography. But, again, we would assert that
the appearance of leaves had less if anything to do with guarding patient identity
and modesty and more to do with not offending the potential audience.
Parenthetically, this issue raises another: It seemed to be the case at this time that
men with bullet holes and other signs of battlefield trauma, as public displays, was
deemed to be less offensive to an Americans than pubic displays. Amazingly, over
a century later, two physicians who edited a volume of these Civil War
photographs employed the same technique of adding fig leaves to men whose
genitalia were displayed: "To preserve modesty for these men," they explained in
1996, "we have scanned in an natural leaf from one of the original photographs
and placed it over the perineal area." 25

III. Civil War Photographs and Their Multiple Fates

Soon after the end of the war the photographs taken for medical reasons were
being used in an increasingly wide manner. As noted, the Museum exhibited the
photographs, not just in Washington but throughout the country at expositions.
After the war, disabled veterans used their photographs to support themselves in a
variety of ways. Private Alfred Stratton took the most direct route. During the war,
he endured a double amputation of both arms in 1864 and, as a result, received a
pension of twenty-five dollars a month. In 1869, he visited the Museum and had his
photograph taken. In later years, he sold carte-de-visites of himself in a uniform as
a disabled soldier. 26 [Figs. 17, 18]

As we have seen, soldiers used their Museum photographs to buttress pension
claims. The photographs taken by the Museum documented their injury and the
extent of their disability while reminding the pension examiners of the faces of the
men who had fought to preserve the Union. The ex-soldiers in these pictures
reestablish their personal identity and presumably could not as easily be reduced
to "anonymous," numbered supplicants. Curator George Otis may have had this in
mind when he wrote requesting photographs from Charles Lapham, offering to pay
the expense of having photographs of his stumps and artificial limbs made. He
suggested how the "photographer might take two or three prints of each to be
retained by you, and then should forward the negatives, carefully packed to this
office, by express, enclosing at the same time the bill for his services."
Otis also commissioned physicians, such as prosthetic maker Dr. E.D. Hudson
of New York City, to take photographs for him. Writing to Hudson, Otis
expressed how anxious he was to "obtain photographs of double amputations of
the thigh or leg and of other cases of unusual interest, and am willing to pay for
such. I hereby authorize you to have photographs taken of cases of especial
interest. As near as may be they should be uniform in size with those taken at the Army Medical Museum, of some of which you have copies." 29 In photographs he sent to the Museum, Hudson advertised his expertise on the picture's mount. [Fig. 21] Otis and Hudson cooperated so closely that Hudson was able to display his prosthetics in the Medical Department's exhibit at the Philadelphia Centennial fair. 30

By the twentieth century, the War and thus the photographs of those who had fought in it, receded as a distant memory. (the United States had no National Archives, no central repository, for the nation's documentary history, until 1934). By World War I, the photographs and illustrations were considered worthless and over the next fifty years were given away, discarded or ignored in a large image library. [Fig. 22] The centennial of the War in 1961 brought some renewed interest in them, but it was the convergence of trends in the 1980s that brought them back to the public view. Professional and amateur historians rediscovered this war and produced a great number of publications about it. The History was then reprinted as The Medical and Surgical History of the Civil War in 1990. This trend culminated in Ken Burns' television documentary The Civil War, also in 1990, with the result that photographs of wounded soldiers have now been seen by millions of viewers. While the images remained on display in the various homes of the Museum, they were later 'discovered' by the fine art community. The increasing acceptance of photography as an art form led to two photographs being included in the Corcoran Gallery of Art 1985 exhibition on war photography, The Indelible Image. 31 [Figs. 23-24, 25] At the same time, Museum photographs, including those of Barnum, began to be sold at major auction houses as collectibles. The growth of genealogical research has also increased demand for the images, as people search for photographs of their ancestors. 32 The pictures have gone from being clinical shots of wounded soldiers to valued images of forefathers -- perhaps the only surviving pictures of these men.

IV. Military Memory and the Civil War Photographic Oeuvre of Dr. Reed Bontecou

Themes of the discussion so far -- amassing examples of Civil War injury, transformation of such specimens into national icons and symbols of political and professional unity, and development of medical photography and its significance -- coalesce in the work of Dr. Reed Bontecou. 33 Bontecou [Fig. 26] was a New York surgeon who served in several smaller Civil War hospitals until finally taking charge of the massive 3,000-bed Harewood U.S. Army General Hospital located in
Washington, DC. Described as one of the greatest contributors to the Army Medical Museum when it was building its collections during the 1860s, Bontecou donated hundreds of specimens from, and photographs of, wounded soldiers. [Fig. 27] In addition to the National Museum of Health and Medicine, whose holdings of Bontecou's photographs and military medical photographs in general are unrivalled in the world, both Yale and Cornell universities hold Bontecou material, as does the private Burns Archive. 34

What is fascinating about these images are the reactions and emotional responses of those who discovered them for themselves almost 150 years after they were first shot. Blair Rogers, a plastic surgeon, on seeing this collection of Civil War photographs was reminded of his experiences during World War II and the dreadful wartime defects of the face and neck, extremities, and the body proper, of the soldiers on both sides of that war. 35 Rogers’ training as scientist and doctor is evident in his quantitative and clinical grouping of the cases then before him—age range of soldiers treated, their home states, location of injuries, and so on. Yet as an amateur historian, Rogers, in his account, reveals a greater sensitivity to these visual documents. He becomes acutely aware of the construction and mounting techniques for the photographs. He describes, almost with a sense of reverence, how each board is covered by a thin piece of semi-opaque paper or tissue to protect the printed face of each photograph which has been cut to fit into a gilt oval frame. Along the entire very thin edge of each board there is a thin gold lining or coating. The thin covering sheet of fine tissue paper, which protects the photograph itself, is rather fragile and needs to be handled with great care because of its age. This thin sheet of paper, however, has served its purpose well, and there seems to be no deterioration of the photograph surfaces, despite their age of 135-136 years. 36 What Rogers describes is no different from countless other photographs of this era, but we might infer from his careful description that he believes that there is something incongruous between the subject matter of these photographs and their protective mountings: why would so much attention be lavished on a mere medical record of a wounded soldier? It is as though Dr. Rogers has fully subscribed to the statement made by his erstwhile colleague, Dr. Billings, more than a century earlier (although the former physician had no knowledge of it): that these photographs radiate an interest more than purely scientific or medical.

This interpretation is borne out by Rogers when he writes about how these photographs are interesting in many different ways, for they show us how tragically very young were the casualties; the personal manner of their dress; the furniture they sat upon to support their lame and mutilated bodies for the lengthy time it took to photograph them; and also their facial anxiety, fear, anger, suspicion, humility, despondency, etc. He continues, [i]n the flick of turning just a few pages back and
forth and looking at these photographs silently, quickly, or perhaps more slowly and curiously, the reader probably experiences a number of emotions, all of which cannot be typified, described or even encompassed within the confines of this article. Finally, in a statement that might ring a bit hollow or sound maudlin were it not for Rogers experiences as a plastic surgeon and his recollections of the wounded World War II soldiers, he offers a plea for no more warsa sentiment inspired in great part after viewing the Bontecou collections:

Let us hope these photographs will be a constant reminder to all of us that Wars such as these must never be started or fought again as long as any of us live and have anything to do about preventing so many horrendous personal tragedies.

The power of these medical images to stir national as well as personal memory is again vividly characterized in Kathy Newmans encounter with the Bontecou material. Writing in the Yale Journal of Criticism, Newmans background as scholar and her intended audience are both profoundly different from those of Rogers, and yet the points of intersection in their analyses remain remarkable. Like Rogers, Newman draws attention to the gilt oval frames and protective opaque tissue. Although she recognizes the conventional nature of the portrait she is struck that this is no ordinary remembrance. Employing the trope of injury in her own discourse, she, too, declares how these images triggered her (if only vicarious) war memories. The first time I examined this collection I was surprised to discover that the images beneath each tissue assaulted my senses as no CNN footage ever had, even though (or perhaps especially though) I began my subscription to cable television during the Gulf War. Now two years have passed and still I can neither refuse nor transform their traces of violence: the graininess of a gunshot wound in black and white, the folds of an amputated stump, the boldness with which a soldiers gaze seems, occasionally, to answer mine."

The emotions of the soldier-subjects as perceived in these photographs also stir Newmans imagination, but she feels that we can only guess at them. Regarding the portrait of George Morrison [Figs. 28, 29] who was wounded in the last month of the war when it was obvious to all that it was ending, we must ask what it is that he sees when he looks into the camera and straight into our eyes. Why does he look so serious, and so sad? Is it his own pain, or the memory of anothers that pulls at the corners of his mouth? [T]he sadness in his eyes, we suspect, is mixed with something like defiance, a looking back that is also a taking back. George Morrison, a century dead, still refuses to be (reduced to) a sign."

And, as did Rogers, these same images compel Newman to vent about the relationship between nationhood, identity, and war, and one of wars inevitable outcomesdeath.
Reacting to the portrait of a dead or near dead military patient, [Fig. 30] Newman remarks how the gilded frame cannot mitigate the wastedness of his body or the raggedness of his amputated limb. [The photograph] unveils the truth of the disease (gangrene) only to discover that the horror of warlies beneath. She further notes:

Death does its work, says Whitman [who was a hospital attendant during the War], but the Nation is immortal. Is death the key then to Nation making? And in its representations are we assured the immortality of our (collective) identity? Through these oval frames we learn (again, for the lesson does not seem to stick) that the power to wound and the attempt to speak another's pain has consequences which can never be anticipated. 

V. Conclusion

During the century following America's civil war, the Army Medical Museum continued its mission of documenting the changing nature of battlefield trauma through photography and other visual artifacts. Medical photographs of wounded and disabled soldiers from the Spanish-American War, World Wars I and II, the Korean Conflict, and the Vietnam War fill box upon archival box, shelf upon shelf. But there were subtle differences. While many clinical photographs were still being taken, the emphasis had shifted towards action and documentary shots.

During this elapsed period of over 100 years the technical quality of the photographs has improved with the advent of fast speed black and white, and later color film the images are finer, their details sharper, their utility greater. Professional medical photographers, employed by the same hospitals where patients were being treated, shot these clinically precise photographs. In the twentieth century, movie film, by adding motion and providing new information, made certain types of still photography obsolete. But as medical photography advanced, the social and aesthetic significance of this genre of visual culture receded. As we have shown, the medical photographs of the Civil War were not perceived as "private" so they enjoyed a long "public" life that allowed them to be viewed, interpreted and reinterpreted. This contrasts with their twentieth- and twenty-first century analogs that remain sequestered in patient file folders due to strict institutional and legal regulations regarding patient privacy. Admittedly, there have been exceptions to this. For example, the "official" Army hospital photographs of World War II double amputee, Harold Russell, convey an atypical insight to the patients character. Perhaps not surprisingly Russell was able to make his disability
work to his advantage, first through an Army training film on the subject of soldier amputees, then through his role as Homer Parrish in the highly successful Hollywood film of 1946, *The Best Years of Our Lives*. Because the central story of the film is a romanticized account of the readjustment of veterans (one of whom is disabled) to civilian life during peacetime, it echoes themes that were explored in the medical photographs of Civil War soldiers. In this twentieth-century portrayal, [Fig. 31] however, it is a dramatized and carefully staged public image that depicted the wounded soldiers plight, not his private army medical photographic record. 44 This distinction between the public and private spheres vis-à-vis medical images seems not to have existed for those Civil War soldiers.

Arguably, medical photographs, now that they are available only for the gaze of doctors and rarely if ever exposed to public view, have become an element of a constantly evolving invisible culture. Hopefully, these images will continue to migrate to non-medical research repositories such as archives and museums, so some time in the future they too may become the stuff of scholarly scrutiny, if the rapidly-changing custom and law permit. They will certainly not be released with the speed that Civil War photographs were --- and publishing a large systematic collection is even less likely. We would wager, however, that should todays medical images be studied as art they will inevitably be compared with those originating with the Civil War and so the cycle of their interpretation will continue.

The opinions or assertions contained herein are the private views of the authors and are not to be construed as official or as reflecting the views of the US Department of Defense. This piece is a US government work and, as such, is in the public domain in the United States of America.

*J.T.H. Connor holds a doctorate in history and is Assistant Director, National Museum of Health and Medicine at the Armed Forces Institute of Pathology, Washington, DC. He has published widely on history of medicine in North America, including medical technology and alternative medical practices. His latest book, Doing Good: The Life of Toronto's General Hospital (Toronto: University of Toronto Press, 2000), has received several awards.*

Since 1994 he has been a member of the Armed Forces Institute of Pathology's Institutional Review Board.

1. The quote begins, "There is on the wall, in the northwest corner of the room, a small gallery of watercolor paintings, mounted in frames, which illustrate peculiarly dangerous and difficult surgical operations that have been performed successfully. Among these is one, the picture of a young man, a mere boy of eighteen or nineteen, resting on a couch after amputation at the hip-joint." Louis Bagger, "The Army Medical Museum in Washington." 

   *Appleton's Journal IX:206 (March 1, 1873), 294-297*


7. See Carleton B. Chapman, Order Out Of Chaos: John Shaw Billings and America's Coming of Age (Francis A. Countway Library of Medicine, 1992).
9. Daguerre invented photography in 1839 and by the time of the Civil War, it had become a useful tool instead of a curiosity. Yet it had limitations. The best method, a collodion process which used silver nitrate suspended in cellulose that had been dissolved in ether, could not tolerate motion or depict color. The heavy glass plates that were used as negatives had to be individually sensitized with collodion just before use, exposed for several seconds, and then immediately developed. Camera equipment was bulky and expensive. Additionally, "early photographs of diseased organs proved disappointing. Although photography could represent the relative sizes and shapes of pathological specimens, the detail in the pictures was indecipherable. This was because photography did not imitate the conventions which lithographers and engravers employed to distinguish the textures and colors of pathological specimens -- cross hatching, for example." (Daniel M. Fox & Christopher Lawrence. *Photographing Medicine: Images and Power in Britain and America since 1840*. [Westport, CT: Greenwood Press, 1988], 24). Notwithstanding the difficulties with photography, its use for medical subjects was becoming popular in the years prior to the war. See Stanley Burns, *Early Medical Photography in America (1839-1883)*, (New York: The Burns Archive, 1983).


13. All of the Surgical Photographs and a selection of the Contributed Photographs were reproduced in Bradley P. Bengston & Julian E. Kuz, *Photographic Atlas of Civil War Injuries* (Grand Rapids: Medical Staff Press 1996). For more information on the photographs, including Otis' role in creating them, see Rhode's "Foreword," p. iv-ix. See also Blair Rogers and Michael Rhode, "The first Civil War photographs of soldiers with facial

14. Some of the photographs were engraved to illustrate cases in the *Medical and Surgical History*. Some were distributed individually when requested. A small catalogue, *Army Medical Museum Photographic Series*, listing 109 photographs, was published in 1865. The photographs were also bound in volumes of 50 to make an eight-volume set titled *Photographs of Surgical Cases and Specimens*. The first volume of 50 photographs was printed in an edition of 40 sets which were distributed to Medical Directors in the Union Army. (Lamb, 35) Otis "hoped, that by distributing to Department and Army Headquarters, a series of illustrations of the choicest specimens of the Museum, that the collection may be made more generally useful to medical officers, and that their interest in it will be augmented - that they will see what has already been effected, principally by their zeal and what yet remains to be supplied by their exertions." (OHA 15, Otis to Sloan, March 18, 1865). The first two volumes in the series were ready to be sent to the Universal Exposition at Paris of 1867 by the end of the year. (Otis to J.C. Derby, December 13, 1865) By January 1869, volumes one through four, containing photographs 1 through 200, were being made available to interested parties, including the College of Physicians of Philadelphia and the Royal College of Surgeons in Dublin, Ireland (Lamb, 52; OHA 8: Curatorial Records: AMM Collection Logbooks, Box 19, MM8795). In 1871, the first five volumes were formally published as *Photographs of Surgical Cases and Specimens taken at the Army Medical Museum*. A separate companion volume *Histories of 296 surgical photographs prepared at the Army Medical Museum, 1866-1871* was published as well. (Lamb, 61) Volume six was ready for the Centennial in 1876. The final volume had apparently been published by late 1882 to complete the set.

15. Many other photographs were taken at the Museum in the years following the Civil War, but these do not show men with their wounds. Instead they are of pathological material, much like the Surgical Photographs of bones. By far the most common photograph taken by the Museum was of specimens in a carte-de-visite size. This popular French size for photographs swept America just prior to the war. Matching the size of the engravings to be made for the *History*, Museum photographers took thousands of these pictures. The "Card Photos" were mounted in large albums, arranged by section of the body, in the Museum. A small set of *Medical Series* photographs, consisting of pictures of colons removed from dead soldiers, were made for research. These were probably first taken by Bell, with some definitely done by Ward. The pictures are of colons suspended in glass jars full of preserving alcohol.


19. Fox & Lawrence, 5-13, 25.

20. Buck used photography to demonstrate his technique for operations. For an extensive view of his work, see Blair Rogers, "The first pre- and post-operative photographs of plastic and reconstructive surgery: Contributions of Gurdon Buck (1807-1877)." *Aesthetic Plastic Surgery* 15 (1991).


23. O'Connor, 238.

24. In 1876, Museum Curator J.J. Woodward was responsible for the Medical Department's exhibit at the Centennial Exposition in Philadelphia. Since the pictures would be available to anyone at the fair to examine, fig leaves have been discreetly placed to cover the soldiers' genitals. The work was probably done the previous summer. (OHA 15, Otis to Barnes, July 15, 1875). Otis had done something similar years earlier; he had a lithographer cover the soldier's genitals when a plate for the *History* was being made. (OHA 15, Otis to Rosenthal, January 11, 1867) The mounts also were changed and labeled "International Exposition Philadelphia, 1876."
25. Bengston & Kuz, xvi.


28. For further information on Hudson, see Blair Roger's forthcoming paper in *Aesthetic Plastic Surgery*, (November/December 2002).

29. OHA 15, Otis to Hudson, February 7, 1866.

30. OHA 15, Otis to Hudson, March 8, 1876.


32. See *National Genealogical Society Quarterly* 82:2 (June 1994) for an overview for the use of health and medical records in genealogy.


34. Unfortunately, many of the Museum's photographs were given away by Daniel Lamb in 1915, including scores to Reed Bontecou's son. Many of these are now owned by Dr. Stanley Burns.


37. Rogers, "Bontecou," 129.

38. Rogers, "Bontecou," 129.


41. Newman, 69. In her next paragraph, Newman speaks of the 'romantic softness of the portraits'; this is an artifact of the enlargement of the photographs from cartes-des-visites.
42. Newman, 84.
