

Notes on the Proliferation of *Metropolis* (1927)

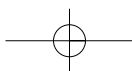
MARTIN KOERBER

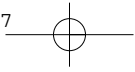


"*Metropolis*" (Fritz Lang, DE, 1927).
Photo: Ufa/DFI

Metropolis is popular. It is impossible to imagine a retrospective of classic German silent films, science fiction films, or cinematic architecture (the series of possible topics could go on and on) without this film. Many have, at some point, seen something on the screen called *Metropolis*. But what could they have seen? Certainly not the film written in 1924 by Thea von Harbou and directed by Fritz Lang in 1925/26, because that film ceased to exist in April 1927. What is being offered under the title *Metropolis* by various distributors and archives, what is for sale on videocassettes, or occasionally seen on TV are versions, sometimes more and sometimes less removed from Lang's film.

On February 15, 2001, at the Berlin International Film Festival, a new restoration of the film was shown. It has been touring the world ever since. This new version, commissioned by the Friedrich-Wilhelm-Murnau-Stiftung (a public foundation holding the copyright to this film, as well as to almost all other German films produced prior to 1945) is the result of a joint effort of a working group, comprising of archivists from the Bundesarchiv-Filmarchiv (Federal German Film Archives, Berlin), Filmmuseum München, and the Deutsches Filminstitut in Wiesbaden. The author of this text was





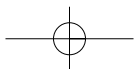
initially charged with researching the existing film material, and then hired by the Murnau-Stiftung to coordinate and oversee the actual restoration process. My initial findings were published in the book, *Metropolis, A Cinematic Laboratory of Modern Architecture*,¹ while we were still working on the project. This essay is an updated version which attempts to summarize how *Metropolis* was destroyed and repeatedly reconstructed and restored over several decades. Above all, my thanks go to Enno Patalas for sharing his knowledge about the film with me for the good of the project. In his time as director of the Munich Filmmuseum he had put a tremendous effort into his own reconstructed version of *Metropolis*; furthermore, he reworked his notes into a documentation of the film and its surviving elements which formed the basis of the new editing structure. Meanwhile, his notes have grown into an independent publication, available in German, which makes it possible to understand on a scene by scene basis what happened to the "Gestalt" of this film, thus giving an in-depth insight into what was possible to restore, and what not.²

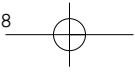
What I can do here, however, is give an idea of the proliferation of one of the most famous silent films of all time, emphasizing that the story of this film is by no means unusual. Many classics that we take for granted as they appear on the screen today have had a similar fate. What makes *Metropolis* special is the amount of documentation about the original form of the film, which has made it possible to trace the "real thing," and restore some of it from the surviving fragments in the best possible print quality.

METROPOLIS APPEARS AND DISAPPEARS AGAIN

The festive premiere of *Metropolis* took place at the Ufa-Palast am Zoo in Berlin on January 10, 1927. At the time, the length of the film was 4,189 meters (13,823 ft): at a projection speed of 24 frames per second (we can only guess at this today), meaning the showing lasted 153 minutes.³ The film was accompanied by music for a large orchestra by Gottfried Huppertz; the orchestral score and the piano arrangement, because of the numerous cues they contain, are one of the best sources for those who want more accurate data about the form of the premiere version.⁴

As early as December 1926, the American representative of Ufa, Frederick Wynne-Jones, brought *Metropolis* to the US and showed it to Paramount, who intended to distribute the film in America. Apparently, it was immediately decided to cut down the monumental film for the American market to "normal" feature length. The playwright Channing Pollock was commissioned to do this work. The changes he made in the film were nothing short of drastic: The basic conflict between Joh Fredersen, the industrialist (Alfred Abel), and Rotwang (Rudolf Klein-Rogge), the scientist-inventor, namely their rivalry over a dead woman, Hel, was completely removed from the film, and with it the rationale for creating the machine woman, and finally the destruction of *Metropolis*.⁵ Also extirpated was the pursuit of Freder (Gustav Fröhlich), Fredersen's son, Georgy (Erwin Biswanger), and Josaphat (Theodore Loos) by the Thin Man (Fritz Rasp), as well as the majority of scenes taking place in the "Yoshiwara," *Metropolis*'s red light district. Further deletions involved the extended pursuit scenes at the end of the film. In order to restore the comprehensibility of the film as a whole after these deletions, it was necessary to make radical changes in the inter-titles, and





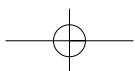
occasionally to change, in important ways, the editing of surviving scenes. After all the changes were made, the American version was still approximately 3,100 meters (10,230 ft) long. Pollock summed it up this way: „As it stood when I began my job of structural editing, *Metropolis* had no restraint or logic. It was symbolism run such riot that people who saw it couldn't tell what the picture was all about. I have given it my meaning.“⁶

In Berlin, *Metropolis* was withdrawn after a few weeks. The reasons for doing this are still unclear. Perhaps here, too, it was felt that the excessive length of the film was an obstacle to its distribution in the rest of Germany. On April 7, 8, and 27, 1927, the Ufa's board of directors held meetings about the film and decided that "*Metropolis*, in its American version, after the removal of titles that tend to be communist in nature," would also be screened in Germany.⁷ The surviving documents do not indicate whether Fritz Lang was involved in the adaptation of the second German version of his film. It seems unlikely, as he is never mentioned in the lists which give the names of people busily editing, screening, and re-editing the film. We do know that Lang was very outspoken in complaining about what had happened to his project when asked by British journalists during a stay in London in September of 1927: "I love films and so I shall never go to America. Their experts have slashed my best film, *Metropolis*, so cruelly that I dare not see it while I am in England."⁸ Some decades later Lang would even go so far as to refer to *Metropolis* as a film "that does no longer exist (sic)".

The altered version of *Metropolis* was submitted to the Berlin film censorship office on August 5, 1927, with cuts largely modeled on the American version and with inter-titles changed as necessary, and was then, at a length of 3,241 meters (10,695 ft), released for distribution. Only in this and similarly shortened versions that were exported by Ufa to other countries was it ever shown outside Berlin.

Over seventy years have passed since the premiere screening of *Metropolis* and the destruction of the original version which occurred almost immediately. This most famous of all German silent films became an almost equally famous case for the history books. Over the past forty years or more, film archives have been struggling to produce copies from the extant mutilated versions that are "better", meaning more complete than the versions marketed by Ufa and Paramount. It is difficult to trace the history of these efforts, because many of these versions were never precisely documented, at least up until now. By comparing the many different copies stored in the world's film archives, it has however been possible to deduce from the film material itself the changes made to the film, as well as the attempts to reverse those changes. Of course, it was not only impossible, but also unnecessary to look at the dozens of *Metropolis* copies that exist on this planet. My preferred method was to single out and concentrate on the surviving nitrate source material from which in one way or another all these copies were derived.

In its advertisements for *Metropolis*, the Ufa publicity department boasted that allegedly 620,000 meters (2.046 million ft) of negative film and 1,300,000 meters (4.29 million ft) of positive film had been used in the film's production. Compared to





a premiere screening length of 4,189 meters, this would mean a shooting ratio of approximately 148:1. If this data is accurate, one might deduce that from this more than ample material Ufa not only failed to extract the shots declared no good, but also, contrary to accepted film industry practice, copied more than double the amount of rushes - the only way to explain the use such a huge amount of positive film. In other words, these figures are scarcely plausible, although they support legends about Fritz Lang, characterizing him as a sadistic circus trainer of his actors, and a heedless squanderer of material. People who were present when Lang was shooting unanimously report that he made his actors repeat scenes to the point of exhaustion. Since, in *Metropolis*, two inexperienced newcomers, Gustav Fröhlich and Brigitte Helm were cast in the leading parts, it seems credible that there were excessive rehearsals, and that much footage was exposed. Erich Kettelhut, the film's art director and a chronicler who tends to be very matter-of-fact, has a very critical attitude towards Lang, noting that Lang was not satisfied until "at least three of the many takes completely met his expectations, including his acting standards."⁹ This observation, which is mentioned quite casually in Kettelhut's lengthy report about the making of *Metropolis*, proves Lang to be a conscientious professional who has something to deliver to his employer: three good takes of every shot.

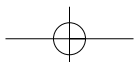
It is quite likely that from the outset the plan was to create three equivalent original negatives for *Metropolis*: one to be used to produce copies for the German market, one for the export department, and one to be delivered to Paramount, who would distribute the film in the United States. At the time, the parallel production of several negatives was a perfectly common practice. Accordingly, the 620,000 meters of exposed negative would be distributed over three original negatives that would be created from them, which reduces the ratio of exposed negative to edited footage to a still exorbitant and unlikely 49:1. There were no good duplicate materials available yet, and only if one had several negatives was it possible to produce a large number of copies, or export negatives, from which, in turn, foreign distributors could make their copies. These original negatives, shot parallel, originated from several cameras that were placed side by side during shooting, or were a montage produced from a number of different takes of the same shot that were at best on the same artistic level, but never totally identical, of course.

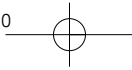
When reconstructing films of which there are only incomplete extant copies, it is often a stroke of luck that in this way films were, so to speak, produced several times over. On the other hand, multiple negatives meant multiple versions, all of which included variants in performance, camera position, length and continuity, which can create enormous problems when combining the material. Furthermore, the restorer is also faced with an ethical dilemma: he is compiling a film that never existed in the form he has created, by reassembling it from a number of different negatives.

SURVIVAL (NOT ALWAYS) OF THE FITTEST

What happened to the three original negatives of *Metropolis*?

In March 1934, at the request of the Reichsfilmkammer (Nazi German Film Chamber), Ufa compiled a list of silent feature films which were still stored in their

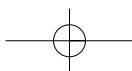




Tempelhof film archive.¹⁰ Among the 480 titles mentioned, there is only one copy of *Metropolis*, listed as consisting of 2,589 meters (8,544 ft) of film negative (not counting inter-titles) on nine reels. The length indicates that this cannot be the original negative of the original version of *Metropolis*, for, at 4,189 meters, the original was considerably longer. At best, this negative corresponded to the second German version, which Ufa brought out in the summer of 1927; after the film had been cut, modeled more or less on Paramount's adaptation, this Paramount version measured 3,241 meters (including inter-titles). What subsequently happened to this negative has not yet been completely determined. In all likelihood, it was moved at the end of World War II together with other Ufa-owned material, since it reappeared in the possession of Ufa after the war, when the company was being reorganized in West Germany in the early 1950s. After the collapse of the postwar Ufa in 1962, the surviving negative was transferred to the Friedrich-Wilhelm-Murnau-Stiftung in Wiesbaden. In 1988, a five-reel fragment was recopied and then destroyed.

However, there does exist a dupe negative of the German Paramount version, which has served as a basis for most of the copies that are circulating in Western countries. In the summer of 1936, Iris Barry, the founding curator of the Film Department of the Museum of Modern Art (MoMA) in New York, came to Berlin to purchase copies of German film classics for the museum's film collection. In addition to other films, she received a 35mm positive copy of *Metropolis* from Ufa. As a comparison with the five reels recopied in Wiesbaden revealed, this MoMA print was generated from the original negative stored by Ufa. The nitrate copy given to MoMA no longer exists, but a dupe negative was made from it in 1937 in New York. This dupe negative underwent a first restoration in 1947, using film clips from the then still extant original nitrate copy, after the dupe negative had become partially unusable.¹¹ Since 1986, this dupe negative has been in possession of the Munich Filmmuseum. In contrast to the negative measured by Ufa in 1934 at 2,589 meters (without inter-titles), the surviving dupe negative evidences more missing footage: The nine reels of dupe negative are only 2,532 meters long (including inter-titles).

Passed down from the pre-war Reichsfilmarchiv to the Staatliches Filmarchiv der DDR (State Film Archive of the GDR) in East-Berlin, and inherited by the Bundesarchiv-Filmarchiv (Federal German Archives) after German reunification in 1990, was another original negative of the film that does not appear on the 1934 Ufa list. It is possible that it was not yet back in Ufa's possession at the time of the inventory, since the negative in question is Paramount's original negative, which had gone to America in 1926/27, where the above described drastic changes to it had been made. It probably went back to Ufa after Paramount's license expired, or at any rate after 1936, and was then given by Ufa to the German Reichsfilmarchiv. The material is 2,337 meters (7712 ft) long (including American inter-titles) on eight reels, and in its present form possibly corresponds to yet another, even shorter Paramount version. Also, by way of the East German Staatliches Filmarchiv, a supplementary fragment of this original negative reached the Bundesarchiv-Filmarchiv; it, too, is part of the Paramount version, and contains the scenes removed from Paramount's first version, as well as fragments of shots that were not completely removed, but merely shortened. The spectacular





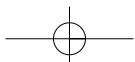
"Metropolis". Photo: Ufa/DFI

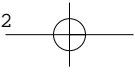
length of this additional material (1,952 meters on 10 reels), which was not returned to Berlin by Gosfilmofond in Moscow until 1971,¹² unfortunately does not mean that the scenes of the German premiere version that were lost in all other versions are to be found here. Rather, the reason for the length of the material is that it also includes a large number of variants and outtakes of the Paramount film's American inter-titles, as well as source material for various special effects scenes that need to be copied together in the finished film as double opticals.

To date, no trace has been found of the third original negative given to Ufa's export department. However, prints made from this negative, which were exported to various countries in 1927/28, have been preserved. At the British Film Institute's National Film and Television Archive, in London, there is a nitrate copy of a 2,603 meter (8608 ft) version that was distributed in Britain. This version contains scenes that are missing in both the MoMA Paramount version and in Paramount's American release version, but other scenes found in those versions have been shortened. The English inter-titles occasionally diverge from the texts written by Channing Pollock for the Paramount American version.

Several years ago the George Eastman House in Rochester, New York, took in as a permanent loan the nitrate copy previously stored in the National Film and Sound Archive in Canberra, Australia. The editing and inter-titles in that version, which was distributed in Australia and originated in the private collection of Harry Davidson, again slightly diverge from the English version. This print is particularly interesting, because it was tinted throughout.

Other preserved nitrate copies of the export version, tinted in part in colors other than the Australian version, are located in the Fondazione Cineteca Italiana in Milan, which owns three fragments. Measured at 1,899 meters, 482 meters, and 190 meters





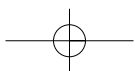
long, each of these fragments has lavish Italian inter-titles, whose meaning is quite different from the German titles.

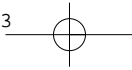
Most recently, and alas after the new restoration was finished, a tinted nitrate copy turned up in New Zealand, of which no details could be established because so far I've had no chance to inspect it. My best guess is that this print would be similar to the British and Australian versions - but one never knows... So I hope I can have a look at this material some day.

Another nitrate copy, tinted in orange only is on deposit from David Packard at the UCLA Film & Television archive. I was allowed to inspect it, and it even contained one short scene that was found nowhere else, but unfortunately the copy could never be made available for the restoration. (The scene in question thus had to be lifted from the Moroder version; obviously Moroder had access to this copy when he made his version, which is not discussed any further here, because I don't think it is a restoration.) So to resume all existing source copies:

- Paramount German version (5 reels safety fine grain positive, German flash-titles, Murnau-Stiftung)
- Paramount German version (2,532 m, nitrate dupe negative, incl. English intertitles translated from German print, corresponding to the second German cut, MOMA/Munich Filmmuseum)
- Paramount U.S. version (2,337 m, nitrate camera negative, incl. American inter-titles, Bundesarchiv-Filmarchiv)
- Paramount U.S. version (1,952 m, nitrate camera negative outtakes from the above camera negative, incl. American inter-titles, Bundesarchiv-Filmarchiv)
- Ufa Export version (2,603 m, positive print, English inter-titles, BFI)
- Ufa Export version (8721 ft, English inter-titles, NFSA Canberra/Eastman House)
- Ufa Export version (1899 m, 190 m, 482 m, three partially tinted nitrate positive print fragments, Italian inter-titles, Fondazione Cineteca Italiana)
- Ufa Export version (unknown length, tinted nitrate positive print, English inter-titles, The New Zealand Film Archive)
- Ufa Export version (unknown length, tinted nitrate positive print, English inter-titles, UCLA)

As far as can be ascertained, all circulating copies of *Metropolis* - reconstructed or not - are derived from the above material, though in part by way of a large number of intermediary stages that make the photographic quality of many of the versions look more like a caricature, than a reproduction of the original. The scenes removed from the film in 1927, first by Paramount and then by Ufa, have not been rediscovered to date, and considering the decades of hard archive-work done on this film, it is not very likely that they still exist somewhere. *"This means that a quarter of the original premiere version of Metropolis, including the part containing the core of the story as conceived by Thea von Harbou and Fritz Lang, must be considered to be irretrievably lost"*. Regardless of this fact, film archives have been showing their prints for decades, and when possible, working on producing better versions whose genesis can only be sketched out here very generally.



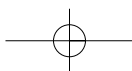


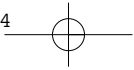
ARCHIVAL VERSIONS AND RESTORATIONS

The most widespread version of *Metropolis* is probably the Museum of Modern Art print, which was created in 1937 by replacing the German inter-titles of the second, German Paramount version received from Ufa, with English-language translations. These were naturally closer to the German version than the captions of the Paramount U.S. version, written by Channing Pollock, in which even the names of the characters had been changed: in the Pollock version, Joh Fredersen became John Masterman, his son Freder was given the name Eric, and Josaphat became Joseph. In the MoMA version, the protagonists again (or rather: still) have their original names. As early as 1938, the MoMA version was duplicated for the National Film Library in London (as the BFI Film Archive was then called), and from there it continued to be spread throughout Europe, thanks to the exchange policies of the International Federation of Film Archives (FIAP). For example, early prints were found in the collections of the Cinémathèque Française (Paris), the Cinémathèque Suisse (Lausanne), and the Cinémathèque Royale in Brussels. The versions that have been distributed in West Germany since the 1960s, set to various kinds of music, also originate from the London dupe negative.

In the sixties, the Paramount U.S. version also reappeared. From Berlin, where the shortened Paramount negative of the Reichsfilmarchiv was copied by the GDR's Staatliches Filmarchiv, and made available to the public, it went to various other archives and was screened there. Gosfilmofond, in Moscow, and the Československý Filmový Archiv in Prague, jointly produced an improved Paramount version that at least attained a length of 2,816 meters, and was therefore more complete than the material known in East Berlin, if still shorter than the version edited by Pollock in 1927.¹³ At the GDR's Staatliches Filmarchiv, Eckart Jahnke succeeded between 1969 and 1972 in producing the so-called FIAP version from various materials made available by other FIAP archives.¹⁴ This was an important step in the direction of a more complete version of *Metropolis*, though still not satisfactory. Unfortunately, many of the riddles hidden in the material could not be solved, because the screenplay and the censorship office "card" had not yet been rediscovered. Probably the musical score, from which many of the most important clues as to the film's editing sequence and to missing scenes could have been ascertained, was also not taken into consideration.¹⁵

Unfortunately, the English inter-titles were left as they were found in the various copies used, and so names of characters frequently change within the film, since the titles came from both the Paramount U.S. and MoMA versions. Owing to the inadequacy of his sources, Jahnke arrived at several fatal, false conclusions in the course of his work. Thus, for example, he believed the comparatively laconic, film captions in the MoMA version were further removed from von Harbou's style than the flowery texts that Pollock had inserted into the Paramount version. Today, we know that exactly the opposite would have been correct. After studying the materials that were available to him, Jahnke proposed that the FIAP version should be based on what he called the "London copy," into which missing takes from other versions were to be inserted whenever possible. His report leaves unclear what was meant by that term, for he had received from London not only a dupe negative of the MoMA version, but also



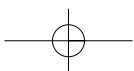


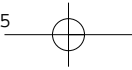
one that had been derived from the English distributor's version (Ufa Export negative).¹⁶ From existing notes about the "London copy" it becomes clear, however, that the copy referred to must have been the MoMA version. While it is true that MoMA had offered the Staatliches Filmarchiv its 1937 dupe negative, no one realized that this material would have been two generations better than the exact same material obtained from London. As a result, the FIAF version - in addition to all its other flaws - was very unsatisfactory from a photographic point of view.

From today's perspective, it is difficult to understand why no attempt was made to obtain a new version from the photographically excellent original negative of the Paramount U.S. version that was preserved in the archive itself! It could have been reedited, modeled on the versions that were recognized to be correct. A letter from Fritz Lang is probably the reason that this was not done. "You were quite right to use the London version (i. e., the MoMA version, MK) as a basis for your reconstruction," Lang wrote to the archive, in 1971, referring to the Paramount U.S. version as an example for "how thoughtlessly and dictatorially American distributors treated European films in the twenties."¹⁷ The film director's authority could apparently not be shaken even by the fact that, in his letter, Lang admits: "[It is] impossible for me to tell you something from memory that could help you in your work," and then lays a false trail: "After Berlin was taken, all the copies of my film which were stored in a print lab were apparently confiscated by the Russians. Among these films was a complete copy of *Metropolis* as well. The performance lasted 2 hours and 4 minutes." This performance length corresponds to that of the second German Paramount version (3,241 meters, though at 23 frames/second), in which all the "thoughtless and dictatorial" deletions of the American distributor had been carried out, and yet Lang calls this version "complete." Was he really unable to remember that his film had originally been thirty minutes, or almost 1000 meters longer?

For years, the efforts of Enno Patalas to preserve and restore German film classics have enjoyed a great deal of international attention. It is to his work at the Munich Filmmuseum that we owe the most far-reaching attempt at reconstructing *Metropolis*, since Patalas - unlike Jahnke in the GDR - was able to use many secondary sources that had been discovered in the meantime, and these provided more accurate information about the lost premiere version: the censorship office card, the screenplay, and the music.

In 1986/1987, after years of preliminary work with inadequate film material and intensive international research, a work print was edited in Munich, based on the 1937 nitrate dupe negative, taken over from the Museum of Modern Art, and incorporating missing scenes from all other available versions, namely from a dupe negative of the Australian version, and from a dupe taken from the original British release. Added were newly photographed inter-titles, faithful to the text found on the censorship cards.¹⁸ This version is 3,153 meters long, and therefore, still shorter than the second German Paramount version of 1927. However, the missing sections, in as far as they are necessary for understanding the remainder, have been supplemented using texts and occasional stills, and the editing corresponded as far as possible to the premiere





version. This work print was presented all over the world, often with the music of Gottfried Huppertz, newly arranged by Berndt Heller.

THE 2001 RESTORATION

The newest edition of *Metropolis* that we have worked on since 1998 is conceived along the same lines as the Munich version. However, after in-depth comparisons of various materials, we decided to use wherever possible the extant original negative of the Paramount U.S. version, thus making some small changes in editing and placement of inter-titles necessary. Supplementary shots have been, if possible, copied directly from extant first-generation nitrate copies. One reason for this procedure is the improved photographic quality - superior to that of all previous versions - which, for the first time in decades, will greatly emphasize the work of cameramen Karl Freund and Günther Rittau.

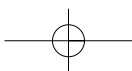
Another reason is not technical, but philological in nature: In the course of our work, we came to the conclusion that the original negative still held by the Ufa archives in 1934 was not a top-quality negative. As a result, prints generated from this negative, including the MoMA dupe negative copied in the 1930s, on which both the FIAF and the Munich versions were based, are less valuable than everyone had believed until now. A direct comparison between the MoMA and Paramount U.S. material clearly showed that in the Ufa negative many scenes had been edited in - not from camera originals, but from dupe negatives. The continuity is often less than successful, and the performance of the actors often inferior to that in the Paramount U.S. negative. All this led us to believe that this original negative was probably not even the negative of the German version (even a modified one), but a substitute version assembled after the originally shortened negative had worn out. While the original negative had combined the best shots available, the substitute version was an assemblage of previously rejected shots, and, where needed, duplicate material to fill in gaps where corresponding out-takes were no longer available. On the other hand, we can safely assume that it was Lang who selected the shots contained in the original negative of the Paramount U.S. version, which left Berlin as early as at the end of 1926, and was shortened and reedited in America. It is more than unlikely that Ufa used inferior material for this version with which it planned to introduce its most expensive and important film to the huge American market.

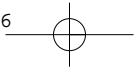
However, this new approach also meant that, in attempting to reconstruct the film once more, the film had to be reedited from scratch. The difficulties associated with editing and assembling such varying and, to some extent, contradictory material were unavoidable. And this time, too, it was not possible to create *the* original version of *Metropolis* but "only" a synthetic version, consisting of the fragments passed down to us from multiple negatives.

The newest edition of *Metropolis* also covered new ground on a technical level. Instead of producing a dupe negative photographically, in a 2K-resolution, the preserved nitrate-material was scanned and digitally manipulated in a computer. This allowed for more precision than would have been possible using conventional methods when doing touch-up work on scratches, soiled regions, surface abrasions and torn areas, but also when integrating fragments from different sources of quite different photographic quality. Scanning and restoration work were done by Alpha Omega Film & Video GmbH



"Metropolis". Photo: Ufa/DFI





in Munich, exposure back to film by Centrimage in Paris, prints for distribution by the Bundesarchiv-Filmarchiv. I can foresee that some debate may arise about the question of whether a 2K resolution is enough to preserve a film from an original negative, even if it is from the 1920s. However, it should be mentioned here, that before the 2K restoration took place, all the material chosen to be used in the restoration had also been copied by the Bundesarchiv-Filmarchiv onto 35 mm film as a measure of protection; the resulting dupe positives and dupe negatives have not been assembled, according to the newest edition. Should the need arise to go back and alter the restoration, and should then the digital data or the original nitrate material no longer be available, this material can serve as a possible source for future interventions. Also it should be noted that these days most digital post-production work for modern films is done at 2K resolution.

In the end, the resulting data has been exposed back to film, and the "digital" dupe negative has a decisive advantage over previous dupe negatives: there was hardly any loss of generation in the process, as would have to be expected in the several generations of conventional duplication necessary otherwise to obtain a printing negative. Thus, a copy made from the "digital" negative can have a quality that is very close to a positive, made in 1927, produced at that time from a brand-new negative.

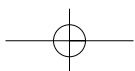
Whether the final chapter of *Metropolis*'s road to restoration has been written, remains to be seen. Certainly, the film's photographic quality and its editing structure are optimal, given the surviving elements. We can safely assume that our restoration will remain the definitive version, unless an older more complete nitrate print or negative turns up somewhere in the world's archives or in the hands of a private collector. Barring that unlikely circumstance, we can enjoy *Metropolis* for the beauty of that which remains, damaged but at least authentic.

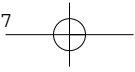
ACKNOWLEDGEMENTS

I wish to express my deepfelt thanks to everybody involved in the restoration at the various archives and institutions, namely the Friedrich-Wilhelm-Murnau-Stiftung, the Bundesarchiv-Filmarchiv, and the Filmmuseum München for providing information and material towards the new version, as well as giving me support in the research, and for bearing with me and my questions at all times during the three years it took to complete this endeavour.

NOTES

1. This publication gives a much more detailed picture than I can do here. Readers of German are referred to: Enno Patalas: *Metropolis in/aus Trümmern* (Berlin: Bertz Verlag, 2001).
2. The actual projection speed for the premiere is unclear. Noted on the piano score as abridged by Huppertz' hand to fit the shortened version is a projection speed of 28 frames per second, perhaps implemented to increase the speed of the shortened version and subsequently reduce the running time. Roland Schacht, a critic who attended the premiere reports of a running time lasting circa 140 minutes.
3. The original score and piano accompaniment belonging to Huppertz are kept in the archive of the Filmmuseum Berlin - Deutsche Kinematek, in Berlin. Copies of the printed score for piano can be found in other archives and libraries, such as in the Staatsbibliothek zu Berlin - Preußischer Kulturbesitz, and in the Deutsches Filminstitut, in Frankfurt am Main.
5. An article by Randolph Bartlett, "German Film Revision Upheld as Needed Here," which appeared





March 13th, 1927, in the *New York Times*, justifies various accusations. Suggested was that the nearness of the name "Hel" to the English word "hell" was the prime reason to remove the character from the film. This is obviously hard to believe. Hel's name only appears on her tombstone, and as a special effect, this would have been relatively easy to re-shoot with a different text for the American version.

5. Channing Pollock Gives His Impressions of *Metropolis* in: Press release of Paramount Pictures for the film *Metropolis*. A transcript exists in Bundesarchiv-Filmarchiv, File on the Reconstruction of *Metropolis* (from Staatliches Filmarchiv der DDR).
6. Bundesarchiv, File R 109 (Universum Film AG), 1026a: Notes on Board Meetings: No. 3 (7. April 1927), No. 4 (8. April 1927) and No. 17 (27. April 1927)
7. *Sunday Express*, September 25, 1927; quoted in Jeanpaul Goergen: "Der Metropolis- Skandal. Fritz Lang und Metropolis in London, September 1927" in: *Filmblatt* 15, Vol. 6., 2001.
8. Erich Kettelhut, *Memoirs*. Unpublished typed manuscript in the archive of the Filmmuseum Berlin - Deutsche Kinemathek p. 596
9. Bundesarchiv - Filmarchiv, Document Collection, File U 381.
10. A letter by Eileen Bowser (Museum of Modern Art) to Manfred Lichtenstein (Staatliches Filmarchiv der DDR) dated April 16th, 1968. Bundesarchiv-Filmarchiv, File on the Reconstruction of *Metropolis* (from Staatliches Filmarchiv der DDR.).
11. In 1945 the Soviet Armies of Occupation removed a lot of film material found at the Ufa-Babelsberg Studios and from the Reichsfilmarchiv, taking them to Moscow, just as the other Allied Armies of Occupation confiscated as „Alien Property“ much German film material from their occupation zones. Just as the Library of Congress began a program of repatriation in the 1970s to the then West German Bundesarchiv, so too did Gosfilmofond begin selective repatriation. to East Berlin.
12. Note from Vladimir Dmitriev of the Russian organization Gosfilmofond to the author, 1998. Prague obviously owned (received from Berlin?) the short version of the Paramount version in which the Gosfilmofond integrated, as well as possible, additional scenes from the original, negative fragment confiscated in Berlin in 1945, and sent back again later.
13. In the credits, alongside the Staatliches Filmarchiv der DDR, after the FIAF (Fédération Internationale des Archives du Film) the following are named: National Film Archive (London), Ceskoslovensky Filmovy Archiv (Prague), Gosfilmofond (Moscow), Deutsches Institut für Filmkunde (Wiesbaden), Stiftung Deutsche Kinemathek (Berlin-West), Museum of Modern Art (New York) and Archion Israeli Liseratim (Haifa).
14. Jürgen Labenski (ZDF Television, Mainz) mentioned that ZDF had access to Huppertz's score since 1967 and, in the early seventies, put it at the disposal of the Staatliches Filmarchiv. However, in the files on the reconstruction, now kept at Bundesarchiv-Filmarchiv, no reference to this can be found; nor does Jahnke's final report refer to this source. From this we can assume that the music - if at all - first arrived in the archive after the research was completed and was only used for adding the sound-track when the film was broadcast on Television.
15. Note from Elaine Burrows (British Film Institute, London) to the author, May 11th, 1998. All other information mentioned here pertaining to the version of the Staatliches Filmarchiv der DDR are taken from Jahnke's File on the Reconstruction, now in the Bundesarchiv-Filmarchiv.
16. Fritz Lang to Wolfgang Klaue (Staatliches Filmarchiv der DDR), January 23rd, 1971, in the Bundesarchiv-Filmarchiv, File on the Reconstruction of *Metropolis*.
17. All German films had to pass through a local censorship office in the 1920s. Documenting the process were censorship cards, which listed the name of the production company applying for censorship approval, and a usually complete list of all written inter-titles, as well as any other written material in the film (credits, inserts etc.). These cards have been invaluable in the restoration of several German classic silent films.

REFERENCE

Wolfgang Jacobsen, Werner Sudendorf (ed): *Metropolis , A Cinematic Laboratory of Modern Architecture* (Stuttgart/London: Edition Axel Menges, 2000)

