

COMMUNICATION CONTAGION: DIRECTOR EDGAR G. ULMER'S
NATIONAL TUBERCULOSIS FILMS OF 1939

by

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A thesis submitted in partial fulfillment
of the requirements for the degree

of

Masters of Fine Arts

in

Science and Natural History Filmmaking

MONTANA STATE UNIVERSITY
Bozeman, Montana

August 2014

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ABSTRACT

In the last decade, a number of largely forgotten early 20th century medical science educational films have been located, restored and digitized for academic and public review. I present in this paper one particular series of films written and directed by the émigré Austrian director, Edgar Ulmer, for the National Tuberculosis Association's campaign of 1939. Set apart from other period mainstream classroom and academic contagion films, Ulmer's series was one of the first to address high contagion, socially marginalized populations through culturally inclusive film narratives.

In this paper I will discuss how Ulmer broke with the narrowly accessible teaching conventions and utilized culturally embedded understandings of authority, race, gender and nationalism to motivate minority and at risk communities to comply with public health regulations. I will conclude that his seminal work in adapting medical science for accessible public consumption informs a broad and thereby more effective messaging in public medical media today.

CHAPTER 1: INTRODUCTION

Brittle and damaged, collections of early twentieth century medical instructional films were relegated to hospitals and university storerooms to await their final demise. Their usefulness having lasted only as long as their medical technology they presented was relevant, these films, dating from approximately 1915-1950 were of little use as a teaching tool for the academic or now-defunct government institutions for whom they were first commissioned. Film historian Kirsten Ostherr notes, "Although there is abundant evidence to suggest that these films were far from obscure or marginal, they were nonetheless treated as ephemeral objects; possessing neither the artistic nor the commercial value deemed necessary to metric preservation" (Cinematic Prophylaxis, 13). With the development of film digitizing tools in the mid-1990s, a select group of academic film advocates sought funding to purchase, restore and upload these films for public record. For film and social history scholars, these revived and restored educational films continue to serve as a sobering reminder of early 20th Century social constructs that governed privileged medical access according to race, gender and socio-economic class.

Medical education films dating from 1925-1939 aimed at contagion control included The United States Public Health Service/Bray Studio's *Science of Life Hygiene Series* (1920), The Eastman Teaching Film titled *Tuberculosis* (c.1926) and an earlier production by National Tuberculosis Association (NTA) titled, *On The Firing Line* (1936). These films fell largely into two categories. The first category was comprised of teaching hospital lectures and performances addressing a limited, educated audience intimately familiar with medical terminology. The second category included popular,

Hollywood studio-style "disease morality plays" utilizing melodramatic script conventions to underscore their warning message. Under the thin guise of public enrichment, these films featured partial female nudity and suggestive voice-over situations, which visually incited the largely male audience to engage in the activities narrative had cautioned against. Both genres historically proved to have little effect on overall bacterial disease mitigation rates. Aware of the stagnation in their fight against tuberculosis within minority groups, the National Tuberculosis Association (NTA) sought to readdress their messaging in an effort to communicate more intimately with underserved communities. At the height of the tuberculosis infection scare, NTA chose Austrian émigré director Edgar G. Ulmer to create a series of non-theatrical release films for use in schools, town halls and churches. The films were specifically scripted to include the typically higher infection rate groups of African and Native Americans, Mexican immigrants and working-class urban white youth. Although no documentation exists as to the reasons why the NTA selected Ulmer, it is likely they were aware of his directorial work with Ukrainian language and interracial cast films. Professor David Orgeron writes that Ulmer's diverse resume "solidified his professional reputation as a filmmaker especially capable of researching a niche or ethnic audience, and this ability meshed with the NTA's newly focused, late-Depression era campaign" (*Learning With The Lights Off*, 301). Most likely, their attention was drawn to his 1932 syphilis warning dramatic film, *Damaged Lives*, a box office and critical success which finally placed Ulmer on the larger Hollywood map. His time notoriety, however, was brief. Due to an adulterous affair with a powerful director's family member, Ulmer was quickly ushered out of the established studio system and into the uncertain world of the independent

auteur filmmaking. Relegated from this point on to work in “B” level studios, Ulmer consistently exceeded the aesthetic standards of his severely reduced budget. As exemplified in the NTA’s Tuberculosis Series, Ulmer proved exceptional among those second-tier directors who were often tapped to direct government educational films.

The NTA board allowed Ulmer an unusual degree of creative script freedom, emphasizing only their end goal of accessible medical and sanitation-messaged films for the marginalized tuberculosis carriers within their respective communities. Noted for their high production value, these docu-fiction films considered the culturally embedded constructs of tradition and religion as a means to communicate the dangers of contagion. By successfully hybridizing the authoritarian and entertainment formats, Ulmer's films experienced a continuous non-commercial distribution until the approval of the effective tuberculin BCG vaccine that came into standard use in 1943. Evidenced by this distribution, I will argue in this paper that Ulmer's presentation of medical science to a non-academic and often semi-illiterate target audience contributed to foundational constructs of medical film language. To do so, I will identify Ulmer's methods of scripting accessible medical science education that appeared throughout the NTA Film Series and contrast these methods with the prior educational contagion films, notably the Eastman Classroom Film *Tuberculosis* and the NTA’s own 1936 *On The Firing Line*. These films largely failed to appeal to marginalized, highly infected populations. I will conclude that Ulmer’s NTA series contributed accessibility conventions to contemporary instructional films in the medical field and suggest a continued adherence to his premise of scripted story enhancing sound science education as a means to improve public medical literacy and compliance through film.

CHAPTER 2: RACE AND CULTURE

The 1939 New York World's Fair Theater held packed houses for the film *Let My People Live*, Ulmer's fifteen minute medical docu-fiction set in the sanctuary of the Alabama Tuskegee Church. An unlikely international selection, the film appeared on the same screen as Hollywood travelogue and drama films showcasing the technical advancements of the motion picture industry. Submitted to the World's Fair Motion Picture Committee by the United States Health Department, its final selection underscored a recognition of the public's growing unrest over the tuberculosis epidemic. This was coupled with increasing ostracism and hostility directed towards minority groups "which statistically carried the burden of the disease" (Harry E. Kleinschmidt, scriptwriter, *Cloud In The Sky*). Earlier efforts to educate the public and curb the mounting fears that expanded exponentially when the presumed carriers were people of color had proven "largely ineffective" (Orgeron, "Learning With The Lights Off" 301). Higher infection rates among minority populations assigned tuberculosis a physicality, effectively projecting disease upon racial identity. The bold selection of *Let My People Live* suggested to both an American and international audience that scientific discourse and public access to medical science knowledge could no longer exist in exclusion from one another. For middle-class white Americans, imminent immigration compounded racially-based fears of future contagions and the film forced an overdue dialog between privileged medicine and those it rarely intended to treat.

Addressing Disease Through Cultural Constructs

Following *Let My People Live* (1938), Ulmer directed *Another To Conquer* (1941) to address higher tuberculin rate Native American tribal communities, especially those residing in the Navajo Nation and surrounding pueblos of the American Southwest. The problem with reaching these audiences lay in the inter-war period's ineffective teaching method of the filmed medical lecture, which was shown as standard practice when addressing the general public, minorities and the semi-literate or non-native English speakers alike. Geoff Alexander argues that the body of educational films was little more than cinematic lectures framing poor acting and uninspired writing. "The subject matter and treatment," Alexander says, "in films relating to social issues were all too often decided by the social perspective of white male psychographic of the people who own and managed most educational film companies, and who ran the school organizations that bought them" (37).

The core of the cultural accessibility problem, Ulmer assessed, was the American College of Surgeon's missionary zeal to dismiss a minority population's traditional practices and require in their place an acceptance in the powers of medical science. Unfamiliar medical recommendations such as X-ray screenings and the implementation of specific sanitation practices conjured discomfort and suspicion, effectively turning minority audiences away from critical early tuberculosis diagnoses. The more authoritative and intrusive the medical message, the more alienated communities became. To address this resistance, Ulmer presented a set of medical science film language strategies aimed specifically at non-science literate populations. Aware he was caught

between the current ineffective modes of narrowly accessible medical representation and the strongholds of tradition and faith, Ulmer constructed fictional narrative structures incorporating familiar locations and cultural practices to create a base of contextual meaning for his audience. In my own view, his personal detachment from the pedagogical confines of privileged medicine permitted him freedom to construct the NTA films fitting, rather than conflicting with, traditional belief structures.

Ulmer identified three methods in his scripts to introduce medicine through cultural sensitivities. First, he recognized that the deeply entrenched concept of fatalism must be addressed in order to bridge the relationship between faith, tradition and science. If one's ancestral heritage and degree of religious adherence determined both the quality of life and longevity, there was little interest in exploring alternative medical health options. He worked to script and direct his protagonists in both films as identifiable members of their respective community, thereby shifting the perceived voice of authority into one of relatable, non-confrontational exploration. The actors then performed a plausible scenario where religious and traditional beliefs are not mutually exclusive to the desire to pursue medical treatment. In *Let My People Live*, the infected protagonist experiences the telltale symptoms of the disease and then proceeds through a set number of community and inter-personal struggles within a three-act narrative structure before concluding she must engage medical help.

Secondly, Ulmer understood that the notions of matriarchy were fundamental to the oversight of healthcare within traditional communities. As the mother or lead female character gradually accepted medical principles in lieu of divine intervention, the extended family was likely to follow suit. Both the protagonists in *Let My People Live*

and *Another To Conquer* were young women who had access to a remotely "schooled" brother figure but themselves must make the leap to trust medical science. Both scripts set up the protagonist for inevitable family and community conflict. The turning point in *Let My People Live* occurs when a friend selling her grandmother's folk remedy stops the protagonist on her way to the tuberculosis prevention clinic. This folk remedy, which the friend claims has cured many, will prevent the protagonist from the uncomfortable and unnecessary interaction with the presumably white medical doctor. At this juncture, Ulmer does not turn to the construct of authority via voice-over narration, but rather crafts a simple debate between the women. He furthermore scripts moments where the protagonist openly questions her faith in the benefits of medical science. This nuanced, emotional uncertainty woven through the script works to gain the trust of the targeted audience as well as to recognize and acknowledge the fear of seeking testing and treatment.

Ulmer avoided the pitfalls of the earlier medical science films scripts, namely the NTA's own *On The Firing Line*, which framed minority groups in situations of poverty and despair. In that film, scripted for a white, educated audience, the narrator bemoans the African-American community's steady infection rates. Typical of this period's medical films, the featured minority population is not engaged in direct dialog or seen in any way as instigators of their own health destiny. The white case worker visits a dilapidated home that invokes the common "white savior" trope, leaving the audience of *On The Firing Line* to conclude that their continued financial support of the NTA's Christmas Seal Campaign will ensure a healthy but separately-lived future for the featured communities.

Thirdly, Ulmer shows the protagonists at the end of each film directly evangelizing to their communities regarding the benefits of early tuberculosis detection. They witness her physical recovery without apparent cultural alteration and can now follow suit. This narrative underscored the need for a recognizable and racially relatable community member to separate superstitious-based traditions from scientific fact. Similarly, the protagonist in the Navajo/Diné *Another To Conquer* refutes the fallacy of her father's claim that disease only affects the most cowardly and lazy. Her father who is named Slow Talker in the film (played by veteran Native American actor Howard Gorman) states "Warriors do not lie around in bed all day. They get up and fight." As the father begins to exhibit signs of tuberculosis, he internally wrestles with his daughter's advocacy for white medicine in addition to traditional treatments. His son has left the Navajo Reservation to attend St. Katharine's Indian School in Santa Fe where he learns that tuberculosis contagion originates from human contact, not one's lack of stamina or weakness of character. The son tells his father and sister that the doctor at St. Katherine's lays no blame upon their people. Ignoring the tribe's potential judgment, the daughter begins to explain and demystify the medical process for her father. Ulmer uses her medical conversion, as he does with all his protagonists, as a means to walk the audience through the tuberculin testing procedure in accordance to the ethnicity addressed. Ulmer concludes the film *Another To Conquer* with the reiteration that traditional belief structures can adapt to medical science concepts and procedures without asking communities to abandon their cultural practices.

The father is rewarded for his conversion to medical science by a complete return to health. The final scene frames the daughter and her husband carrying their new baby

against the iconic, red rock formations of their native Monument Valley. The narrator dramatically concludes, "Slow Talker is now a *warrior* for the cause."

Addressing Disease Through Religious Authority

Fears of contagion stemmed not only from contact with African American and Native American communities, but also from the growing rates of United State's immigration made possible by increased access to modes of transportation. In a snapshot of middle-class concerns, the United States Surgeon, General Hugh S. Cummings remarked, "...increased transportation has brought with it international sanitary and public health problems of major importance" (Ostherr, *Cinematic Prophylaxis* 53). In spite efforts of the American College of Surgeons to address contagion fears aimed at immigrants, Ostherr noted "the social authority of medicine did not break the historically entrenched lineage of disease and social difference" (57).

Under such emerging issues of contention, Ulmer was tasked with creating a script that could reach the burgeoning Mexican immigrant audience while carefully navigating the NTA's more conservative supporters and contributors. Himself a bilingual immigrant who experienced professional isolation based upon his Eastern European Jewish heritage, Ulmer acutely understood the challenges of portraying integration. By the late 1930's, biographer Noah Isenberg noted that Ulmer underwent an intensely personal stage that enabled him to explore his own condition of exile and his mixed feeling about being an inheritor of an alien tradition." (Perennial Detour, 15) Prior to *A Cloud in the Sky*, no single teaching film to date had directly addressed the Mexican immigrant audiences regarding contagion, or had attempted to find solutions to the more

complex issue of distribution of such a film. The earlier *On the Firing Line* had presented statistics linking poverty and immigration to the disease, but such facts, although statistically supported, functioned to create further separation between the white establishment and the Mexican communities largely employed in their service.

Rockefeller Foundation Scholar-In-Residence Kenneth Garner noted that these public service contagion films "often contradicted the high-minded intentions of their makers, incorporating spectacle elements within ostensibly pedagogical subjects" (681).

Portrayals of immigrant workers in such films were paired with narrated contagion graphics that functioned to enforce an immigrant/disease correlation that was difficult to dislodge from public health perceptions. For the white audience, Ulmer had to visually recast the Mexican community as practitioners of healthy living collectively willing to embrace medical science and engage in the necessary tuberculosis testing required for eventual assimilation. For the Mexican audience, the scripted narrative permitted their culture to comfortably incorporate medical practice without infringing upon religious doctrinal ideologies.

Attesting to this integrative messaging, the film exists with visuals in both an English and Spanish language version. The English language version was distributed through schools, civic venues and occasionally attached as a public service message to theatrical releases. The Spanish version was distributed through Mexican cinema venues and Catholic churches and wherever projection equipment was available. The success of these versions, and the degree to which they were screened affirmed Ulmer's belief that the Mexican-American community's search for health and the white medical

establishment's desire to contain the contagion could converge into cooperative behaviors.

To develop concepts of minority self-determination, Ulmer turned to the culturally embedded authority structure of the Catholic Church to permit and encourage medical accessibility. To create this newly- forged intersection of culture and faith, Ulmer interwove the popular concept of newsreel montages with a fictional, church-centric narrative. The opening montage features Mexican workers in pressed shirts digging a ditch under composited footage of a waving American flag. In the town square, Mexican girls dance while the parish priest and his white doctor companion look on with concern. Tuberculosis is on the rise. The patriarchal tone sets the narrative in motion, establishing the duality of the priest figure as an integrated community member who affirms traditional, ecumenical beliefs while promoting the community's interaction with the white medical establishment. Ulmer's use of the priest's recognized authority mitigated, if not erased completely, the heavy hand of the NTA from the pedagogical message of medical salvation. Ulmer avoided the narrated criticism of traditional health practices, employed in the earlier film *Tuberculosis*, a move that easily could have derailed the *Cloud In The Sky* into an ineffective litany against honored cultural practice and identity. Instead, he depicted the contributions of the Mexican youth and their desire to assimilate into American white society through a commitment to tuberculosis eradication. After the dance, the beautiful protagonist Consuelo begins to manifest the typical symptoms of tuberculin infection. She turns to the church, and, in veiled traditional dress, kneels to pray. In the film's pivotal scene, her prayer is answered not by God but by a tap on the shoulder from the priest. He asks her first to cease all use of

patented medicines. Next, he tells her she must visit a medical doctor. He assures her this is not act of disbelief in the power of faith, but an affirmation in the powers God gave humanity to heal its own. Drawing on Consuelo's understood adherence to the priest's authority, the narrative quickly moves her inside a doctor's office where, accompanied by her equally symptomatic father, she faces what lay ahead. To underscore the level of trust she must place in modern medicine, she undresses to only a wrapped sheet and faces the X-ray machine. The doctor explains the process in simple, expository terms in hopes that there will be no "cloud in the sky," a reference to the dark spot on X-ray film cast by the thickened tuberculin lung tissue. When the X-ray proves positive, Consuelo enters a white sanatorium and is attended to by white medical staff. Because 1930's sanatoriums were largely segregated according to race and class, Ulmer's imagined desegregated setting in the film's denouement contributed to his visual argument for a future of racially integrated medical care. Consuelo's time in the bucolic sanitarium ends with a clean bill of health, a romantic proposal and the promise to viewers that this unequivocally "American" citizen has been initiated into mainstream society through an embrace of modern medical science.

A Cloud in the Sky is a nuanced film that reaches far beyond its surface pedagogical message. At its core, it is a candid imaging of the realities of immigrant life as well as an address of the underlying medical cost to white society for continued segregation. As more academic review are dedicated to Ulmer's NTA films, I believe critics will find his narratives utilizing established cultural conventions as a means to convey medical science a turning point in modern, multi-cultural representations of disease on film.

CHAPTER 3: WOMEN, CONTAGION AND MORALITY

Themes of morality and mortality for women were closely entwined in the popular sex hygiene films of the 1930s. These films were thinly disguised, “sexploitation” narratives that wrapped gratuitous sexual scenes around a female-centric moral conclusion (Schaffer 179). The films visually worked to link images of promiscuous women with the diseased demise their actions so markedly deserved. These sexual, social class charged morality plays voyeuristically framed the female figure in compromised situations under the guise of moral enrichment and public health promotion. Their voice-over narration cautioned against lurid behavior while visually illustrating the pleasurable spectacle of promiscuity, nudity, and morbid disease. The hygiene film's nod to redemptive female virtue failed to garner the seal of approval from The Motion Pictures Producers and Distributors of America (MPPDA), a self-appointed governing body which oversaw the moral content of Hollywood Studio productions. In spite of growing public concerns over issues of censorship, “they remained adamant about not passing these films, and most reviews were circumspect in their treatment of them (Schaefer 195).

Partnering with the American College Of Surgeons, newly formed medical film funding organizations such as the Rockefeller Foundation produced and distributed their own hygiene films to the non-theatrical, academic market. Following the 1920 guidelines of The Society for Visual Education, a group founded with the moral obligation to keep viewers from "lesser entertainment pursuits" (Oregon, “Learning With the Lights Off” 16) the foundation sought to academically distance themselves from all manner of

theatrical sexual spectacle by invoking conventions of medical authority within the documentary stylistic structure. With strong Protestant beliefs and clear definitions of proper character, the Rockefeller's *Secrets of Success Series* (1930) was pitched as a “true” educational experience for youth rather than mere entertainment for the general public. Their films, however, such as *Personal Hygiene For Girls* (c.1930) contained underlying messages riddled with the same assumptions as the sex hygiene films from which they sought to distance themselves. With no vaccination against sexually transmitted disease, the film’s message was clear: the enforcement of virtue resided solely with the woman. For all the moral responsibility placed upon her, however, the woman's image appeared in tuberculin public health media not as a privileged subject of medical concern, but as a representative bearer of insidious infection (Cartwright 146).

The messaging of these films provided windows into the prevailing and ambivalent contagion views towards women. The male redemptive narration reminds the woman who has kept her virtue intact that domestic sanitation and healthy children are her responsibility and obligatory contribution to wider communal health. In contrast, the common male-oriented, instructional contagion film, such as *First Aid Treatment After Exposure To Syphilis* (1924), was chiefly concerned with the mechanics of sanitation while largely remaining silent on gender-based moral instruction. It was clear that both the theatrically distributed sex hygiene films and the medical institution documentary films had built their narratives on a female voyeuristic gaze and socially encoded expectations. Laden with sexually charged overlays and inherent voyeurism, the films failed to directly address and instruct a general female audience to become proponents of their own health initiatives.

Desexualizing the Male Gaze

Just as *Another To Conquer* sought to dismiss the notion of contagion by heredity, so did Ulmer's next film, *They Do Come Back* (1940), aimed to separate contagion from entrenched ideas of female moral behavior. Set in "Every Town, USA," the film features a young, Caucasian, blue-collar couple working at their respective factories. A lone kiss between them, rather than extended bodily contact, is sufficient to spread tuberculosis. The script here clearly breaks with past contagion films by leaving the identity of the infected/ infectee character undefined and thereby disembodied the idea of threat from an identified gender attachment. The importance of Ulmer's neutrality on carrier identification lies in the growing field of X-ray technology. It was critical to remove this visualization tool from its earliest spectacle-based origins of use in public entertainment shows where actors, subjected to high amounts of radiation, could drink iodine or swallow a coin behind the X-ray screen to the audiences' delight. Both the sexual hygiene films and cautionary medical education warning films seized on this voyeuristic technology, suggesting the X-ray itself as a divining rod of a female morality. A beautiful woman's contagion was undetectable to the naked eye. Carelessly infecting lovers, family and community, this asymptomatic, tubercular woman featured in public health films of this period proved an insidious threat to the unsuspecting public (Schaefer 166).

An enduring example of this peculiar voyeurism was captured in the experiential films of Dr. James Sibley Watson. In cooperation with the Kodak Research Laboratories, Dr. Watson used the X-ray as a surveillance tool for film experiments featuring the female torso, favoring those which displayed deformity or infection. The result was that

"his abusing films have no scientific purpose, and worked to create a culture of medical spectatorship for theatrical entertainment purposes" (Patti Doyen, Barbara Hammer, *The Medical Film Symposium*). This spectatorship drew an audience, but such movies did little to advance the public health campaign (Schaefer 196). Additionally, commercial filmmakers copying this technology imbedded X-ray images of women for theatrical distribution. The more in demand the body's interior became to the eroticized, surveillance gaze, the further the technology went from appealing to NTA's identified demographic of urban working white women who could medically benefit from the medical screening.

Ulmer worked carefully to separate his next film, which featured the potential dangers of physical contact, from the sexual exploitation genre. He was equally cognizant of not veering his script towards the dry, academically inaccessible medical lecture film. Hoping to engage a wider audience beyond the standard non-fiction venues, Ulmer opened his film *They Do Come Back* with the inviting Hollywood film conventions of wide city shots, an orchestral score and fast-paced narration which excitedly pulled the viewer into the opening scene. In the formulaic sex hygiene narrative, the female lead's moral divergence would lead to the pleasurable gaze of her devastation. In *They Do Come Back*, Ulmer introduces the viewers to a thoroughly modern, factory-employed female protagonist on whom any proclivity for moral weakness would be difficult to assign. Ulmer structured the narrative to support the film's core topic of the X-ray procedure and its use in the establishment of a scientific, neutral gaze in the service of female tuberculin testing. He first placed the female protagonist on equal social and financial status as her infected fiancé. Secondly, in the early kiss scene where the

tuberculin transfers occurs, Ulmer avoided scripting dialog or framing of the shot to indicate one particular character's disease culpability. The simple framing and non-lingering editing worked to dismiss the expectation of sexual spectacle by inferring the kiss was to lead to extended, off-screen contact. While she may or may not be the carrier, her sympathetic and stylistic departure from the sex hygiene film's typical antagonist character relieved Ulmer's narrative of worn tropes linking female sexual availability to male infection. Time is not spent implying a salacious source of the female protagonist's infection to suggest the baseness her morality, but rather it is spent framing the steps in which she self-determines her care through her employment and adherence to timely medical advice. By the time the X-ray is introduced in the film, issues of her noncompliance with public health management and fears of surveillance have been alleviated by a medical voiceover assuring her health is the sole issue at stake (Cartwright 150). With the expectation of sexual pleasure removed, the film proceeds to reintroduce the X-ray as a modern, doctor-to-patient private detection device. It is important to note that not only is the female patient alleviated from the spectacle of performance in *They Do Come Back*, but her relationship to the X-ray and, by extension, the medical profession, served the critical function of neutralizing the medical office space from overlays of future sexual exploitation.

CHAPTER 4: CONVENTIONS OF PUBLIC ACCESSIBILITY

Ulmer's NTA film visualizing the most complex explanation of the tuberculin bacillus was curiously the partially animated, *Goodbye Mr. Germ* (1940). The film's whimsical, highly appealing narrative featured "Tee Bee," a top-hatted, Burl Ives-like talking germ who walks the audience through his point of infection, the tuberculosis testing process, and ultimately his own demise at the local sanatorium. The narrative is framed as a daydream of a bumbling scientist who wonders aloud for his children's benefit what might happen if a germs could recount the course of their lives. Blending animation, narrative and the structure of a process film, *Goodbye Mr. Germ* delivered accessible, entertaining tuberculosis contagion and treatment information to a suburban classroom and general audience. Although this demographic was not a minority, there existed surprisingly few resources that directly related to their health experience. This child-oriented film was scripted to address lingering concerns of a white population who, even by 1939, continued to experience subdued but persistent rates of tuberculin mortality. The underlying cultural assumption by the NTA was that the white demographic readily accepted the veracity of medical science concerning microbial transference and that screen time spent scripting narrative demonstrations to address superstition or disbelief was largely unnecessary (Orgeron, "Learning With The Lights Off" 307). With no scripting for cultural address, the film immediately set out to visually describe the life cycle of the tuberculin bacillus. *Goodbye Mr. Germ* delivered a seemingly simple narrative but featured sufficient adult concepts and medical processes

to fulfill the NTA's mission to teach and entertain children, their parents and classroom educators alike.

The development of animation in early medical films allowed a controlled construction of surgical processes and microscopic concepts that could not be easily demonstrated or verified by live action footage. Discussing the American College of Surgeon's surgical theater films, Ostherr wrote that the animation was inherently a non-documentary mode of representation, but, when coupled with narration, it produced an edited document of realism (Ostherr, "Cinematic Prophylaxis" 72). The sophistication of medical animation composited over live action plates manufactured an authority that ultimately served to disassociate it from baser cartoon entertainment animation.

This approach underscored the social delineation between medical privileged access and public consumption (Ostherr "Medical Visions" 53). That same year, Ulmer produced a film for the NTA that was made exclusively for a medical audience called *Diagnostic Procedures In Tuberculosis* (1940). In the opening credits, Ulmer erroneously titles himself "Edgar G. Ulmer, PhD", indicating possibly that the NTA felt pressure from the MPPDA who strongly encouraged their seal to appear on film opening credits to assure the audience the content was medically accurate as well as free of sexual or morbidly graphic depictions. The sub-dermal injection animations he commissioned for the film established his familiarity with medical animated illustration and the power of editing it into a medical narrative. By transferring this sophisticated animation / live action plate skill into a children's narrative, he maintained an entertaining pacing while delivering complex but pictorially memorable medical information.

This combination of medical film illustration and the commercially popular cartoon style produced a hybrid animation effective in communicating information that may have been deemed too graphic or complex for a children's educational film. The animated antagonist Tee Bee cheerfully interprets frightening or unpleasant events a child might encounter throughout the tuberculosis testing process. Speaking through a tiny microphone on "germ" radio, Tee Bee relates to the scientist, played by James Kirkwood, Sr., his long and contented residence inside the human lung. Repeating the editing technique of surgical animation films, Ulmer cuts back and forth from live footage to animation plates to illustrate the elderly Tee Bee's final journey from a successful infection to his sanatorium demise. Tee Bee begins with his tribe of tuberculin bacilli as they gleefully puncture arteries inside a healthy lung. Tee Bee sounds out for the audience confusing, tuberculosis-related medical jargon as well as narrates the X-ray process and basic sanatorium procedures. Ulmer's direction coupled with the appealing animation by H.L. Roberts was a well-executed, early contribution to a growing body of medical science instructional shorts that utilized animation as their principle vehicle of medical communication. In the analysis of the film's impact, it is worth noting that four years later the United States military, together with the United States Public Health Service, commissioned multiple, similarly-animated medical expository films for adult instruction that assigned the protagonist and antagonist role to a fully animated character. Animating concepts of contagion, if not the contagion itself, proved a successful method to make the enigmatic both tangible and most importantly, medically manageable. *Goodbye Mr. Germ* signaled a trend towards greater public accessibility by reducing the complexity of the illustrated image without sacrificing the core concepts of contagion.

Embodying the role of a knowledgeable host, Ulmer's Tee Bee bridged the divide between popular cartoon entertainment and the privileged modes of medical authority to visually represent invisible contagions to a general population.

Recasting The Medical Space

In addition to animation, the accessibility in *Goodbye Mr. Germ* can also be seen in the framing of the medical space as well as the time offered to the audience to spend within that space. The locations and physical sets of *Let My People Live*, *Another To Conquer*, *Cloud in the Sky* and *They Do Come Back* were constructed to be comfortably identifiable to the specific target audience. Once in the community clinic or medical office, Ulmer scripted an emphasis on convincing the minority audience the value of medical intervention before discussing the unpleasant testing process itself. *Goodbye Mr. Germ* begins within a white, suburban setting, and then moves via a dream sequence to an inviting, comedy-filled laboratory. The comical shenanigans of the animal residents coupled with the animation recast the medical or science office as an unquestionably unthreatening space for children. The development of the bumbling professor character within what appears to be more of a playhouse than sterile scientific laboratory sets the stage to introduce Tee Bee and his grimly entertaining tales of lung collapse. Progressing to the testing sequence, Ulmer constructs a sparse *mise en scene* to remove the medical office space as a place of privileged access. Only the instruments needed for the testing, including a wall mounted X-ray machine, are placed in the scene in order to focus the audience's full attention on the task at hand. Earlier, Ulmer had earned an industry-wide reputation for using minimal set dressing, hard shadows and unusual camera angles to

define ambiance on his 1934 noir classic, *The Black Cat*. With a consummate eye for detail and what is specifically is communicated by *not* showing selected objects in frame, he drove his narratives with a sparse aesthetic to emphasize the dialog and to enhance the message of the script. His deliberate framing choices, as well as his use of an anthropomorphized germ character, broke authoritarian constructs in *Goodbye Mr. Germ*. These combined conventions worked to put the audience at ease, effectively setting the narrative in the third act to introduce the most prohibitive aspect of juvenile tuberculosis recovery: the required isolation of the sanatorium.

Ulmer's NTA films were conceived to place the medical office and the tuberculosis sanatorium together as part of - and not apart from - the community in which they served. This worked to create the illusion of close physical proximity as a means to relieve the anxiety of travel to the medical visit as well as to mask the actual significant distance of most sanatoriums from population centers. Creating the sense of close of patient to medical practitioner accessibility was critical to inciting symptomatic, often reluctant community members to submit to tuberculosis testing. The NTA knew that issues of location in addition to the sanatorium's policies of complete physical isolation from all non-infected persons discouraged initial testing compliance. Ulmer cast the sanatorium in *Goodbye Mr. Germ* as a local, pastoral retreat, while the film *Tuberculosis* portrayed a far more accurate experience within a sterile, institutional setting visibly separated from centers of population. For children of infected parents, the experience of separation was intensified by lengthy stays at boarding school style "prevenatoriums," which were often located in distance counties. *Tuberculosis* clearly establishes that these state-sponsored prevenatoriums are there for parents who are unable to care for their

children, indicating that such an experience of separation was both necessary and common to the parent's healing process. In contrast, Ulmer used collapsed editing to artificially represent the actual location of the sanatorium and prevenatorium and did not dwell on the lengthy time required for one's full recovery. To maintain a sense that such long-term care was accessible to all families, Ulmer carefully side stepped issues of segregation that determined where one would be treated and the level of care they might receive. For children of minority families, the choices were slim. Similar to Consuelo's sanatorium recovery experience in *Cloud In The Sky*, this depiction of equality may have been an anticipative projection by the socially minded NTA to see such inclusive acceptance in medical settings, suggesting to state-run hospital facilities an eventual desegregation of the treatment process.

Goodbye Mr. Germ must be critiqued through the historical lens of the period's contagion policies. Every school-bound child of the era was subjected to the scrutiny of school staff for signs of tuberculosis. Knowing children were especially susceptible to the disease placed educational districts on high alert. The abrupt isolation from one's community and family were understandably an unwelcomed prospect for all involved. Shown in a classroom setting, Ulmer's cartoon character Tee Bee provided the audience assurances that disease was no more than a two-dimensional inconvenience to be trumped by friendly doctors and sanitary living. Departing from the more complex illustration of previous medical films as well as creating a comfortable, imagined clinic and sanatorium space, the convivial *Goodbye Mr. Germ* succeeded in decontextualizing the authority of the medical testing space for middle class white children and their parents. By employing a visualization of contagion through the animated character, Ulmer moved the morbid

spectacle of progressive infection to an accessible, pedagogical exploration of disease mitigation.

CHAPTER 5: AN IMAGINED STUDY IN MEDICAL ACCESSIBILITY

Disparate representations of accessibility - who can have medicine and at what cost - have shaped our consumption of healthcare at the juncture where medicine and commerce converge. My fascination with Ulmer's address of this question in the NTA Series sparked my earlier research into period pharmaceutical and medical services consumption. What is striking is that socially defining issues such as money, one's location/ neighborhood, pharmaceutical addiction, and the money that can hide that pharmaceutical addiction remain fundamentally unaltered today. My thesis film, *The Pharmacy on Mercury Street* (2014), is an imagined snapshot of a community on the brink of the discovery of bacterial transfer. With heightened fears, no vaccine, and little understanding of sanitation precautions, the film's individual characters turn to the local pharmacy for their medicinal needs ranging from tuberculin infection, sexual transmitted disease, and pregnancy. Both licensed pharmacists and common peddlers offered opium as one of the few symptom-masking, pain-mitigating ingredients available. They compounded their medicines or connections according to their client's social standing and perceived ability to pay. Although the film delves into the resulting issues of addiction, the overarching theme is an exploration of the intersection between social standing and medical accessibility. My compiled research, which encompasses pages of coroner reports, pharmaceutical recipes, client logs and period diaries serves to illuminate how these class and race distinctions contributed to longevity and integrated community health. Moreover, they serve as a historical starting point from which to critically discuss the each generation's modes of medical information consumption. With the luxury of

hindsight, we can use resources such as *archive.org*'s non-theatrical film library to pinpoint the intra-war era as time the American medical community embraced power of film to cross social boundaries and loosen grip of tuberculosis. What I extrapolate from my experience in the production of my film, as well as the research of Ulmer's NTA series work, is that we, as educational science filmmakers, must be diligent in our pursuit of accessible content presentation. Awareness of the historical pitfalls of social exclusivity when applied to medical access will give us pause as we consider how we can craft our educational message to greatest public effect. Scripts aimed at the popular audience that veer towards the opposite spectrum of the academic medical film *or* the "science in the service of entertainment" film tend to become weakened, genre-specific works that fail to reach the audience for which they were commissioned. Our educational efforts in either the documentary or fiction film format must consider cultural relevance as a means to continually combat these entrenched barriers to public medical information consumption.

CHAPTER 6: CONCLUSION

When seen through deeply rooted class culture of 1939 America, Ulmer's NTA restored films, which at first appear to be unremarkable reels of standard educational classroom fare, distinguish themselves against their contemporaries as notable contributions in a trend towards democratic contagion education. Products of a fundamental 1920s through 1930s American cultural shift, the NTA series revealed the changing attitudes towards contagious disease reflected in race, gender, nationality and public accessibility. The growing collection of these early classroom and medical institution educational films source critical new information on the effectiveness, or lack of it, in the contextual messaging of film and its ability to affect the behavior of a pre-tuberculosis vaccination generation. Viewed as a comparative body of cinematic work, Ulmer's *NTA Tuberculosis Film Series*, the earlier NTA film, *On The Firing Line*, The Eastman Classroom Film *Tuberculosis*, Bray Studio's *The Science of Life Series: Personal Hygiene For Young Women*, and the X-ray photo-plays of Dr. James Sibley are samples of a larger body of educationally-pitched films that illustrated the nuanced medical hierarchy of content delivery.

The goal of the NTA was to bring underrepresented communities into the medical American mainstream by enlisting the growing popularity of film to create a cultural assimilation and widespread acceptance of medical science. Ulmer's fictional scripting and directing work in *Let My People Live* and *Another To Conquer* addressed the deeply intertwined notions of disease, fate and racial identity as a means to forge new relationships with medical science. I argue that by addressing medical accessibly through

culturally embedded avenues of religion, traditional practices and visually familiar environments, his films worked to encourage minority communities to seek medical testing over traditional medicines and superstitious practices. Moreover, Ulmer scripted and directed the films with sensitivity to these practices in order to integrate them into the larger, medical science pedagogical narrative. Likewise, just as representations of race and nationality were unfairly weighted in the discourse of public health, so were issues of female morality erroneously weighted to explain male, and by wider inference, communal infection rates. Ulmer's direction in *They Do Come Back* worked to neutralize the female representation of the disease and desexualize contagion. It departed from the conventions of the commercial sex hygiene film genre by removing the spectacle of the contagious female body and leaving the infected carrier ambiguous in the final denouement. The film addressed common medical misunderstandings of infectious bacterial proliferation by illustrating that only minimal physical contact necessary for a full transference of the disease.

A Hollywood outsider in very sense of the word, Austrian born Edgar Ulmer was an unconventional choice for an underfunded series of pedagogical medical films. It is evident there was a calculated risk taken by the NTA who believed that a partnership with Ulmer could produce effective films to reach audiences in marginalized populations where their previous endeavors had all but failed. The investment in both Ulmer and in the communities in which the films were made proved worth the risk. Ulmer's immigrant sensibilities combined with his independent (it low-budget) auteur status permitted him to employ a then-unconventional "every man" vantage point from which he could visually

explain contagion to minority populations in a manner few other directors of the era might have considered or achieved.

Persistent social stratification continues to dictate the methods by which medical films are placed into distribution, making Ulmer's work all the more relevant today. Problems reaching underrepresented populations with accessible medical information, racial and sexist overtones that color science narratives and barriers of medical authority are all issues that collectively call for science filmmakers to remain conscientious in their creations of accessible, balanced and audience appropriate content. The parameters provided by medical philanthropic and government agencies determined the medical information permitted into the public-oriented, fictional film narrative. The narrative, nonetheless, provided accessible and entertaining content by which factual information was delivered to a targeted population. This symbiotic relationship worked to insure, or at least mitigate, the potential of false or fantastic claims made to viewers under the banner of medical science. Certainly, such agencies were not without some degree of social agenda, but their scientific oversight exemplified in Ulmer's *NTA Tuberculosis Film Series* demonstrated the power of scientifically based docu-fiction film to drive attitudes toward health in the twentieth century and beyond. Ulmer's directorial vision demonstrated that if vetted medical science informs the fictional (or semi-fictional) narrative, ideologies of communal health, then as now, have fuel to spread.

REFERENCES CITED

- Alexander, Geoff. *Academic Film for the Classroom: A History*. Jefferson: MacFarlane and Company, Inc., 2010. Print.
- "An Interview by Miguel Rodriguez With Author Noah Isenberg and Arianne Ulmer Cipes." Interview by Miguel Rodriguez. *Edgar G. Ulmer: A Filmmaker At The Margins*. KPBS.org, 30 Jan. 2014. Web. 2 May 2014.
<<http://www.kpbs.org/news/2014/jan/30/edgar-g-ulmer-filmmaker-margins/>>.
- Boon, Timothy, *Films of Fact; A History of Science In Documentary Films and Television*. London: Wallflower Press, 2008. Print.
- Cartwright, Lisa, *Screening The Body: Tracing Medicine's Visual Culture*. Minneapolis: University of Minnesota Press, 1995. Print.
- "Doctors and Nurses." *Pioneers Of Television*. PBS. KENW, Boston. 22 Apr. 2014. Television.
- Gallagher, Tag. "All Lost In Wonder: Edgar G. Ulmer." Editorial. *Screening Past* 1 Mar. 2001: n. pag. [Http://tlweb.latrobe.edu.au/](http://tlweb.latrobe.edu.au/). Web. 1 May 2014.
<<http://tlweb.latrobe.edu.au/humanities/screeningthepast/firstrelease/fr0301/tgafr12a.htm>>.
- Garner, Kenneth. "A Review Of Learning With The Lights Off: Educational Film In The United States." *Technology and Culture* July 2013: 681-682. Print.
- Isenberg, Noah. "Permanent Vacation: Home and Homelessness in the Life of Edger G. Ulmer." *The Films Of Edgar Ulmer*. Lanham: Scarecrow, 2009. 1-20. Print.
- Isenberg, Noah, *Edgar G. Ulmer: A Filmmaker at the Margins*. Oakland: University of California Press, 2014. Print.
- Isenberg, Noah. "Perennial Detour: The Cinema of Edgar G. Ulmer and the Experience of Exile." *Cinema Journal* Winter 2004: 3-25. [Http://www.dartmouth.edu/~germ43/](http://www.dartmouth.edu/~germ43/). Dartmouth College. Web. 30 Apr. 2014.
- Kridel, Craig "Examining the Educational Film Work of Alice Keliher and the Human Relations Series of Films and Mark A. May and the Secrets of Success Program." The Rockefeller Archive Center, 2010. Web. 5 May. 2014
- Nichols, Bill. *Representing Reality: Issues and Concepts in Documentary*. Bloomington: Indiana University Press, 1991. Print.

- Orgeron, David, Marsha Orgeron and Dan Streible, eds. *Learning With The Lights Off: Educational Film in United States*. New York: Oxford University Press, 2012. Print.
- Orgeron, Devin. "The Way We Learned: Educational Films In The United States (Part I)." *North Carolina State University: The Abstract*, n. pag. Web. 6 Dec 2011.
- Ostherr, Kirsten, *Cinematic Prophylaxis: Globalization and Contagion in the Discourse of World Health*. Durham: Duke University Press Books, 2005. Print.
- Ostherr, Kirsten, *Medical Visions: Producing the Patient Through Film, Television, and Imaging Technologies*. New York: Oxford University Press, 2013. Print
- Schaefer, Eric, *Bold! Daring! Shocking! True! A History of Exploitation Films, 1919-1959*. Durham: Duke University Press, 1999. Print.
- The Medical Film Symposium*. National Library of Medicine: The History of Medicine Division, 20 Jan. 2010. Web. 10 May. 2014.

FILMS CITED

- Another to Conquer*. Dir. Edgar G. Ulmer. Perf. Howard Gorman, Sammy Day, Geraldine Birdsbill, Richard Hogner. Springer Pictures, Inc., 1941. <https://archive.org>. Web. 3 May 2014. <http://www.archive.org/details/another_to_conquer_1941>.
- Cloud in the Sky*. Dir. Edgar G. Ulmer. By Harry Kleinschmidt. Motion Picture Service Corporation, 1939. <https://archive.org>. Web. 3 May 2014. <https://archive.org/details/cloud_in_the_sky_1939>.
- Damaged Lives*. Dir. Edgar G. Ulmer. Perf. Harry Myers, Diane Sinclair, Lyman Williams. Weldon Pictures Corp, 1933. DVD.
- Diagnostic Procedures in Tuberculosis*. Dir. Edgarg G. Ulmer. Perf. Dr. Kendall Emerson. Motion Picture Service Corporation, 1940. <https://archive.org>. Web. 3 May 2014. <https://archive.org/details/cloud_in_the_sky_1939>.
- First Aid Treatment After Exposure To Syphilis*. Creator(s): Department of Health, Education, and Welfare, 1924. [Http://www.archives.gov](http://www.archives.gov). Web. 12 May 2014. <<http://research.archives.gov/description/13290>>.

Goodbye Mr. Germ. Dir. Edgar G. Ulmer. Perf. James Kirkwood, Sr. DeFernes Studio, 1940. <https://archive.org>. Web. 30 Apr. 2014.
<https://archive.org/details/goodbye_mr_germ_1940>.

Let My People Live. Dir. Edgar G. Ulmer. Perf. Rex Ingram, Peggy Howard, Merritt Smith, Ernestine Coles, Christine Johnson, Jackson Burnside. Motion Picture Service Corporation, 1938. <https://archive.org>. Web. 30 Apr. 2014.
<https://archive.org/details/let_my_people_live_1938>.

On the Firing Line. Perf. Vaughan Glaser. Courier Productions, Inc., 1936. <https://archive.org>. Web. 17 May 2014.
<https://archive.org/details/0096_On_the_Firing_Line_08_00_41_00>.

Sanctus. Dir. Barbara Hammer. Perf. Dr. James Sibley Watson. 1990. VHS Copy.

The Science of Life Series: Personal Hygiene For Young Women. Bray Studios Inc., 1920. <https://archive.org>. Web. 16 May 2014.
<https://archive.org/details/6215_Personal_Hygiene_for_Young_Women_01_29_36_11>.

The Temple of Moloch. Dir. Mary R. Mechtold. Perf. Gayne Whitman, Warren Cook, Bessie Learn, Yale Boss. The Edison Company, 1914. <https://archive.org>. Web. 3 May 2014. <https://archive.org/details/temple_of_moloch>.

They Do Come Back. Dir. Edgar G. Ulmer. Perf. Wilma Caspar, Edward Mulhern. DeFernes Studios, 1940. Online Video. <https://archive.org/>. Web. 5 May 2014.
<https://archive.org/details/they_do_come_back_1940>.

Tuberculosis. Eastman Classroom Films, 1927. <https://archive.org>. Web. 29 Apr. 2014.
<<https://archive.org/details/Tuberculosis-welcome>>.

White Battalions. Dir. Tom M. Gordon. The Chicago Film Laboratory, 1941. www.youtube.com. Web. 3 May 2014.
<<https://www.youtube.com/watch?v=JhKg9iLCQ84>>.