

Unhooking the Hookworm: The Making and Uses of a Public Health Film

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In 1920 the International Health Division of the Rockefeller Foundation produced a film that would introduce tens of thousands of people throughout the world to the medium of the cinema. *Unhooking the Hookworm* was intended to teach rural peoples how to rid themselves of the *Ankylostomiasis* parasite, and to prevent its spread in their communities. This was one of the first educational films to be intended for audiences in what would come to be known as the 'developing' world. In this respect, it is the ancestor of the public health films that are still produced and distributed by Non-Governmental Organizations throughout Asia, Africa, and the Americas. Rockefeller officials appear to have been unaware that they were pioneers in a global movement to bring cinema to rural peoples. Yet their film, *Unhooking the Hookworm*, would establish precedents for didactic film-making that shaped documentary film-making in Asia and Africa for a generation.

Documents held at the Rockefeller Archive Center provide invaluable insight into the history of this remarkable film. They explain why the Rockefeller Foundation became involved in film-making, and reveal the expectations and assumptions guiding the film-makers. They also illuminate the reactions of public health officials to the film throughout the Western hemisphere. These documents suggest that the production of *Unhooking the Hookworm* was informed by the film-makers' condescending view of the diverse rural audiences they were targeting. They also demonstrate the close parallels between the making of *Unhooking the Hookworm* and similar public health films being produced in Africa and Asia.

The Rockefeller Foundation's campaign against hookworm was the result of John D. Rockefeller's decision in 1909 to commit a part of his personal fortune to the eradication of the disease. According to an article published in *Science* magazine, Rockefeller was motivated by his concern for the people of the American South, who suffered a remarkable incidence of the affliction.¹ The work was begun by the Rockefeller Sanitary Commission for the Eradication of Hookworm Disease (1909-1914), but was later taken up by the Rockefeller Foundation. The idea to make a movie for the hookworm campaign seems to have emerged after officers of the foundation returned from a meeting in London with representatives of Great Britain's Colonial Office.²

For Rockefeller and his foundation, the hookworm problem was predominantly one that afflicted white rural communities. It was widely perceived that whites suffered from higher rates of infection than black farmers. In Aiken, South Carolina, for example, in 1923 the public health authorities estimated that over half of all whites in the rural areas suffered from the disease.

¹ Science Magazine November 5, 1909 pp. 635-636.

² RF, RG 5.1.2.

Rockefeller officials viewed the disease as contributing to the prevalence of poverty in the Southern States which kept the region from developing at the same pace as the North.

The British Colonial Office had quite different needs for a hookworm campaign. In the British West Indies the rates of infection were almost entirely confined to black and Indian rural workers. On the island of Trinidad the infection rates among sugar cane workers were estimated to be 70%, while in Jamaica it was estimated that 65% of the population carried the parasite.³ Thus any campaign against the disease that was designed in the United States would have to be adaptable to the conditions in the West Indies territories. One of the main challenges for the film-makers would be to devise a formula that could influence and educate the diverse audiences suffering from the parasite.

The documents reveal fundamental differences in the ways in which Rockefeller officials and their British colleagues conceived of the hookworm problem. In the British West Indies, with its predominantly black and Indian populations, white officials measured the cost of the disease in worker productivity.⁴ For these officials, hookworm was a problem because the working peoples of the islands suffered from ‘a natural disinclination to improve their status’,⁵ ‘filthy’ personal hygiene,⁶ and an innate and lingering fear of ‘black magic’.⁷ In the American South, conversely,

³ Box 43, Folder 262, RG5 Series SS – 435, No. 7421 Report on Hookworm Infection Survey of Jamaica by M.E. Connor, MD., June 14 to July 1918.

⁴ Box 43, Folder 262, R65 Series SS – 435, No. 7421 Report on Hookworm Infection Survey of Jamaica by M.E. Connor, MD., June 14 to July 1918. “For many years it was thought by the employers in Jamaica that the inefficiency of the working class was due to causes other than a natural disinclination to improve their status, and that one of the chief of these causes was the debilitating effect of hookworm disease.”

⁵ Ibid.

⁶ According to a sample film précis contained in RG 1, Series 100, Box 5, Folder 42, ‘Films-Reports 1917-1927, part 3,’ ‘Preliminary Draft of Plan for Production of a Film on Hookworm Disease’ Sept 12, 1917.

⁷ See for example RG 5 Series 2, SS-439 Box 44, Folder 271, ‘Final Report of the Hookworm Inspection Survey of St. Christopher (St. Kitts) British West Indies’ performed for the IHB by H Muench, Jan-Feb, 1924. “The population, as is to be expected, is apathetic. The great bulk of the population consists of a rather uneducated negro race. The interest in their future welfare, of all but a small minority, usually extends no further than the next meal. The spirit of scientific inquiry is largely confined, of course, to ‘obeah’ and voodooism [sic].”

the disease was seen as threatening white social mobility, family cohesion, and mental hygiene.⁸ Public health officials did not expect to find superstition and intransigence among white southern audiences, but rather simple rural people who would be eager to improve their health through education.

The view of the Rockefeller officials towards the white southern victims of hookworm is reflected in the various film ideas that were discussed. An early suggestion for the film read as follows: “Show ramshackle home with insanitary out house . . . The family is made up of well-defined hookworm types. Group listlessly sprawled about the door and yard.” When one of the children acts lethargic the father “berates and cuffs him.” The notes for the film consign the family members to the following fates: “mother goes to poor house. Sally Doe is taken to the insane asylum. Tom Doe becomes a petty criminal, shows him in prison, then Jimmie Doe, weakened by hookworms, dies of typhoid, shows burial with open grave and pine box.” The treatment goes on to somewhat confusingly suggest an alternative scenario in which the family tries “The Wrong Cure: Dr. Quack’s Liquid Life.” However, in the end “They get right cure from state medical agents, who teach parents how to administer medicine. Recalcitrant son is told by the mother in the title ‘Lie on your right side or I’ll thrash ye!’” The final scene in this drama takes place three years later, where ‘The premises show signs of increased prosperity’.⁹

Here we see hookworm being presented as contributing to domestic violence, crime, mental illness, and avoidable child mortality. Its cure is relatively simple once the ‘well-defined hookworm types’ can be persuaded to eschew a patent medicine and trust their state medical agents. A second treatment suggested by Dr. Freeman of the IHB recommended that ‘you begin

⁸ RG 1, Series 100, Box 5, Folder 42, ‘Films-Reports 1917-1927, part 3’, ‘Preliminary Draft of Plan for Production of a Film on Hookworm Disease’ Sept 12, 1917.

⁹ RF, RG 5.1.2, Series 938 (1915 & earlier), Box 20, F301, ‘938 ‘Films-General Individual’, ‘Tentative Scenario for Moving Picture Film No. 2’, no date, but probably March 1914.

with healthy mountain home where the parents want to send the boy to college, to become a doctor or teacher, etc.’, but this ambition is jeopardized when the boy contracts hookworm ‘at a dirty school’. He is cured by the local health officials, goes on to get his medical degree, and returns to his rural community as a crusader for sanitation.¹⁰ This version leaves out the stigmatization of the earlier treatment and places a great deal of emphasis on social mobility.

But the hookworm problem was not confined to white southerners, as at least one early script suggestion recognized. In this version of the film, ‘The camera might show a white man in the South at a construction work, a colored man in the South, a West Indian, a singalese of Ceylon, a Chinese Coolie in China, an African in the wilds of Africa, etc., the impression being conveyed that the idea of the importance of home sanitation is gripping all the races of the world’.¹¹ After the hookworm campaign expanded its focus to the Caribbean in 1913,¹² officials there submitted their own ideas for a film as well. A doctor working in British Trinidad offered suggestions as to the making of a film that would be useful for that colony. It appears that he had gotten his hands on a copy of the script that was eventually used when the film was shot in 1920, which he found inappropriate to Trinidad. He offered instead an idea for a fictional story about ‘two brothers’ who contracted the disease. Though the actual treatment of the film is not in the files, it appears from the correspondence to be suggesting a drama in which two siblings who have hookworm adopt contrasting remedies.¹³ His suggested alternative was intended for the large Indian population of the island. This letter is of some historic interest because it appears to be the first suggestion of ‘the two brothers’ format, which would become a

¹⁰ RF, RG 5.1.2, Series 938 (1915 & earlier), Box 20, F301, ‘938 ‘Films-General Individual’, ‘Minutes of Discussion on Moving Picture Film’.

¹¹ RG 1, Series 100, Box 5, Folder 42, ‘Films-Reports 1917-1927, part 3’, ‘Preliminary Draft of Plan for Production of a Film on Hookworm Disease’, September 12, 1917, Unsigned précis for film.

¹² RG 5, Series 2, SS-439 Box 44, Folder 275.

¹³ Letter From Dr. Dersheimer to Dear Dr. Howard [IHB] from Port of Spain, Trinidad, September 24, 1919.

staple of film-making in colonial Africa and in the West Indies. Beginning in the 1930s, South African authorities pioneered this format in an early venereal disease film produced for African audiences.¹⁴ It was later utilized extensively by the British Colonial Film Unit and the Central African Film Unit, which operated in Zimbabwe, Zambia, and Malawi in the decades following the Second World War.

The idea of using public health films for the Rockefeller campaign gathered steam after World War I ended in 1918. The RF began getting requests for moving pictures from local health officials in the United States.¹⁵ At the same time the conditions of the war had led to pioneering developments in mobile projectors, which could now be relatively easily transported on trucks. This was important, as many of the rural areas that were the targets of the campaign had no electricity.¹⁶

After six years of planning, *Unhooking the Hookworm* was finally released in 1920.¹⁷ It is interesting to compare the final version with the earlier treatments that had been sent to the Foundation. The ten-minute film combines a lecture on hookworm with a dramatization of a white southern family's experience with the disease. It utilizes microscopic reproductions of hookworms, as well as extensive English-language inter-titles. The film begins with an image of a young boy lying on the porch of a farm house. When a friend comes by to ask him if he wants to go swimming, he begs off, saying he is 'too tired'. The film then pauses to explain that the boy suffers from hookworm, which makes him lethargic. The boy's father takes him to a doctor,

¹⁴ For a discussion of this early colonial film see Megan Vaughn *Curing Their Ills*. The 'two brothers' formula was suggested for *Unhooking the Hookworm*, using two white families.

¹⁵ The Rockefeller files contains several such requests, including one from Columbia South Carolina RF, RG 5.1.2, Series 938 (1918), Box 72, F1030, '938 Films 1918', Letter from Universal Film Manufacturing Co., April 23, 1918 by Harry Levey, Manager, Industrial Dept., to Dr. Meyers, of IHB relaying a request 'from Columbia, S.C. asking for a . . . a reel showing the hook worm'.

¹⁶ RF, RG 5.1.2, Series 938 (1920), Box 103, F. 1431, 1432, 1433, '938 Films A-I 1920', Letter to IHB from J. Sterling Moran, Community Motion Picture Bureau, to IHB.

¹⁷ 'Fight Upon Malaria by Vincent' *New York Times* August 1, 1921.

who gives him a pill that cures his infection. The film ends with a scene of the boy swimming with his friends in a pond.

Unhooking the Hookworm leaves out all of the elements from the earlier treatments that stigmatized the white family. There is no hint of domestic violence, criminality, or madness. Nor does it suggest that the disease poses a threat to social mobility or worker productivity. And there is no suggestion of alternative cures (such as the ‘Dr. Quack’ medicine introduced in the earlier treatment). The film implies that it is a disease that affects children, and thus its main threat is to the preservation of childhood. It also relies on fairly sophisticated cinema effects to impart its lessons. It utilizes long titles in English (which were translated into several other European languages for distribution), microscopic images of hookworm and their larvae, and a brief cartoon segment which demonstrates the growth of the worms inside of the intestines. It also contains very little reference to the international scope of the problem. The film begins by showing a world map with the areas of high hookworm infestation shaded in. But with the exception of one brief and somewhat incongruous image of a village in India, the entire film is focused on the experience of white southern children.

The film was initially screened in the American South, where it proved popular with local health officials. A state Health Officer in Kentucky hailed it as ‘far and away the best public health film I have ever seen’¹⁸ and claimed that it had encouraged many audience members to seek treatment. A Health Commissioner in Dublin, Georgia similarly wrote, “I have had wonderful results from the hookworm picture.”¹⁹ The files at the Rockefeller Archive Center also include an effusive report from a community health officer in South Carolina, who

¹⁸ 5-26-21, ‘Memorandum concerning comments on the film ‘Unhooking the hookworm,’ Dr. A.T. McCormack, State Health Officer, Louisville, Kentucky’.

¹⁹ O.H. Cheek Commissioner of Health, Dublin, Georgia quoted in RG 1, Series 100, Box 5, Folder 39, 100 Films-Reports, 1917-1927, 5-26-21, ‘Memorandum concerning comments on the film *Unhooking the hookworm*’.

attributed the dramatic increase in local interest in his work to the utilization of moving pictures in health education.²⁰

But there were some concerns voiced in response to the film as well. One correspondent informed the International Health Board (IHB) that the film would only be effective with white audiences, “races other than the white race are easily distracted when a partially exposed white person is pictured. It invariably brings down a roar of laughter and continually distracts the audience from the point that is being made.” The writer went on to suggest that the film should demonstrate the effects of hookworm on black, and white families, “if the improved family conditions of a colored family were shown, it would leave a stronger impression than the white man’s house in the closing picture.” The same correspondent also asserted that the film would only work among film-literate audiences, “wherever ‘movies’ have become an established institution and are commonly used for education and entertainment, it would seem to be entirely practicable to use the hookworm film. On the other hand, it would probably be unwise to attempt to use it in backward countries where the movies picture theatre has not yet developed on a commercial basis.”²¹

The idea that the film was inappropriate to ‘backward’ communities was echoed in other letters as well.²² “I believe that the present task is to develop [sic] a hookworm film which is of universal application; one that can be shown in almost every part of the world where hookworms are found and which will tell the whole story of hookworm disease and its prevention in a simple manner...Such a film must be planned to instruct an ignorant, superstitious, impressionable audience, many of whom cannot read”. The correspondent goes on to insist, “The film is ideal

²⁰ RG 5, Series 3, 246 J South Carolina County Health Work Reports, 1920, 246 J South Carolina County Health Work Annual Report, 1925, Folder 980, ‘Narrative Report Fairfield County Health Unit S. C. Third Quarter 1920’.

²¹ December 17, 1923, Letter to John Ferrell, IHB

²² Ibid.

for the rural south...not be useful in foreign countries...to the native of a tropical country there are no points of contact or association in the present film.” The letter concluded with a commentary on the difficulty such audiences would have with understanding the film, particularly the microscopic amplification, “everything is foreign to him, from the homes, people, dress, and customs down to the great snakes they see depicted writhing in the human bowel.”²³

This letter appears to be the first suggestion that audiences in tropical colonies would struggle to understand the complexities of ‘sophisticated’ film techniques. This became an article of faith for film-makers in British, French, and Belgian colonies in Africa during the 1930s and 1940s, who refused to utilize slow-motion, cartoons, or microscopic magnification for fear of confusing their audiences.²⁴

The Rockefeller Foundation files contain a good deal of correspondence from health officers responsible for showing the film, though they provide very little direct evidence from audience members themselves. But other sources can provide insight into audience reactions. In 1922 the film was screened for audiences in Kingston, Jamaica. In this case the local paper, *The Gleaner*, waxed enthusiastically about the profound influence the film had on educating local peoples about the disease. In its review of the film’s showing, the paper quoted a letter received by the island’s chief medical officer from a woman who supposedly had resisted treatment until she saw the film, “Sir, I beg you forgit [sic] past foolishness and send me more medicine. I attend show last night and see what happens inside me and beg for more of the very good govt.

²³ 100 Films-Reports 1917-1927, 5-26-21, December 17, 1923, Letter to John Ferrell, IHB, in regard to proposed change in hookworm film.

²⁴ For a discussion of colonial theories of African film literacy see my article ‘Watching Africans Watch Movies: Theorizing Film Literacy in Colonial Africa’ in *The Journal of Radio, Television, and Cinema*, June, 2000.

pill.”²⁵ The *Gleaner*’s coverage of the hookworm film went on to note that the film had been particularly influential upon ‘people [who] had never seen motion pictures’.²⁶

Jamaican government officials viewed the showing of these films differently. A memo written not long after the screening of the shows doubted that such films could teach anything meaningful to Jamaicans, ‘A hookworm film taken in the Southern States of America,’ one opined, ‘could have conveyed very little to the audience’ in the colonies. If Jamaicans were to receive instruction from motion pictures, he argued, ‘Locally made films are imperative if anything is to be got from them’. Much of this prejudice appears to stem from his low opinion of Jamaican audiences, though the final line of his letter suggests additional reasons for discouraging the future showing of more Rockefeller films: the ‘culture...distributed on the screen would be American (if this is not a contradiction in terms) and we want no culture from the USA.’²⁷

Unhooking the Hookworm continued to be shown in the British West Indies throughout the decade. It became a staple of government education programs which reached some of the most remote rural parts of the island, and the handful of films which were a part of the program were recognized as the most effective draw to get rural workers to attend. Even in areas of the island with the greatest reputation for intransigence to colonial initiatives, public health officers could count on the movies to attract hundreds of people to the screenings.²⁸ However, while local officials recognized the value of film propaganda, they disparaged the use of *Unhooking*

²⁵ *Jamaica Gleaner*, January 13, 1922, ‘Report of Hookworm Campaign’.

²⁶ *Ibid.*

²⁷ Jamaican National Archives, 1B/5/77/44 [1930], Memorandum on films, Minutes dated July 30, 1930.

²⁸ For example, a cinema operator, in operating the Scott’s Hall Area of Jamaica where, “The cooperation in this area is the worst that has been met with for years”, still attracted an average of almost 250 people to a series of free screenings. See RG 5, Series 3, Reports, Routine, 437 H Jamaica-Hookworm Reports, 1921-1922, Jamaica-Hookworm Reports, 1929, Folder 2250, Report of Unit #1, July 1927.

the Hookworm for the treatment of the disease on the island. In late 1929 they began making their own films for local consumption.²⁹

The lessons learned from *Unhooking the Hookworm* were ultimately that the film had been inappropriate for any audiences other than white southern farmers. Consequently, when the Rockefeller Foundation embarked on the production of a second film on malaria, it was designed to take into account the limitations of its target audience. As an official of the foundation opined, ‘in less progressive countries few people know what a microscope does’. In a similar vein, another official warned that ‘the native or ignorant mind’ would be confused by the sophisticated scientific apparatus involved in malaria’s diagnosis and treatment. The most expansive comments on this question were provided by Mark Boyd, an official of the International Health Board, who warned of the danger of the board making films which were, “for the most part considerably above the intellectual capacity of the average rural audience, either in the United States or abroad” and that it was particularly “inappropriate for rural negro audiences.” The official went on to explain: ‘No one realizes better than the southern negro, the vast gulf that exists between whites and the negroes’ and thus could not be expected to learn from a film ‘dealing with whites’. His comments influenced the production of the film *Malaria*, which was subsequently re-shot several times with scenes of African-American actors to make it intelligible to black audiences. According to reports, ‘This modified film was enthusiastically

²⁹ RG 5, Series 3, Reports, Routine, 437 H Jamaica-Hookworm Reports, 1921-1922, Jamaica-Hookworm Reports, 1929, Folder 2252, Report of #1 Unit, January, 1929, ‘A moving picture film has been taken in the Richmond District, depicting the various features of a Hookworm Campaign. Such local pictures should prove of higher value than imported ones, excellent though they be’.

received by Negro audiences wherever it was shown and I am sure made the rural negroes appreciate malaria as a negro problem.³⁰

Unhooking the Hookworm had a brief history. It was quickly determined to be inappropriate for the vast majority of hookworm sufferers worldwide. It was rendered obsolete by its relatively primitive production techniques, as well as the remarkable success of the hookworm eradication program which it was a part of. However, its historical significance is large. It appears to have inaugurated a way of thinking about films and audiences that would grow into an entire industry of instructional film-making in the colonial world during the 1930s and 1940s. It demonstrated the dramatic appeal of the medium to rural illiterate communities, and it introduced thousands of rural people to the cinema, a medium which would dominate global culture throughout the 20th century.

³⁰ Quoted in 'The Rockefeller Foundation's Malaria Film, 1925', Marianne P. Fedunkiweb published at: <http://www.rockarch.org/publications/conferences/fedunkiweb.pdf>