1929 poster for the film by the Stenberg brothers

3. MAN WITH A MOVIE CAMERA: the Movie Cameras

Richard Bossons
Dziga Vertov’s 1929 masterpiece ‘Man with a Movie Camera’ is a staple of film studies courses and has been analysed and written about countless times. What has had no attention, surprisingly, is the actual equipment used on and in the film. Surprisingly, because it is the only film where the camera plays such a central role (even ‘coming to life’ towards the end), and ‘the mechanical eye’ was a central part of Vertov’s theories. In most of the analyses of ‘Man with a Movie Camera’ there is little or no discussion of the cameras, or they are mentioned inaccurately. This post looks at the film from the Movie Camera’s point of view.

I have included links to other websites and information to enhance the value of this article and, although I have taken reasonable steps to ensure that they are reputable, I am unable to accept responsibility for any viruses and malware arising from these links.

[x] Numbers in brackets refer to notes at the end of the article.

THE FILM AND ITS AUTHOR

‘Man with a Movie Camera’ [Человек с кино аппаратом, Человек с кино аппаратом (R), Людина з кіноапаратом, Людина з кіноапаратом (U)], along with Eisenstein’s ‘Battleship Potemkin’, must be the most influential of all Soviet films. It was voted one of the ten best films in cinematic history by BFI ‘Sight & Sound’ readers, and the best documentary ever made [1]. The latter accolade is rather misleading as the film was not meant to be a documentary in the conventional sense. Vertov describes it as an ‘Excerpt from a Camera Operator’s Diary’ in the opening titles, but warns the audience:

“Attention Viewers!

This film is an experiment in the cinematic communication of real events

Without the help of intertitles

Without the help of a story

Without the help of theatre

This experimental work aims at creating a truly international language of cinema based on its absolute separation from the language of theatre and literature”

Rather than ‘Director’ Vertov describes himself as the ‘Author-Supervisor of the Experiment’. On the face of it the ‘story-line’ is of a man with a movie camera wandering about an unnamed city (mostly a mixture of Odesa, Kyiv, and Moscow – see Notes) filming its activities during the day. There are images of trams, trains, traffic, people working and playing, birth, death, marriage and divorce, an ambulance and fire engine, factory machinery and crowds at the beach.

But the film is unlike any other ‘City Symphony’ in the 1920s such as Paul Strand’s on New York (‘Manhatta’, 1921) or Walter Ruttmann’s on Berlin (‘Berlin: Symphony of a Great City’, 1927), and this dry description “…doesn’t do justice to its dedication totransforming and upending reality. This film is visibly excited about the new medium’s possibility, dense with ideas, packed with energy: it echoes Un Chien Andalou, anticipates Vigo’s À Propos De Nice and the New Wave generally, and even Riefenstahl’s Olympia. There are trick-shots, split-screens, stop-
motion animation, slo-mo and speeded up action. Welles never had as much fun with his train-set as Vertov had with his movie camera” [2].

It is also a film about film-making, shots of the city and the ‘Man’ (Vertov’s brother, and cinematographer, Mikhail Kaufman) are interspersed with images of the film being edited by Vertov’s wife, Elizaveta Svilova. There are occasional views of the audience in a cinema reacting to events on the screen, watching the very film that they are appearing in!

Dziga Vertov (a pseudonym meaning ‘spinning top’, his real name was David Kaufman) became a film-maker in 1918 after two years experimenting with sound in what he called the ‘Laboratory of Hearing’. During the Civil War he organised film shows and film-making on the ‘agit-trains’ spreading propaganda through the areas captured by the Red Army, and then worked on a series of short documentary films he titled ‘Kino-pravda’ (Film-truth) during the early 1920s. During this period Vertov developed his experimental film techniques and his theories about cinema as the art form best suited for the masses. He derided film drama as ‘... the opium of the people...Down with the bourgeois fairy-tale script! Long live life as it is!”.
Vertov believed that the camera, more than the human eye, is best used to explore real life, as being a mechanical device it would record the world as it really was without bias or aesthetic considerations. This theory he called ‘Kino-glaz’, or Cine-Eye:

“The Cine-Eye lives and moves in time and space, it perceives and fixes its impressions in a completely different way from that of the human eye...We cannot make our eyes any better than they have been made but we can go on perfecting the camera forever.”

“I am the Cine-Eye. I am the mechanical eye.

I the machine show you the world as only I can see it.

I emancipate myself henceforth and forever from human immobility. I am in constant motion. I approach objects and move away from them. I creep up to them. I clamber over them, I move alongside the muzzle of a running horse, I tear into a crowd at full tilt, I flee before fleeing soldiers, I turn over on my back, I rise up with aeroplanes, I fall and rise with falling and rising bodies...

...Freed from any obligation to 16-17 frames a second, freed from the restraints of time and space, I juxtapose any points in the universe regardless of where I fixed them.

My path leads towards the creation of a fresh perception of the world. I can thus decipher a world that you do not know.”

He adopted these principles in several films following this manifesto including ‘Kino-glaz’ in 1924 (above), ‘A Sixth Part of the World’ (1926), and ‘The Eleventh Year’ (1928), but ‘Man with a Movie Camera’ is the apotheosis of his theories [4]. It had a mixed reception on its release, praised by many critics, but also criticised as too ‘formalistic’ (elitist) with Sergei Eisenstein deriding it as “pointless camera hooliganism”.

The film was popular with audiences but fell out of favour in the 1930s along with its director and was neglected for years. It is now regarded as a masterpiece of world cinema, influencing directors from Godard to Christopher Nolan.

This is only a brief introduction to the film and Dziga Vertov. For an in-depth analysis read John MacKay’s essay ‘Man with a Movie Camera: an Introduction’, Academia, 2013.


For other references see Notes at the end of the article.
Mikhail Kaufman looking pleased to be surrounded by the equipment used on the film in 1928. On the left is a rare Debrie GV Model F on a Debrie tripod, an Ica or Zeiss Ikon Kinamo being held above a Debrie Parvo Model L (with the 21cm Krauss Zeiss telephoto lens seen in the film), and a Debrie Interview (wooden body panels) on the right. The latter two are supported by a makeshift mount and clamp on another Debrie tripod. Missing is the Parvo Model K (used on ‘The Eleventh Year’), and possibly a Debrie Sept. This photograph is usually shown the wrong way round.

THE CAMERAS IN ‘MAN WITH A MOVIE CAMERA’

Man with a Movie Camera ‘…is an experimental documentary in which a cameraman (Kaufman) and a moving-picture camera (the French-made Debrie Parvo ‘L’) become a single entity, an ubiquitous, omniscient and quasi God-like eye capable of recording a new kind of social and political reality. Not only is this mechanical eye able to perceive things that the human eye cannot, but the camera itself has become a ‘Constructivist’ object in its own right, a sleek blend of silver, metal design and utilitarian, ideological purpose.’ [5].

Dziga Vertov and his friend and collaborator the Constructivist artist and photographer Alexander Rodchenko shared an interest in cameras. The latter spent over 6,000 francs (around 3,000 euros today) on photographic equipment during his trip to Paris in 1925, including a camera for Vertov (a Debrie Sept). The choice of cameras for a film about a cameraman would have been carefully considered by the ‘Author-Supervisor’ and his brother.

Particularly the latter as Mikhail Kaufman was a mechanical and electrical engineer with an expert knowledge of the cine camera, as well as a director making innovative films in his own right [6].
In an article in the November 1926 edition of the journal Kino it was announced that “At the last Kinok [7] meeting, cameraman and Kinok member M. Kaufman held a lecture about the first Soviet film camera with a motor drive designed along entirely new lines, which he constructed together with film technician Userdov. The camera can be used for single frame animation, normal and slow motion shooting. The design of the camera is so simple that it presents no obstacles to the commencement of mass production. The camera is equipped with technically superior shooting devices, and will be distinguished by its comparative light weight. The first Soviet film camera will carry the name of Kinoglaz.” This sounds like an advanced camera for the time, particularly as the Soviet camera industry only began in earnest in the early 1930s [8]. There is no evidence that it ever went into production, or was used in the making of ‘Man with a Movie Camera’.

The most prominent camera used by Kaufman in the film is the Parvo Model L, made by André Debrie in Paris, introduced in 1926. An obvious choice as it was the most sophisticated and advanced movie camera of its day, widely used by European [9] film-makers including Sergei Eisenstein, Abel Gance, Fritz Lang, Joris Ivens, and many others. Importantly, apart from being technically superior to its contemporaries, it is very photogenic, a simple silver and black metal box on a beautifully designed wood and aluminium tripod. The classic all black Mitchell or Bell & Howell movie cameras with their protruding ‘Mickey Mouse ears’ film magazines and ugly tripods would not have looked as good on screen, and would have been awkward to carry around. The Debrie cameras are compact and (relatively) light enough to be carried by Kaufman up a chimney, into the back of cars, on a motorcycle, across a moving gantry, along a beach, down a mine, in a foundry, and in many of the other challenging locations demanded by his brother. Debies were also the main cameras imported by the state film organisations such as Goskino/Sovkino and VUFKU (supplied by Schatzow of Berlin) after Germany recognised the Soviet Union in 1922.

As it is so prominent in many of the well-known scenes many commentators assume that the Parvo Model L is the only camera that appears with Kaufman in the film, but in fact there were four. A total of 5 or 6 cameras were involved in the making of ‘Man with a Movie Camera’, perhaps more (eg other cameras used during ‘The Eleventh Year’ filming), as follows (in order of importance):

DEBRIE ‘PARVO’ MODEL L 35MM HAND-CRANKED CINE CAMERA (1926)

DEBRIE ‘INTERVIEW’ 35MM HAND-CRANKED CINE CAMERA (1924)

DEBRIE ‘PARVO’ MODEL K 35MM HAND-CRANKED CINE CAMERA (1924)*


ICA or ZEISS IKON ‘KINAMO’ 35MM CLOCKWORK CINE CAMERA (1923/1926)

DEBRIE ‘SEPT’ 35MM CLOCKWORK MULTI-FUNCTION CINE CAMERA (1921-26)**

* Used on ‘The Eleventh Year’ filming

** Not seen in the film. Likely to have been used, but no evidence found so far.
DEBRIE ‘PARVO’ MODEL L 35MM HAND-CRANKED CINE CAMERA (1926)

The Australian explorer Frank Hurley’s Debríe Parvo Model L. He described his camera as “a glorious piece of mechanism, and ideal for my work”. The Parvo is in good condition after its Antarctic and WW2 Middle East adventures (though missing its strap handle and side viewfinders). [National Museum of Australia]

The Model L was the latest in a series of Parvo cine cameras going back to the early 1900s. Joseph Debrie founded his company in Paris in 1898 to make film perforating machines for the rapidly developing cinematography industry. This had been born in the city in 1895 when the Lumière brothers held the first public screening of a motion picture.
With the help of his 17-year-old son André he designed the first ‘Parvo’ in 1908 at the request of the English partner of a Parisian film distribution company, Charles Raleigh, who wanted a compact, lightweight, but tough 35mm cine camera for African film expeditions. The new camera design was based around a strong engine turned aluminium frame which supports the hand cranked mechanism (for picture see section on Model K). The separate, simple box-like casing is made of thin varnished mahogany plywood panels. Rather than external film containers, the magazines are mounted within the casing on each side of the frame which makes the camera very compact. The film comes out of one magazine and is looped and twisted around the film gate to return into the other one (see lh illustration on the Model L catalogue pages below). This arrangement also allows direct viewing through the lens between the magazines, for focusing before the film is fed through the gate. There is also a side mounted ‘Newton’ type viewfinder (negative power plano-concave lens) for use during filming. Debrie named the new camera ‘Parvo’, Latin for ‘small’. And indeed it is, the body measuring 242 x 175 x 147mm, and weighing only 6.5kg (actual measurements of National Science & Media Museum 1908 camera).

Debrie Offices and Factory, Rue Saint-Maur, Paris, early 1900s

In 1919 André Debrie took over the company after his father’s death which by that time had expanded into manufacturing all types of cinematography equipment including darkroom, editing and printing apparatus, film projectors and devices for special effects. From 1920 the Parvo outer casing was made of aluminium, occasionally painted black or grey, but mostly left in its natural finish. My Model K has a special ‘engine-turned’ finish, but most were plain. The shutter was also fitted with an ingenious auto-dissolve mechanism in 1920. The camera had been slightly larger since the 1913 Model A, still very compact for a professional 35mm cine camera at 270 x 200 x 150mm, with a film capacity of 120 metres (390 ft). However, the weight had increased considerably to 10.1 kg (including 7.5cm lens) due to the all metal construction and additional components.
The Parvo became the most widely used cine camera for European silent films in the 1920s, most notably in the Soviet Union. The renowned Berlin photographic dealer Schatzow proclaimed that it was the ‘Sole Representative for Germany and Russia’ on the maker’s plate and so the firm would have sold the cameras for some of the greatest films ever made.

The 3,000th camera left the Rue Saint-Maur in 1924, and over 9,000 Parvos were eventually manufactured. Virtually all the great directors outside the USA used the camera as well as Dziga Vertov, particularly Sergei Eisenstein and Abel Gance (see section on the Model K).

Eduard Tisse and Sergei Eisenstein in crash helmets with a Parvo Model JK!
A series of minor improvements throughout the 1920s were signified by the ever changing letter codes of E,* G, H, * JK, K, KL, until the L was designed in 1926. There was also a simpler ‘amateur’ range called the ‘Interview’, introduced in 1924, which ran concurrently with the professional cameras. Some of the models had a long life as the Model E (the basic Parvo) and Model K were still shown in the 1931 catalogue that mainly featured the Model L. There was also a Model LS in the catalogue, identical to the L but with the body made of ebonite (a harden rubber material) to deaden the sound of the mechanism for ‘talking pictures’. Even more confusion is caused by the letters found next to the serial number, often used to describe the model in sales particulars. For example my Model K has the series letter Z. I have not found out what these letters refer to as obviously there were not 26 variations of the Model K!

*I have not yet come across a Model ‘F’ ‘I’ or ‘J’

The Model “L” PARVO, “Parvo” model L, or “Parvo Debrée” model L (as it was inconsistently called in the handbooks and sales catalogues) had significant advantages over the previous versions with, among other additional features, an ingenious way of allowing focusing through the lens on to ground glass when a film was loaded (above), and a quicker method of changing lenses (see notes on Krauss Zeiss lens). As with the Model K an electric motor drive could easily be attached (though many camera operators still preferred the hand crank at this time). The magazine capacity remained at 120 metres (390 ft), giving six minutes of exposed film at the standard silent film hand-cranked speed of 16 frames/second.
The Model L was made for several years, becoming Debrie’s most popular camera, until the advent of sound films in the early 1930s when it was superseded by the larger (300m) capacity Super Parvo with a built-in motor drive and sound-proofing (an intermediate Model T was available in 1931 which was effectively a Model L adapted for the larger film magazines). However, because it was still one of the most compact and reliable cameras, significant film-makers such as Leni Riefenstahl [11] and Eduard Tisse (Eisenstein’s cinematographer) [12] were still using motorised Model Ls throughout the 1930s. Carol Reed used a Model L and Model K for shooting some of the scenes of his 1949 film ‘The Third Man’ [13]. Agnès Varda also used a motorised Model L (due to budgetary reasons, presumably) for her first film La Pointe Courte (1955). The thirty-year-old design was still capable of producing the beautiful cinematography of this ground-breaking film.

A selection of scenes with the Parvo Model L

[Note: figures in brackets show in hours, minutes & seconds approximately when the scene appears in a 2014 digitally restored version by the Eye Institute and Lobster Films (see Notes for details and source of screenshots). The scene can extend before and after the time shown which is just meant as a guide to locate it. The approximate times would apply to most versions of the film].

[00:02:22] Opening sequence (‘reflected’ image, the first of many – see Notes). The ‘miniature’ camera on top is also the Parvo Model L (reflected as well)
[00:21:19 on] The car and carriage sequence around Odesa

[00:26:25 on] The camera over the City sequence (Kyiv)
[00:54:18 on] Motorcycles around the track sequence

[01:00:38 on] The camera and tripod animation sequence
Other scenes with the Parvo Model L

[00:09:58] On the railway tracks (the camera isn’t very clear, and this is part of the Debrie ‘Interview’ camera [see below] sequence but it looks like an aluminium body)

[00:11:10] Lens changing sequence (reflected image)

[00:11:23] [00:11:27] [00:11:30] Cranking sequences (reflected image)

[00:11:34] & [00:11:46] 21cm lens (reflected image)

[00:12:39] & [00:12:42] 15cm lens (reflected image); possibly on Debrie Interview

[00:12:59] & [00:13:04] 15cm lens with iris (reflected image) – between Reels 1 & 2; possibly on Debrie Interview

[00:14:34] [00:14:37] 21cm lens (reflected image with ‘Cine-eye’)

[00:19:53] Reflection of camera and buildings in revolving door

[00:20:47] Filming the wheels from locomotive steps

[00:21:19 on] Car and carriage sequence around Odesa

[00:32:22] 21cm lens (reflected image with ‘Cine-eye’)

[00:33:48] 21cm lens (only non-reflected image of lens); beginning of Reel 4

[00:33:55] Traffic policeman at intersection sequence, Moscow

[00:34:58] Side view of cranking camera (reflected)

[00:35:03] Filming into a mirrored stand or booth? (‘Specialist [shoe?] Cleaner, Paris’)

[00:35:44] Cranking camera (reflected)

[00:35:44/45] 21cm lens (reflected)

[00:35:44] Brief image of camera cranking (reflected)

[00:37:56] Cranking camera in reverse (non-reflected image)

[00:38:03] Cranking camera in reverse (reflected image)

[00:42:31] [00:42:34] [00:42:37] Side view of cranking camera (reflected)

[00:42:57 on] Model L appears in traffic intersection sequence with Kinamo

[00:43:10] Model L on its own at the traffic signal with spreadeagled tripod

[00:43:15] Model L in part of ‘between the trams’ sequence (with Debrie Interview)

[00:43:26] 21cm lens (reflected image); end of Reel 4

[00:54:19 on] Camera on a motorcycle around the track sequence
Close up of camera on motorcycle handlebars in a special cradle; end of Reel 5 (omitted from Lobster Films version)

[00:54:23 on] On the carousel sequence (partly shown ‘reflected’ – see Notes)
[01:03:29] Second camera on a motorcycle sequence
[01:05:32 on] Camera in the back of a speeding car through Odesa sequence

**E. KRAUSS TESSAR ZEISS 21cm f4.5 TELEPHOTO LENS #156458**

This lens was used often, and appears regularly in the film with the Model L, usually in reflection. Krauss was a Paris based optical manufacturer founded in the late 1880s that made Zeiss lenses under licence. The **Tessar** (from the Greek *Tessares* = four) was designed by Paul Rudolph of Carl Zeiss in 1902, and is the most successful lens configuration of all, licensed to many manufacturers. Over 116 years on the name is still used for Zeiss’ four element mobile phone camera lenses. The Tessar design consists of four lens elements in two groups, the front pair separated by an air space and the rear pair cemented together as a ‘doublet’.
[00:33:48] The only non-reflected image of the lens

Enlargement of [00:26:27]
A **15cm version of the lens** appears briefly at the ‘out-of-focus flowers’ sequence [00:12:39] & [00:12:42] and shortly afterwards at the end of Part 1 [00:12:59] and the beginning of Part 2 [00:13:04] using a closing and opening iris to show this changeover symbolically. Debrie made a 90mm iris (catalogue illustration below) to fit in front of the lens, and a 140mm iris for the accessory carrier on the tripod (not used in the film). However, this iris looks like an earlier type, perhaps fitted to the Interview. The image of the lens is reflected. This lens does not appear anywhere else in the film. The outer rim with the protruding lugs is for attaching accessories such as a lens hood and filter holder.
The 90cm iris in the catalogue as seen on the Model L Parvo in Eleazar Langman’s well-known photograph of Mikhail Kaufman. To clear the telephoto lenses seen in the film it was likely that the iris was attached to a bellows type lens hood.
A new interchangeable lens mount was designed for the Model L to allow for very fast lens changes, *in one second as a maximum* boasted the handbook (I have seen several Model L’s without this feature, and other models were fitted with it after 1926). There was a large choice of lenses for this mount from a variety of manufacturers including Taylor Hobson, Zeiss, and Bausch & Lomb. The lenses below are all fitted into the Model L mount (in the centre of the handbook illustration below).
Quoting from the instructions:

‘Attachment of lenses on “Parvo” Model L with new style mount

The following explanations, which are rather lengthy and require a great deal of attention, permit of attaching or removing a lens in one second as a maximum.

….Take the desired lens; turn sunshade (I) from left to right and push it on its mount as far as it will go. In this way focusing flange (J) will face ball (K) on apparatus. Set this lens of the camera in such a way that button (L) of lens sunshade will engage notch (E) of camera at the same time that the three notches (M) on lens will engage the 3 lugs on camera. Hold the lens completely in and push tightening lever (C) to the left. The lens will then be attached…’

The operation is indeed a lot quicker and simpler than the instructions would suggest as can be seen in the film [00:11:10] when Mikhail Kaufman swaps lenses just before swinging the camera around for a profile view (another reflected image – the lever is on the right of the lens).
Harking back to the basic design of the first Parvo, intended for the ‘Amateur and Reporter’ according to the brochure, the wood-bodied Interview is essentially the same as the aluminium models but without the auto-dissolve mechanism. It was lighter at 8.4kg, which is probably a good reason why it features in most of the scenes where the camera and tripod are being carried around by Mikhail Kaufman. It was also the least valuable Debrie of the three seen in the film, and the wood absorbs knocks better than aluminium! In any case, the more advanced ‘L’, ‘K’, and ‘GV’ would have been the preferred cameras for filming. Various iterations of the basic type ‘a’ Interview added accessory mounts, bayonet lens mount, reverse cranking, the Parvo tachometer, up to type ‘f’ which added motor drive and the facility to use it with a shoulder harness mount instead of a tripod.

It is not clear if a Parvo ‘Interview’ was used for ‘The Eleventh Year’ filming in 1927. I have not found any evidence for this but it is unlikely that an expensive Model L would have been used in the foundry and mine sequences* to film a Model K, more likely the other way around. Mikhail Kaufman was also using a Model JK during this period as it can be seen mounted on an Indian motorcycle and the front of an electric locomotive (as seen in his 1927 film ‘Moscow’) in photographs of the mid-Twenties.  

*There is a possible glimpse of an Interview in some of the mine scenes.
A selection of scenes with the Interview

[00:02:37] Opening sequence

[0018:18] Through the market crowd sequence
[00:31:41 on] Following the ambulance sequence

[00:42:40] Machinery and camera sequence
[00:50:49] On the beach sequence

[00:56:20] The beer glass sequence
Other scenes with the Interview

[00:09:05] Through the glass doors to the waiting car sequence
[00:09:23] Under the bridge sequence
[00:09:49] Across the railway line
[00:09:58] On the railway tracks (the camera isn’t very clear, and although this is part of the ‘Interview’ sequence it might be the aluminium body of the Model L)
[00:10:44] Back across the railway line (camera being removed from tripod)
[00:15:06] Walking along the street with the camera and tripod (the ‘Awakening Woman’ poster)
[00:25:37] Walking along the street with the camera and tripod
[00:29:27 on] Filming buildings sequence (double/triple exposure)
[00:30:30] In the hotel lift lobby
[00:33:25] On the fire engine
[00:38:47] Possibly in part of the mine sequence
[00:43:13] Beginning of the ‘between the trams’ sequence; replaced by the Model L.
[00:50:15] Coming off the ship down the steps
[00:51:10] Lying in the sea sequence (reflected)
[00:55:58] A giant camera looks over the city
[00:58:29] Coming out of the drinks shop
[00:58:39] Going into the Workers Club
[01:04:56] Two cameras above the crowd
[01:07:38] Carrying camera and tripod. This is the last camera image in the film which is omitted in some versions.
DEBRIE ‘PARVO’ MODEL K 35MM HAND-CRANKED CINE CAMERA (1924)
Dials and controls from top: crank handle turn counter, metres of film counter, direct viewfinder through lens (with optional red filter), opening for electric motor attachment with dark slide, tachometer (below) showing frames per second speed while cranking (0 to 24 fps, arrow on 16 fps), threaded lug for motor (bottom rhs). The top loop toggle is for marking the negative (when you pull it a small hole is cut into the film); the bottom one is for disengaging the crank handle and changing gear to one frame per turn (rather than eight).
The front and side panels open up to allow full access. Note the beautiful engine-turned finish on the frame (the screws are ‘blued’ like a fine watch). A film magazine is in place on the opposite side.

The penultimate version before the Model L (there was a Model KL), this was the most popular Parvo in the mid-Twenties. Abel Gance used a number of Ks and JKs to film his 1927 epic Napoleon, and Debrie collaborated with him on the extraordinary ‘Polyvision’ split screen panoramic sequences in the final reel of the film. A special rig was made to mount three Parvos with synchronized motors on top of one another, facing in different directions to achieve the effect.
Rudolph Valentino, an enthusiastic photographer, also owned a Model K. This camera was in the auction of his property following his early death in 1926 at a guide price of $850, more than $11,500 today!
A selection of scenes with the Parvo Model K*

[00:17:41] Across the moving gantry

[00:38:21] In the mine sequence
[00:39:19] In the foundry sequence

[00:40:35] The Volkhov dam sequence
Other scenes with the Parvo Model K*

[00:13:19] [00:13:57] ‘Bridge’ and trams sequence

[00:15:36 on] Climbing the steelworks chimney with a camera case (probably empty!)

[00:16:09] Taking out the camera from its case at the ‘top’ of the chimney (not confirmed)

[00:17:20] Carts over the cameraman sequence

*The sequences with the Model K were taken during the filming of ‘The Eleventh Year’ in 1927

DEBRIE TRIPOD MODEL ‘C’ (1920s)

Beautifully made in aluminium and beech, the tripod also has a prominent role in ‘Man with a Movie Camera’, whether being carried on Kaufman’s shoulder or performing acrobatics with the camera in a stop-motion sequence. A tripod was available with the wood-bodied Parvo Model A but it seems that the version of the tripod (with an improved head design) that appears in the film was introduced around 1920 with the first aluminium bodied Parvo (I have not been able to find any catalogues for this period). It is the most beautiful and finely engineered design, the cast aluminium head assembly alone weighing over 9kg (total weight is 12.6kg). This contains the (high) geared pan and tilt mechanism controlled with removable handles. These are very evident during the car and carriage sequence [00:21:19 on] with Mikhail Kaufman rapidly adjusting the pan and tilt standing precariously on the edge of the car body. Tiny spirit levels on the side and rear ensure exact levelling when required.
There is a large knurled knob on the side to lock the tilt with a finely engraved dial showing degrees of tilt; panning is locked into gear with a brass switch at the rear, otherwise the head swings freely. Every movement of this example is precise and accurate, even after 95 years. A nicely made leather and canvas case with a shoulder strap protects the tripod when stored or carried on its own.

The two holes in the front of the head are for the accessory support rods (fully utilised in the photograph of Sergei Eisenstein below).
Mikhail Kaufman’s engineering skill is evident in the adapted head on the tripod when filming the Volkhov Dam sequence (more than likely he made it as it is not a Debrie tripod accessory). It only appears here and might have been fitted to allow for a steeper tilt filming down from the aerial platform (the dam, near Leningrad, was also being filmed for Vertov’s 1928 film ‘The Eleventh Year’).
The sturdy legs comprise three sections of 32mm varnished beech bound with brass strips. The central section pulls out to increase the height and is locked at the bottom with screw clamps on the lower two brass bindings. There is a double metal spike for grip at the end.

The legs are removable, fixed with a 9mm diameter steel rod retained with a loose T-bar clamping nut. An adjustable ‘spider’ was provided to restrain the spread of the legs (see above), but I have not noticed this being used in the film. There is a leather handle for carrying the tripod (visible in the screenshot below) but with the camera attached it is rather unbalanced and Kaufman’s familiar over the shoulder method of transport is the best way. The metal bodied cameras and tripod together weigh nearly 23kg, the wood bodied camera and tripod not much less at 21kg, and he must have endured much to carry them up and across gantries, down a mine, in a foundry, through crowds and streets, and along the beach!

[01:00:38] The tripod appears in a solo role at the beginning of the animation sequence
Mikhail Kaufman on the 1927 Indian Big Chief 74 ci (1206 cc) V-twin motorcycle used in the race track scenes, with a professional looking custom-made cradle supporting the Model L camera fixed to the wide handlebars (made by MK?). How effective this would have been for filming over the obviously bumpy track is debatable (you can see it shaking in the film). Significantly there are no sequences taken by this motorcycle mounted camera in 'Man with a Movie Camera', so it was really just a demonstration of speed and technology.
The photograph below shows him astride a 1923 Big Chief with an earlier attempt at filming from a motorcycle. Unlike the one in the film this is fitted with a very crude camera support that looks like a piece of rough timber with a G-clamp! This would have undoubtedly fallen off at the first bump, and doesn’t look like the work of an expert engineer like Kaufman. The camera is a Parvo Model JK, which was not used in Man with a Movie Camera (there is no evidence for this and no reference to any film attached to the image). The circular fitting on the tank is a klaxon (see colour photographs below).
The Big Chief, made in the USA from 1923-1928 by the Indian Motocycle Company (no ‘r’ – see poster below), was one of the most powerful and glamorous motorcycles of this era. With the latest model of cine camera mounted on the handlebars the ensemble would have been very impressive to a 1920s Soviet audience. Whether or not the ‘bike was Kaufman’s it was the only suitable choice. Having a ten kilo weight balanced on top of the handlebars of most motorcycles wouldn’t have done much for the steering, particularly while cranking the camera! The Big Chief, like all Indians, has very wide bars and is a big heavy machine making handling with a weight up front a lot easier. Another advantage is that these Indians have unique (for the period) twist grip controls with cables routed through the handlebars and, unlike the majority of motorcycles of this era, the throttle is on the left side meaning MK could crank the camera with his right hand while safely controlling the speed and steering. This would have been more difficult with the usual lever controls on the right handlebar. Kaufman could clearly manage this big beast of 1920s motorcycles with one hand so I suspect it was his. It seems to have been his second Big Chief, an expensive motorcycle in the Soviet Union – an enthusiastic technophile, he was a pilot as well (there are aerial sequences in his 1929 film ‘In Spring’).

Close up of custom-made camera mounting cradle (omitted from some prints of the film)
1927 Indian Big Chief (like the one used in the film)

1923 Indian Big Chief (note different front suspension)
Twist-grip throttle on left handlebar and klaxon on the top tube of the ’23 model

From a vintage motorcycle enthusiast’s point of view the ‘race’ is interesting with a variety of early and pre-1920s single cylinder touring machines taking part, but no contemporary racing ‘bikes to match the speed of Kaufman’s 90 mph Indian V-twin! Triple exposure makes the narrow (velodrome) track much wider than reality.
Julius Kupfer-Sachs’ 1929 poster for the Berlin film premiere featuring an image of a stylised motorcycle and camera speeding through an ‘Expressionist’ city [Dovzhenko Centre].
ICA OR ZEISS IKON ‘KINAMO’ 35MM CLOCKWORK CINE CAMERA (1923-1925, 1926-1933)

Originally designed for Ica (Internationale Camera AG) in Dresden by the scientist and inventor Emanuel Goldberg [14] the clockwork version of the Kinamo was introduced in 1923, the same year as Bell and Howell’s iconic 16mm Filmo 70. Both cameras were meeting the growing need for precision made compact automatic cine cameras for the amateur market.

The hand-cranked Kinamo (from Kino and Latin Amo = I love film) was launched two years earlier but the new model soon became very popular with professional film-makers as a hand-held 35mm cine camera. The lid of the original hand-cranked camera was simply replaced with a matching housing containing the clockwork motor and a viewfinder.
In particular, Joris Ivens, the Dutch documentary film-maker (below, with the camera), made a number of experimental films using his Kinamo in the 1920s and 30s (eg ‘The Bridge’ 1928, ‘Rain’ 1929, ‘Borinage’ 1933). The Hungarian artist and Bauhaus teacher László Moholy-Nagy was also an enthusiastic Kinamo user.
Way ahead of its time, the camera is beautifully made and very compact at only 150 x 130 x 95mm, but heavy for a small camera, weighing 2.5 kg. There is a choice of internal optical viewfinder and external wire type (Ivens is using the former as is Kaufman in the screenshot below). It could also be used as a still camera, and to copy films using a light source through the lens aperture. There was also a microscope attachment (Microphot).
The film is pre-loaded into cassettes which makes changing films in daylight very easy and convenient when on location. The 80 ft (25 metres) of film in each cassette provides around 75 seconds running time at the governed 16 frames per second. The Kinamo also has interchangeable lenses including a 180mm telephoto lens which makes it very versatile. After the merger of Ica into the Zeiss Ikon conglomerate in 1926 the camera continued to be manufactured under the new name in 35mm (N.25) and even smaller 16mm versions (S.10).
There is little apparent difference other than the embossed maker’s name, the later Ica and the Zeiss Ikon Kinamos both having a small diagonal nickel switch (that locks the shutter release) above the end of the winding handle which you can just spot if you look closely at Kaufman’s camera in the 1928 photograph.

Exactly which version was used is difficult to ascertain. The state organisation for cinematography, Goskino, had purchased several Ica Kinamos in the mid 1920s, and Lev Kuleshov (the great film director and theorist) had ‘criticized their haphazard distribution within the industry’ [15]. However, Vertov had been sacked by Sovkino, Goskino’s successor, in January 1927 after disputes about his film ‘One Sixth of the World’, and his refusal to provide a script for ‘Man with a Movie Camera’, so the Kinamo is unlikely to have been one of these elusive cameras. He moved to Ukraine in the spring of the same year to work for the film organisation VUFKU and so it could have provided either type of Kinamo.

It could equally well have been a Zeiss Ikon version, perhaps imported by Vertov around this time, as his Debrée Sept had been in 1925 (see later notes). This is one of the few photographs of him posing with a camera (rather than on a set) and it certainly looks as if it belongs to him! His brother Boris Kaufman used a Kinamo to shoot some of the hand-held scenes in Jean Vigo’s 1930 film ‘À propos de Nice’ which may have been this one.
The scenes with the Kinamo

[00:43:05 on] The traffic intersection sequence (note the Parvo Model L on the spread-eagled Debrie tripod)
As the hand-cranked Parvos are normally used on a tripod the clockwork Kinamo would have been used for the scenes requiring a hand-held camera throughout the film (and possibly a Debrie Sept – see later description).

There was a growing use of the ‘chest tripod’ shoulder harness which enabled a large cine camera like the Parvo (and Interview) to be used for mobile filming [16]. Note the separate expanding viewfinder. However, there is no evidence that this type of support was used on Man with a Movie Camera, and it would have been very unwieldy compared with the Kinamo, particularly with the motor drive and batteries.
DEBRIE LABRÉLY ‘GV’ MODEL F 35MM HIGH SPEED CINE CAMERA (1925)

Mikhail Kaufman with the Debrie GV Model F cine camera on a Debrie tripod
A rare cine camera (so scarce that I am unable to find a better photograph of it) made by Debrie for a limited period in the mid-1920s, the Model F was an early version of a series of high speed cameras made from 1921 up to the mid-1960s. Designed around the invention by Émile Labrély of a hand-cranked or motorised film mechanism that could operate from 16 to an astonishing 240 frames per second (the ‘standard’ silent film rate was 16 frames per second [17]). ‘GV’ stands for Grande Vitesse, naturally!

Labrély had worked for Pathé in the early 1900s developing high speed cameras and had achieved 400 fps in 1909, and 1200 fps the following year. Extraordinary speeds for the time, but they were not intended as conventional cine cameras being very bulky and producing images only suited to scientific work.

The Model F must have been more successful as a studio or location camera but there are few survivors. The National Science & Media Museum has one, and I have seen a later GV Model G that was for sale at a price (commensurate with the high speed) of £45,000! It was perfectly suited to the study of engineering, military, scientific, or medical problems according to the 1925 Debrie catalogue. Kaufman presumably used this camera for some of the slow-motion sequences (eg athletics) in the film in addition to conventional filming.

A later Debrie GV Model G, courtesy of the Cinémathèque française, Paris
DEBRIE ‘SEPT’ 35MM CLOCKWORK MULTI-FUNCTION CINE CAMERA (1921-26)
The Debrie Sept is a remarkably innovative device, made of aluminium, comprising a 35mm cine camera (only 16 seconds worth of film @ 16 fps), still camera (250 images), rapid sequence still camera, slide and cine projector, film copier, and enlarger. Seven operations, hence the name. A clockwork motor is housed in a detachable box on the side (a second version had a larger motor inside a more bulbous case, below). The 5 metres length of film is loaded into cassettes (or ‘boxes’ as they are described in the English language instructions), larger versions of the later Leica type. There is a choice of reflecting viewfinder or Newton type by pulling out the sliding front lens. The Sept started life in Italy just after WW1 as the ‘Autocinephot’ designed and made by Guiseppe Tartara of F.A.C.T. in Turin. Only around 100 were made when the design was licenced to Etablissements André Debrie, in Paris, who started producing a modified version in 1921. The camera was marketed by Société Française SEPT (see below) at the very high price of 2,550 francs (with a Zeiss lens), approximately 1,300 euros today! For comparison the far more sophisticated Kinamo with a f2.7 Zeiss lens was 475 Reichsmarks, or around 1,200 euros. Despite the cost many thousands were sold (I have seen serial # 9049 at auction in 2015).
Second version of the Sept with a larger clockwork motor introduced in 1925. The version seen with Mikhail Kaufman below. [photograph courtesy of Novacon]

Although marketed ‘Pour Amateurs’, as a tough, small, hand-held movie camera the Sept was popular with silent film directors including Douglas Fairbanks (Robin Hood), and Abel Gance (Napoleon). It was also a favourite of newsreel photographers who could take a short cine film as well as still photographs of their subject. The diminutive* Sept could also be smuggled into events where their rivals had the sole rights, particularly football matches! It is a very different design compared with the precision-made Kinamo, being more the camera equivalent of a 1920s truck with thick metal construction, over-size controls, coarse helicoid focusing for the various available lenses, and a noise like a machine-gun!

*137 x 100 x 70mm, 1.6kg (first version)
In Soviet Russia the Debrie Sept ‘...would appear to have been a prized possession in the 1920s...Iakov Tolchan, a student at the State Film Technical College (GTK) and later a renowned actuality specialist, has recalled being plucked from the obscurity of his studies by Dziga Vertov in 1924 and given the opportunity to join his Ciné-Eye group primarily because he was the owner of a Debrie-Sept, a gift from a relative living in Paris.’ [18]

The following year Dziga Vertov obtained his own Debrie Sept but I can find no evidence that this camera was used during the 1928 filming of ‘Man with a Movie Camera’; it is not seen in the film and it isn’t included with the equipment surrounding Kaufman in the 1928 photograph. However it appears to have been used for ‘The Eleventh Year’ (below). Vertov was using the Sept during his travels across Russia in the mid 20s [19] and Mikhail Kaufman is pictured below by Varvara Stepanova on roller skates with a Sept on her cover design for the first 1927 edition of Soviet Cinema magazine. As both men obviously liked the camera, there is every reason to suppose that this very versatile device was used for at least some of the hand-held shots in the film in 1928 (eg the netball and football matches [00:53:05 on] where such a tough camera would have been very suitable).
Mikhail Kaufman in a precarious position using the later model Sept to film inside the Dzerzhinsky Steelworks in 1927 for ‘The Eleventh Year’. (photograph courtesy of the Dovzhenko Centre)
Dziga Vertov’s Sept was bought for him by Alexander Rodchenko on his visit to Paris in 1925 to supervise the design and construction of the Workers’ Club in the USSR Pavilion at the Paris International Exhibition (‘Kino-Glaz’ was awarded a silver medal and diploma there), and there is some interesting correspondence with his wife Varvara Stepanova about the camera. Rodchenko spent over 6,000 francs on camera equipment during his visit (letter to Stepanova, May 31st 1925).

**Rodchenko to Stepanova – Paris, May 2, 1925**

“I bought the Sept with a timer, a 6-meter [film magazine], and a Zeiss Tessar f3.5, with eighteen cassettes, with a tripod, film, printing thing, etc. I’m sitting here looking it over. It’s small, smaller than my 9 x 12 photo camera. But unfortunately the lens has a scratch, tomorrow I’ll exchange it. It’s in a good case, and you can shoot photos with it too….I’m terribly happy…I want to shoot the opening [20], when Krasin’s [21] there, and send [it] to Vertov – I’ll be Kino-Pravda’s correspondent in Paris..”

“…Your son exchanged the Sept for another one without a scratch. Besides that I bought twelve cassettes, a black tripod, and a big bottle of developer…” (added note to his mother).
Stepanova to Rodchenko – Moscow, June 1st, 1925

“Dear Rodchenok [sic], we received your letter no. 28 of May 24, where you wrote that you want to buy a camera for Vertov. He’s very happy and specially asks for a telephoto lens*.

As soon as you get the camera, send Dziga a letter that you bought such-and-such camera, no., the factory, and so on – this is necessary to get the license.”

*see below

Rodchenko to Stepanova – Paris, June 8, 1925

“I am sending Dziga Vertov a Sept camera, no: 0905*, with a Zeiss 1:3.5 lens, in a leather case with six bobbins**.”

* from the photograph of Mikhail Kaufman using the Sept (if it is the same one) it looks like a later model with the larger motor which came out in 1925 so this serial number would not be correct. Perhaps it is 10905.

**‘bobbins’ = film cassettes

Rodchenko to Stepanova – Paris, June 10, 1925

“I’ll send Dziga the camera on the 12th. I went and bought a printing machine for the Sept, I’ve got about three suitcases full now. I received permission to photograph at the exhibition, which I am enjoying. I do the developing myself and I’ll print at home.”

“Dziga asked you why I bought a tripod for the Sept. Well, he’s an idiot. I bought it, of course, for photos. I bought another one too – for photographing architecture, inside the rooms, with a long exposure, here the tripods are marvellous and cheap.”

Rodchenko to Stepanova – Around 20th June, 1925

“Left Paris for Moscow by train. Brought with me a 4 x 6 Ica, a small Sept cine camera, and two tripods. Posted one Sept cine camera for Dziga Vertov together with a telescopic lens* and extra cassettes to Goskino” [22]

*I have never come across such a lens for a Sept which is usually only fitted with a standard 50mm lens (Vertov asked for a telephoto lens in the June 1st letter, but this letter may be referring to a separate lens sent to Goskino).
NOTES, COMMENTS, AND ACKNOWLEDGEMENTS

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Dziga Vertov was born in Belostock (now Białystok in NE Poland) in 1896, and died in Moscow in 1954. There is an excellent biography with a comprehensive bibliography on the Monoskop cultural web-site.

Mikhail Kaufman was born in Belostock in 1897 and died in Moscow in 1980. Though overshadowed by his brother, he was an innovative film-maker himself and his work is becoming more appreciated. His creative contribution to MwaMC and earlier films is also increasingly recognised. The Dovzhenko Centre has restored two of his films, *In Spring* (1929) and *Unprecedented Campaign* (1931), and there are excellent essays about him in the Centre’s recent book, *Ukrainian Dilogy*, 2018. His biography is on the VUFKU website.

Elizaveta Svilova was born in Moscow in 1900 and died there in 1975. One of the greatest of film editors she spent her life after Vertov’s death preserving his memory and archive. It is thanks to her dedication that his reputation is now higher than ever. Monoskop also has her biography. There is an interesting paper on Svilova and Esfir Shub by Lilya Kaganovsky. Dr Karen Pearlman of Macquarie University has made an award winning film *Woman with an Editing Bench* (2016) paying homage to Svilova’s contribution to the art of film editing.

The film is variously called ‘Man with a Movie Camera’, ‘The Man with a Movie Camera’, ‘The Man with the Movie Camera’, and ‘a Man with a Movie Camera’. Google Translate comes up with the latter version but most people adopt the first one. There is no definite or indefinite article in Russian which explains the confusion. There is also a muddle about the translation of Kino, as in Kino-pravda and Kino-glaz. Most commentators use ‘Cine’ but the film isn’t known as ‘Man with a Cine Camera’! Capitals and hyphens are inconsistent (Kino-Glaz, kinoglaz) even in Vertov’s notes.

The film premiered in Kyiv on the 7th January 1929 (at Goskino No. 2 Cinema), and in Moscow on the 9th April 1929 (at the Hermitage Theatre and Tverskaya 46 cinemas). The film was shown at the influential 1929 ‘Film und Foto’ exhibition in Stuttgart and screened to audiences in Berlin and Paris during Dziga Vertov’s European tour in the summer of the same year. See my blog post on the First Cinema Screening.

THE ‘CITY’

‘Man with a Movie Camera’ is the best example of Lev Kuleshov’s theory of ‘Creative Geography’ where different locations are edited together to portray a single place. Locations were filmed in many different places over two years to be edited into the imaginary City that the Man with the Movie Camera records throughout the day.
MAIN LOCATIONS SEEN IN THE FILM

Read my blog post for the (almost) definitive list and details of the locations filmed for ‘Man with a Movie Camera’.

MOSCOW, KYIV, AND ODESA

Much has changed in Moscow since the film was made, but many of the locations in Kyiv and Odesa are still recognisable. The scenes in Moscow are particularly poignant, showing a largely unspoilt and beautiful city centre just before the widespread destruction of the 1930s from Stalin’s megalomaniac ‘General Plan for the Reconstruction of Moscow’.

DONBAS & KAMIANSKE: Steelworks and coal mines.

VOLKHOV (Leningrad): Hydroelectric Power Plant dam (Волховская ГЭС).

The sequences in the Donbas, Kamianske, and the Volkov Dam were shot in 1927 during filming for ‘The Eleventh Year’ (1928), Vertov’s first film for VUFKU.

NOTE: Kharkiv is included in Dziga Vertov’s shooting notes but following extensive research into the film locations only one scene (aircraft hangar [00:13:25]) has been located in the city. Konstantin Dubin of the Kharkiv Historical Museum has watched the film carefully and confirms that he could not see any obvious Kharkiv locations. It is assumed that the rest of the footage taken in the city was not used during the editing of the film.

POSTERS

‘Man with a Movie Camera’ poster by Vladimir & Georgii Stenberg, 1929.

‘Kino-glaz’ film poster by Aleksandr Rodchenko, 1924.

Julius Kupfer-Sachs 1929 poster ‘Der Mann mit der Kamera’ from the Dovzhenko Centre.

FILM VERSION USED

The screenshots are from a version of the film posted on YouTube by ‘DM Amelin’ in 2018 (also referenced on the Russian Wikipedia entry for the film) but no longer available. The screenshot times are from a 2014 digitally restored version by the EYE Film Institute and Lobster Films from Vertov’s original copy of the film left in Amsterdam after his 1931 European trip. The clarity of this print makes research on the film so much easier. There is an interesting account of the restoration by Mark-Paul Meyer of the Eye Film Institute on Academia.

There is also a restored print of the film available on DVD from the BFI. The poor quality of this (on my copy) and the dirge-like Michael Nyman score mean there is no comparison to the AVG/Lobster version.

A digital restoration of the film was also made by the Dovzhenko Centre in Kyiv, available from its shop. I have not seen it so cannot comment.

‘REFLECTED’ OR ‘FLOPPED’ IMAGES

A number of the images in the film have been ‘reflected’, particularly the famous opening sequence [00:02:22] where you can clearly see the back to front lettering “LE PARVO”. All of the close-up shots of lenses (eg final ‘Cine-eye’ image below), except one [00:33:48], and all the cranking side close-ups of the camera, except one [00:37:56 – but this has MK cranking backwards!], are also ‘reflected’. Some of the lens shots could have been into mirrors, but I have not found out why the others were done in this way. Artistic reasons perhaps, as the reversed images are too consistent to be editing mistakes.

All the ‘reflected’ images are of the Model L (so taken in 1928) except for the Interview ‘camera in the sea’ sequence [00:51:10].

Most of the sequence on the Carousel is ‘reversed’ (below). Presumably for artistic reasons again, perhaps to contrast with the motorcycles going around the track in the opposite direction. You can easily tell as the crank handle should be on the left in the screenshot below, not the external viewfinder and maker’s plate!
This ‘reversing’ of scenes and images has never been commented on in all the various sources I have read. Graham Roberts, in ‘The Man with The Movie Camera Film Companion’, p. 58, notes that one cranking view of the camera during the ‘drunk waking up’ scene at the beginning of the film is ‘upside down’ (BFI version, but not in the Lobster Films version which is based on Vertov’s own print) whereas it is actually upside down and reflected!

In addition, the 1928 photograph of Mikhail Kaufman and his cameras, the photograph of Kaufman with the Debrie GV, and that of Dziga Vertov with the Kinamo, and others, are often reversed when published, even in scholarly publications, through a lack of knowledge of the cameras in the image.

ASSISTANT CAMERAMAN

As the credited ‘Chief Operator M. Kaufman’ was on the screen for much of the time there was clearly another operator behind the camera. No one else is credited in the titles for many of the wonderful sequences in the film, particularly in the mine and foundry (many of these images would stand alone as outstanding photographs), and the exhilarating ‘camera in the car’ scenes around Odesa and in the final moments of the film, which are impressive technical achievements.

Professor John MacKay in his Academia paper on the film (see essential reading) has ascertained from a study of documents in the Russian State Archive of Literature and Art in Moscow that various cameramen were involved – Boris Tseitlin (‘The Eleventh Year’ scenes used in the film, except those of the Volkhov Dam taken by Konstantin Kuliaev) and Georgii Nikolaevich Khimchenko for all the new scenes shot during 1928 [p15 of the paper]. In addition Dziga Vertov’s diary entry for 22nd June 1927 mentions two further members of the crew for the coal mine sequence, ‘Kagarlitsky’ and (E) ‘Baranetsivich’. The latter (described as an electrician) is included in Vertov’s list of staff in his 1923 proposal ‘On the Organisation of a Film Experiment Station’ [‘Kino-Eye: The Writings of Dziga Vertov’, p. 23 – see below].

Gleb Troyanski is also mentioned as a cameraman on the film in various sources, not least his IMDb biography.

DEBRIE

Research into the various models produced by Etablissements André Debrie is difficult as few catalogues were published, or have survived. I have only come across a couple of early advertisements. Although around 9,000 Parvos were made there are few original ones left as many led hard lives in film studios, updated and modified through the years. The company still exists as a manufacturer of cinematography equipment (no longer cameras) after several iterations (including being owned by the James Bond producer, Harry Saltzmann) as part of the French CTM Group. Unfortunately, it is unable to provide any information on the history of the company or its products. Camera dates have been mostly taken from a history of Debrie published by the firm in 1964, kindly provided by Laurent Mannoni. Some of these dates conflict with generally accepted ones published elsewhere.

The Cinémathèque française cinema museum in Paris has a lot of Debrie related items, including sales and other literature, and various cameras, but only a Parvo Model T on display.
The National Science & Media Museum in Bradford, UK, has an extensive collection of Debrie cameras and equipment with several Parvos (including the original 1908 version) and Septs, a GV Model F, sales literature, and handbooks. Sadly, nothing is on display (at the time of my visit in 2018). I have a 1924 Model K on a Debrie tripod, and a 1923 Debrie Sept. Information on the various models has also been gleaned from other museums, collections, auction catalogues, Ebay, and other internet sources.

I am indebted to Laurent Mannoni, Directeur Scientifique du Patrimoine of the Cinémathèque française, for an invaluable dossier of the Debrie literature in the Museum’s collection. A visit to his wonderful museum is a must for film enthusiasts!

Also thanks to Kendra Bean, Emma Hogarth, and Toni Booth of the National Science & Media Museum for enabling me to inspect the Debrie cameras in its collection (all in storage), and for subsequent information. The lack of any early film related exhibits in this museum is inexplicable!

More information on the Debrie Parvo
Fascinating contemporary film of a Parvo L being manufactured
Parvo Model L brochure
More information on the Debrie Interview
More information on the Debrie Grande Vitesse
More information on the Debrie Sept
Debrie Sept instructions

NEW ECONOMIC POLICY

After the devastating civil war of 1918 to 1922 the economy was in ruins and there was a famine and typhoid epidemic in the Lower Volga region in 1921 when millions died. For pragmatic reasons Lenin abandoned the Bolshevik programme of total nationalisation and proposed a New Economic Policy, a form of ‘state capitalism’ that would combine state ownership of banks and large institutions with private enterprise. This was quite successful in quickly resurrecting the economy but both Rodchenko and Vertov commented adversely on the rise of the ‘NEP’ man and woman, regarded as nouveaux riches and an affront to socialist values, and there is much in Man with a Movie Camera contrasting the extravagant and superficial behaviour of these new capitalists in the hair salon, on the beach, and in the gym, with the industrious workers at their machines, or in the mine and foundry.

It is interesting to see that expensive vehicles and cameras were available in the Soviet Union at this time, only a few years after the Civil War and during a period of economic problems. I spotted a chauffeur driven English Crossley tourer (below) and a French Amilcar sports car during the street scenes, both high quality imported vehicles, not what you would expect to see in a Communist state. Vertov perhaps using these as an example of NEP extravagance. However, his brother owned, or had the use of, two expensive top of the range Indian motorcycles which seems just as bourgeois!
Despite the almost constant financial crises there seems to have been no shortage of the finest European camera equipment for the Soviet films and photographers of this era, at least from the mid-20s. The cameramen of Eisenstein, Dovzhenko, Pudovkin et al. were all using Debrie Parvos, and Kaufman was filming ‘Man with a Movie Camera’ in 1928 with the most recent Parvo Model L* and the rare and expensive Debrie Grand Vitesse. Alexander Rodchenko spent a lot of money on camera equipment during his visit to Paris in 1925 as we have seen, and bought a Leica in 1928 for the equivalent of 1,600 euros. The renowned camera store of F. Iochim in Moscow and St Petersburg, that used to supply the Imperial Court with photographic equipment, continued to thrive on importing top quality cameras from Ica and other German manufacturers. The camera that Rodchenko used for his first significant photographs (of Mayakovsky) in 1924 was from Iochim.

[*From the 1931 catalogue the price of a Model L was 28.700 FF and the tripod cost 4.800FF, a total equivalent cost today of around 17,000 euros].

PHOTO CREDITS

Debrie Parvo Model L – Photographs of the camera and Frank Hurley by George Serras, courtesy of the National Museum of Australia. Many thanks to the NMA for permission to use both images.

Debrie Interview photograph with the kind permission of Sam Dodge who has a wonderful collection of antique movie cameras on his website. Also, thanks to Sam Dodge for confirming the identity of the Interview and other useful information.

Debrie Parvo Model K photographs with the kind permission of Jake’s Cameras, Colorado, USA.
Rudolph Valentino photograph from ‘Old Hollywood in Color’ blog.

J Debrée building photograph from CTM André Debrée (France).

1927 Indian Big Chief photograph with the kind permission of Yesterdays Antique Motorcycles. Also, many thanks to Geert Versleyen of YAM for help with identifying the two Indians.

1923 Indian Big Chief photographs with the kind permission of Vintage Bikes Collection, a private Polish collection of early motorcycles and cycles.

Photograph of Mikhail Kaufman with the Debrie Sept with the kind permission of the Oleksandr Dovzhenko National Centre, Kyiv. From ‘Mikhail Kaufman’s Ukrainian Dilogy’, Stanislav Bytitskiy, 2018.

Period photographs are from multiple sources so no specific attribution can be made. Contemporary Soviet photographs are in the public domain (Russia has a seventy year copyright limit). Illustrations from Debrée literature are from the writer’s own collection or multiple sources.

REFERENCES IN TEXT

[1] Link to both polls: http://www.bfi.org.uk/sight-sound-magazine/greatest-docs

Brian Winston, in the September 2014 issue of Sight & Sound, made this interesting claim 85 years after the film came out: ‘..Vertov’s agenda in Man with a Movie Camera signposts nothing less than how documentary can survive the digital destruction of photographic image integrity and yet still, as Vertov wanted, “show us life”. Vertov is, in fact, the key to documentary’s future.’

[2] Peter Bradshaw, the Guardian, 30/07/2015


[4] “The idea for The Man with a Movie Camera had already arisen in 1924. How did this idea take shape? Strictly speaking we needed a Kino-theory and a Kino-program in cinematic form. I suggested such an idea to Vertov but it could not be realised at that time”. ‘Interview with Mikhail Kaufman’, 1979 (see reference below). He had a major disagreement with his brother over the editing of the film and they never worked together again.

There is an argument that Vertov contradicts his theories by providing a narrative throughout the film (ie the cameraman making a film), and that the trick effects and obvious actors and staging in some scenes (the woman getting dressed in her apartment etc) conflict with his desire for film realism. However, Vertov’s approach ‘...differed with most of the other Soviet futurist and constructivist artists, who insisted on the absolute dominance of “facts” in art, and sought to eliminate any subjective interpretation. Vertov was less inclined to restrict his film making to such a factual approach and instead strove to achieve a balance between an authentic representation and “aesthetic” reconstruction of the external world.'
In doing so, he merged his “Film-Truth” principle of respecting the authenticity of each separate shot with his “Film-Eye” method, which requires a cinematic recreation of events through editing’ – Vlada Petric, ‘The Man with the Movie Camera, a Cinematic Analysis’, p. 8 (see reference below).


[6] Mikhail Kaufman studied at the VGIK film school in Moscow and became a mechanic during the Civil War. Vertov described his skills: ‘...works in motion picture and still photography; knows cars; has knowledge of electrical engineering, blacksmithing, and metalwork; given to experimentalation’ (On the Organisation of a Film Experiment Station, ‘Kino-Eye: The Writings of Dziga Vertov’, p. 23, see reference below).

Kaufman made several documentary films during the 1920s and 30s, including the critically acclaimed ‘Moscow’ in 1927 and ‘In Spring’ in 1929. His creative contribution to ‘Man with a Movie Camera’ and earlier films is being increasingly recognised. The youngest Kaufman brother, Boris, also became a renowned cinematographer, working with Jean Vigo, Sidney Lumet, and Elia Kazan, winning an Oscar for ‘On the Waterfront’ in 1954.

[7] The Kinoks (‘kino-oki’ meaning ‘cine-eyes’) were a collective of film-makers organised by Dziga Vertov in the early 1920s.

[8] The Russian camera industry began with the production of copies of traditional folding cameras in 1930 by the Fototrud Industrial Co-operative in Moscow called EFTE and ARFO. Almost exact copies of the Leica rangefinder camera were made by FED from 1932, completely ignoring the Leitz patents. Link to the fascinating story of these cameras and the Dzerzhinsky Commune. The first semi-professional Soviet cine camera (apart from Mikhail Kaufman’s!) was a 16mm prototype made by NIFKI in 1934 (thanks to Russian camera expert Aidas Piviotas for this information). The first synchronised sound camera was the KS-2 made in 1936 by Lenkinap.

[9] Apart from Rudolph Valentino (see photo) Hollywood preferred home-grown cameras from Bell & Howell or Mitchell because of their greater film capacity, turret lenses, and ease of obtaining spare parts. However, Paramount News used Debrée Parvos extensively.


[12] Leni Riefenstahl used Model Ls to film the Berlin Olympics in 1936.

[13] The two cameras are on display in the Third Man Museum in Vienna.


[16] Ibid. pp. 15 & 16 (see reference below).

[17] Silent film speeds varied slightly depending on the studio but the usual cranking rate was 16 frames per second [first set by the Lumière Brothers’ Cinématographe in 1896]. The first ‘talkies’ had a speed of 24 fps (The ‘Jazz Singer’ onwards) and synchronised sound cameras were motorised to run at this speed.

Graham Roberts, in The Man with The Movie Camera Film Companion, p. [ix] notes that ‘In general Western scholars have been working on 18 fps (whilst in Moscow I watched the film at 24 fps). It has now become more common to run the film at 24 fps. The British Film Institute video and DVD print – for which the film is run at 24 fps – lasts 66 minutes, 30 seconds’. Both the Kinamo and Debrie Sept have clockwork motors set at 16 fps and the Debrie Parvo’s tachometer scale is from 0 to 24 fps with a large arrow on the 16 fps mark (below). The maximum speed was generally used for a slow motion effect (ie filming at 24 fps and playing back at 16 fps) so cranking the camera at full speed all the time would have been difficult and unlikely. Just maintaining a regular 16 fps called for a lot of skill and stamina from the operator (from personal experience!); a one eighth turn of the handle = one frame, so two full turns per second = 16 fps. Vertov himself called this ‘the usual rate’ (though wanting it to be abolished in favour of special effects!). ‘Kino-Eye: ‘The Writings of Dziga Vertov’, p. 131 (see reference below).


The opening of the Soviet Pavilion. This extraordinary building, designed by Konstantin Mel’nikov, was a showcase for the avant-garde of the young USSR.

Leonid Krasin, People’s Commissar for Foreign Trade.

Goskino was the State Committee for Cinematography in Moscow. In 1924 it was succeeded by Sovkino so perhaps Rodchenko was just used to the old name.


ESSENTIAL LINKS AND REFERENCES ON DZIGA VERTOV AND HIS FILM


‘Five wonderful effects in Man with a Movie Camera and how they’re still inspiring film-makers today’, Ben Nicholson, British Film Institute.

‘Man with a Movie Camera: the greatest documentary of all time?’ Silent London Blog.


Professor Roberts is one of the few authors who mention the equipment used on the film. However, only one camera is listed in the credits as a ‘Debrie with Zeiss lens (35mm and 70mm)’, but a ‘standard 28mm’ and ‘telephoto’ are mentioned later in the text. In the absence of an equipment list for the film the only lenses that I can be certain of are the 21cm and 15cm Krauss Zeiss ones (NOTE: focal lengths for Krauss lenses of this period are stated in centimetres with commas). Standard (5cm or 7.5cm) and wide angle (3.5cm) lenses would undoubtedly have been used but only the two Krauss telephotos are shown in the film. Lenses seem to have been matched to the camera – on my Model K the serial numbers of the three Krauss lenses (5, 3.5 and 7.5cm) that came with the camera are engraved on the distance bar. There are also serial numbers for 10.5cm and 15cm lenses, unfortunately missing from the set. Debrie chose to show these focal lengths on the bar in millimetres for some reason. The telephotos seem to have been Kaufman’s favoured lenses which is why the cinematography is so unusual for the period. Wide angle lenses are seldom used.

‘Man with a Movie Camera (SU 1929): under the Lens of Cinemetrics’, a discussion by A. Heftberger (Wien), Y. Tsivian (Chicago) and M. Lepore (Torino).
‘The Movie Cameras in Man with a Movie Camera’, by Richard Bossons, 2018 (privately published, contact author: richardbossonsfcse@gmail.com).


‘Dziga Vertov: Defining Documentary Film’, by Jeremy Hicks, KINO: The Russian Cinema series, IB Tauris, 2007 (ch. 4 is on Man with a Movie Camera).


‘False Cinema: Dziga Vertov and early Soviet film’, Jeremy Murray-Brown, an article published in November 1989 in The New Criterion magazine (Volume 8, Number 3). Current commentary on Dziga Vertov is generally uncritical, but this article written on the eve of the Soviet Union’s demise compares him to Nazi propagandists.


‘The most important of the arts’: film after the Russian Revolution, John Green, 26/6/2017 Culture Matters.

‘The delirious vision: the vogue for the hand-held camera in Soviet cinema of the 1920s’ Dr Phil Cavendish, Studies in Russian and Soviet Cinema, vol. 7, no. 1, pp. 5-24. An invaluable study of a neglected aspect of early Soviet film-making – the cameras that were used to make the films!


THE MUSIC FOR THE FILM

Silent films were meant to be accompanied by music, often live as shown in the opening sequence in the film. The Shantser Cinema in Kyiv, where the scenes were filmed, had a 60 piece orchestra in the early 1900s. My Grandfather used to accompany silent films (including Westerns) in the local cinema on a more modest scale with his ‘cello in a string quartet! Dziga Vertov left notes to indicate the type of music he thought would suit the film but sadly his directions seem to have been ignored with one notable exception.

Still the best accompaniment for the film by far is the Alloy Orchestra’s wonderfully percussive and exciting score of 1995 composed for the Pordenone Silent Film Festival, exactly the sort of ‘Constructivist’ music you could imagine being composed at the time, full of driving jazzy rhythms, metallic and other sound effects. The group, who specialise in silent movie music, made a careful study of Vertov’s notes (Vertov archive, Moscow) to his composer (Konstantin Listov) for the Moscow premiere of the film in 1929, and it shows. The last few minutes of the film are a thrilling, mesmeric, combination of music, noise, and action, and the music carefully follows what is shown on screen unlike many of the other soundtrack attempts. The discovery of these notes was a major achievement in film scholarship, first written about by Professor Yuri Tsivian. Dennis James’ Filmharmonia and the Alloy Orchestra, were among a small handful of musicians to perform realizations of this intended score worldwide when the notes were uncovered in the mid-1990’s. Professor Tsivian kindly sent me a copy of these notes which cover 8 pages of precise instructions for each part of the film, detailed to the nearest second. Interestingly the overall running time of the film is shown as 01:04:32, considerably shorter than the prints available now. The running time of course depends on the projection speed.

A digitally restored version of the film (2014) with this soundtrack (and the correct screen ratio) has been made by the EYE Film Institute (Amsterdam) and Lobster Films (Paris) from Vertov’s own print. This was left by him in Amsterdam in 1931 after travelling around Europe for the second time to promote his films. The clarity and quality of the images are a revelation after seeing so many poor examples and at last do full justice to the outstanding cinematography.

So many scores do not reflect the activity on the screen, maintaining a similar tempo throughout. Michael Nyman’s 2002 version is a popular one (BFI) but the rhythm of the music is much the same whatever is happening on screen (e.g. it just carries on regardless during the dramatic pause in the action after the car and carriage sequence [00:22:06]), and bizarrely includes choral singing which creates completely the wrong atmosphere in my opinion. Michael Nyman is apparently composing an opera about Dziga Vertov according to a recent radio discussion. He has also produced a homage to MwaMC with his own film ‘NYman with a Movie Camera’ (2011), that replaces the original sequences with footage from his own film archives shot over the last two decades. I have not seen it, so cannot comment.

The same criticisms apply to the Cinematic Orchestra’s 2003 version which has a consistent jazzy ‘mood music’ rhythm, sometimes at odds with the action on screen. ‘In the Nursery’ has composed a more imaginative score but, along with most of the others, it fails to match the editing tempo of the film.
Wikipedia lists no less than 21 different soundtrack versions from 1983 to 2014!

The most recent score (2019) is by the innovative group The Cabinet of Living Cinema, written to commemorate the ninetieth anniversary of the film.

The only other score that I think Dziga Vertov would have appreciated was not actually made for the film but for the project (2017) by the artist Perry Bard called ‘Man with a Movie Camera: The Global Remake’. This imaginative project called on people around the world to upload video shots to ‘remake’ the film. The uploads play in sync with the original. The result is a delight, and the score brings to mind Vertov’s first sound film, ‘Enthusiasm: The Symphony of Donbas’ (1931).

John Mackay, in his definitive biography of Dziga Vertov (see essential reading) has more detailed notes on the scores (p xxx, note 45).

КОНЕЦ

End of a ‘work in progress’. More information and corrections as research continues!

The ‘Кино-Eye’ (Кино-глаз) image was invented by Mikhail Kaufman using his colleague Boris Kudinov’s eye [p. 12, Ukrainian Dilogy, Dovzhenko Centre, 2018].

Email: richardbossonsfc@gmail.com with any comments and corrections.

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