encyclopedia of early cinema

EDITED BY RICHARD ABEL

ENCYCLOPEDIA OF EARLY CINEMA

The *Encyclopedia of Early Cinema* is a unique one-volume reference work on the first twenty-five years of the cinema's international emergence, approximately from the early 1890s to the mid-1910s. These early years of the history of cinema have lately been the subject of resurgent interest and a growing body of scholarship, and have come to be recognized as an extraordinarily diverse period, when moving pictures were quite unlike the kind of cinema that later emerged as the dominant norm.

This encyclopedia covers all aspects of scholarship on early cinema, both traditional and revisionist. It contains articles on the technological and industrial developments, the techniques of film production, the actors and filmmakers of the time, and on the changing modes of representation and narration, as well as the social and cultural contexts within which early films circulated, including topics such as distribution, exhibition, and audience. Beyond the USA and Europe, attention is also given to the wider international picture, including those regions in Asia, Africa, the Middle East, and South and Central America where filmmaking may have been relatively undeveloped but movie-going was significant.

More than 950 entries have been commissioned from internationally recognized specialists. Alphabetically organized, the entries range in length from short factual articles to full essays that offer clear and stimulating discussions of the key issues, people, practices, and phenomena of early cinema. A thematic list of entries is a useful guide through the book, and all entries contain detailed cross-references. The longer articles have considered suggestions for further reading, which are complemented by a general bibliography of specialized works on early cinema.

The *Encyclopedia of Early Cinema* is an invaluable and fascinating resource for students and researchers interested in the history of cinema.

Richard Abel is Robert Altman Collegiate Professor of Film Studies at the University of Michigan, USA.

ENCYCLOPEDIA OF EARLY CINEMA

Edited by Richard Abel

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Thematic entry list

Categories listed in small upper case do not correspond to entries; all other categories and topics are entry headwords.

ARCHIVE SOURCES, SITES, AND POLICIES
- access
- archives
- authentication
- collections: public and private
- film festivals and occasional events
- preservation

AUDIENCES/SPECTATORSHIP
- audiences: research issues and projects
- audiences: surveys and debates
- spectatorship: issues and debates

CULTURAL CONTEXTS
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- cafés-concerts
- Chatauqua
- comic strips
- department stores
- dime museums: USA
- dioramas and panoramas
- fairs/fairgrounds: Europe
- Hale's Tours
- illustrated lectures
- illustrated magazines
- illustrated songs
- intermediality and modes of reception
- magic lantern shows
- magicians
- moving picture fiction
- moving picture fiction: juvenile series
- museum life exhibits
- music hall
- newspapers
- opera
- painting and the visual arts
- penny arcades
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- photography
- postcards
- saloons
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- stereography
- theater, legitimate
- theater, melodrama
- vaudeville
- wax museums: Europe
- world's fairs

DEVELOPMENTS IN FILM STYLE
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- camera movement
- cinema of attractions
- classical Hollywood cinema
- color
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- editing: early practices and techniques
- editing: spatial relations
- editing: tableau style
- editing: temporal relations
- framing: camera distance and angle
- intertitles and titles
- lighting
- set design
- SOUND ACCOMPANIMENT
  - benshi
  - cue sheets

- dialogue accompaniment
- lecturer
- musical accompaniment
- musical scores
- sound effects
- sound machines

staging in depth

FILM COMPANIES

AUSTRALIA
- Australasian Films
- Johnson and Gibson
- Pathé (Australia)
- Salvation Army

AUSTRIA-HUNGARY
- Saturn
- Wiener Kunstfilm

BELGIUM
- Belge Cinema SA, La

CANADA
- Bioscope Company of Canada

CHINA
- Asia Film Co.
- Commercial Press Motion Picture Department
- Fengtai Photography Studio

CUBA
- Santos y Artigas

DENMARK
- Biorama
- Dania Biofilm
- Dansk Biograf Kompagni
- Filmfabrikken Danmark
- Fotorama
- Kinografen
- Nordisk Films Kompagni

FINLAND
- Atelier Apollo
- Finlandia Film
- Lyyra Filmi

FRANCE
- AGC
- American Biograph (France)
- Aubert, Etablissements L.
- Cinéma du people, Le
- Cinéma-Halls, Compagnie des
- Comica
- Éclair
- Eclipse
- Film d'Art
- Gaumont
- Lumière et fils
- Lux
- Maison de la Bonne Presse
- Pathé-Frères
- Raleigh & Robert
- SCAGL
- STAR FILM (see Méliès, Georges)
- Théophile Pathé
- Valetta

GERMANY
- AGFA
- Continental-Kunstfilm
- Deutsche Mutoskop & Biograph
- Messter consortium
- PAGU/AKGUT
- Vitascope
- Weltkinematograph/Express-Film

GREAT BRITAIN
- Alpha Trading Company
- Bamforth
- Barker Motion Photography
- Blair Camera Company, European
- British & Colonial Kinematograph Company
- British Gaumont
- British Mutoscope & Biograph
- Butcher's Film Service
- Charles Urban Trading Company
- Clarendon Film Company
- Hepworth
- Mitchell and Kenyon
- Miles Brothers
- National Color Kinematograph
- Pathé-Frères (Great Britain)
- Sheffield Photo
- Topical Film Company
- Walturdaw
- Warwick Trading Company
- Wrench Film Company

INDIA
- Aurora Cinema
- Hindustan Cinema Films Company
- Kohinoor Film Company
- Madan Theatres Limited
- Maharashtra Film Company
- Patankar Friends & Company

Phalke Films
Royal Bioscope
ITALY
Ambrosio
Aquila Films
Cines
Comerio Films
Dora Film
Film d'Arte Italiana (Pathé-Frères)
Gloria Films
Itala
Milano Films
Pasquali & C.
JAPAN
Fukuhodo
Komatsu Shokai
Konishi Photographic Store
M. Pathe
Nikkatsu
Tenkatsu
Yokota Shokai
Yoshizawa Shoten
NETHERLANDS, THE
Dutch Mutoscope & Biograph
Hollandia
Hollandsche Film (Pathé-Frères)
POLAND
Kosmofilm
Sfinks
RUSSIA
Drankov
Khanzhonkov & Co.
Pathé russe
Thiemann & Reinhardt Company
SPAIN
Barcinógrafo
Cuesta Valencia
Hispano Films
SWEDEN
Numa Peterson's Trading Company
Orientaliska teatern
Pathé Film (Sweden)
Svensk-Amerikanska Filmkompaniet
Svenska Biografteatern
USA
American Film Manufacturing Company
American Mutoscope and Biograph (AM&B)
Biograph
Blair Camera Company
Centaur/Nestor
Chicago Film Exchange
Eastman Kodak Company
Éclair American
Edison Manufacturing
Essanay Film Manufacturing Company
Famous Players Motion Picture Company
General Film Company
Greater New York Film Rental Company
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Kalem
Keystone Film Company
Klaw & Erlanger
Kleine Optical Company
Lubin Manufacturing Company
Maguire & Baucus
Majestic
Miles Brothers
Motion Picture Distributing and Sales Company (Sales)
Motion Picture Patents Company
Mutual Film Corporation
New York Motion Picture Company
North American Phonograph
Pathé Cinematograph
Raff & Gammon
Reliance
Rex
Selig Polyscope Company
Solax
Thanhouser Film Company
Universal Film Manufacturing Company
Vitagraph Company of America
Warner's Features, Inc.
World Film Corporation

INDUSTRY DEVELOPMENTS
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churches and exhibition
cinema circuits or chains
itinerant exhibitors
nickelodeons
palace cinemas
program formats
projectionists

modes of production: issues and debates
publicity: issues and debates
fashion
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screenwriting

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Brézillon, Léon
Bull, Lucien
Bünzli, Henri René
Burguet, Charles
Calmettes, André
Canudo, Ricciotto
Capellani, Albert
Capellani, Paul
Carl, Renée
Carpentier, Jules
Carré, Michel
Chautard, Emile
Clément-Maurice
Cohl, Emile
Coissac, Guillaume-Michel
Comandon, Jean
Continsouza, Pierre-Victor
de Bedts, Georges William
de Morlhon, Camille
Debrie, Joseph and André
Decourcelle, Pierre
Decroix, Charles
Deed, André
Delac, Charles
Demaria, Jules
Demenÿ, Georges
Denola, Georges
Desfontaines, Henri
Doublier, Francis
Doyen, Eugène-Louis
Dranem
Duhamel, Sarah
Durand, Jean
Dureau, Georges
Fescourt, Henri
Feuillade, Louis
Floury, Edmond Louis
Froissart, Georges
Gabet, Françisque
Gasnier, Louis
Gaumont, Léon Ernest
Grandais, Suzanne
Grimoin-Sanson, Raoul
Gugenheim, Eugène
Guy Blaché, Alice
Hamman, Joë
Hatot, Georges
Heuzé, André
Isola, Emile and Vincent
Janssen, Pierre-Jules-César
Jasset, Victorin-Hippolyte
Joly, Henri
Jourjon, Charles
Kirchner, Albert (a.k.a. Léar)
Krauss, Henry
Laffitte, Paul
Le Bargy, Charles
Le Prince, Louis Aimé Augustin
Lépine, Charles-Lucien
Leprince, René
Levesque, Marcel
Linder, Max
Londe, Albert
Lordier, Georges
Lumière, Auguste and Louis
Marey, Etienne-Jules
Mary, Clément
Méliès, Georges
Mendel, Georges
Mercanton, Louis
Merzbach, Saul and Georges
Mesguich, Felix
Migé, Clément
Mistinguett
Modot, Gaston
Monca, Georges
Musidora
Nalpas, Louis
Napierkowska, Stacia
Natan, Bernard
Navarre, René
Noguès, Pierre
Nonguet, Lucien
Parnaland, Ambroise-François
Pathé, Charles
Perret, Léonce
Pirou, Eugène Louis
Popert, Siegmund
Pouctal, Henri
Poyen, René-Georges

Prince, Charles
Promio, Alexandre
Reulos, Lucien
Reynaud, Emile
Riche, Daniel
Robinne, Gabrielle
Rogers, George
Sandberg, Serge
Tourneur, Maurice
Vandal, Marcel
Velle, Gaston
Veyre, Gabriel
Werner, Michel and Eugène
Zecca, Ferdinand

GERMANY

Altenloh, Emilie
Anschütz, Ottomar
Bartling, Georg
Bassermann, Albert
Becce, Giuseppe
Bolten-Baeckers, Heinrich
Davidson, Paul
Decroix, Charles
Delmont, Joseph
Dentler, Martin
Duskes, Alfred
Ewers, Hanns Heinz
Foersterling, Hermann
Froelich, Carl
Gärtner, Adolf
Giampietro, Josef
Gliewe, Max
Gottschalk, Ludwig
Häfker, Hermann
Hofer, Franz
Lange, Konrad
Lautensack, Heinrich
Lubitsch, Ernst
Mack, Max
May, Joe
Messter, Oskar
Misu, Mime
Müller-Lincke, Anna
Oliver, David
Piel, Harry
Pinschewer, Julius
Pinthus, Kurt
Porten, Henny
Reicher, Ernst
Reinhardt, Max
Rye, Stellan
Seeber, Guido
Skladanowsky, Max and Emil
Stollwerck, Ludwig
Tannenbaum, Herbert
Trautschold, Gustav
Valentin, Karl
von Woringen, Paul
Wegener, Paul
Weisse, Hanni
Wolff, Philipp

GREAT BRITAIN

Acres, Birt
Barker, William George
Brown, Theodore
Cheetham, Arthur
Collins, Alfred
Darling, Alfred
Donisthorpe, Wordsworth
Duncan, Francis Martin
Evans, Fred ("Pimple")
Fitzhamon, Lewin
Friese-Greene, William
Furniss, Harry
Green, George
Haggar, William
Hepworth, Cecil
Holland, Annie
Hopwood, Henry Vaux
Jeffs, Waller
Jury, Sir William Frederick
Kamm, Leonard Ulrich
Kearton, Cherry
Mason, Bert
McDowell, John Benjamin
Newman, Arthur Samuel
Norton, Charles Goodwin
Paul, Robert William
Pike, Oliver
Ponting, Herbert
Pringle, Ralph
Pyke, Montague Alexander
Raymond, Matt
Redfern, Jasper
Relph, Harry ("Little Tich")
Rosenthal, Joseph
Smith, F. Percy
Smith, George Albert

Smith, John William
Stow, Percy
Taylor, Alma and White, Chrissie
Thomas, Arthur Duncan
Urban, Charles
von Herkomer, Sir Hubert
Walker, William
West, Alfred
Williams, Randall
Williamson, James

INDIA
- Bhatavdekar, Harishchandra Sakharam
- Esoofally, Abdulally
- Ganguly, Dhirendranath
- Madan, Jamshedji Framji
- Mudaliar, Nataraja
- Phalke, Dhundiraj Govind
- Sen, Hiralal
- Singh, Suchet
- Venkaiah, Raghupati

ITALY
- Alberini, Filoteo
- Almirante Manzini, Italia
- Ambrosio, Arturo
- Bertini, Francesca
- Bonnard, Mario
- Borelli, Lyda
- Calcina, Vittorio
- Capozzi, Alberto
- Caserini, Mario
- Collo, Alberto
- D'Annunzio, Gabriele
- De Liguoro, Giuseppe
- De Riso, Camillo
- Del Colle, Ubaldo Maria
- Duse, Eleonora
- Fabre, Marcel
- Falena, Ugo
- Frau, Raymond
- Fregoli, Leopoldo
- Frusta, Arrigo
- Ghione, Emilio
- Guazzoni, Enrico
- Guillaume, Ferdinando
- Gys, Leda
- Jacobini, Maria
- Lo Savio, Gerolamo
- Maggi, Luigi
- Martoglio, Nino
- Menichelli, Pina
- Morano, Gigetta
- Negroni, Baldassarre
- Nepoti, Alberto
- Novelli, Amleto
- Notari, Elvira Coda
- Omegna, Roberto
- Oxilia, Nino
- Pagano, Bartolomeo
- Pasquali, Ernesto Maria
- Pastrone, Giovanni
- Roberti, Roberto
- Rodolfi, Eleuterio
- Rossi, Carlo
- Serena, Gustavo
- Vidali, Enrico
- Vitrotti, Giovanni
- Zacconi, Ermete

JAPAN
- Edamasa Yoshiro
- Kaeriyama Norimasa
- Kobayashi Kisaburo
- Komada Koyo
- Makino Shozo
- Maseo Inoue
- Onoe Matsunosuke
- Sawamura Shirogoro
- Tachibana Teijiro
- Tanaka Eizo
- Tokugawa Musei
- Umeya Shokichi
- Yokota Einosuke

MEXICO
- Alva, Carlos, Guillermo and Salvador
- Becerril, Guillermo
- Bernard, Fedinand "Bon"
- Derba, Mimi
- Rosas, Enrique
- Toscano, Salvador

NETHERLANDS, THE
- Binger, Maurits Herman
- Bos, Annie
- Desmet, Jean
- Frenkel, Theo
- Gildemijer, Johan Hendrik
- Hartlooper, Louis
- Ivens, Cees A. P.
- Lamster, Johann Christian

Mullens, Bernard and Willy
Nöggerath, Franz Anton Jr.
Nöggerath, Franz Anton Sr.
Slieker, George Christiaan
Stokvis, Simon B.
Wolf, Nathan Hyman

NORWAY
Gladtvet, Ottar
Gundersen, Jens Christian
Lykke-Seest, Peter

POLAND
Matuszewski, Bóleslaw
Prószynski, Kazimierz

RUSSIA
Bauer, Evgenii
Chardynin, Petr
Drankov, Aleksandr
Gardin, Vladimir
Goncharov, Vasilii
Hansen, Kai
Khanzhonkov, Aleksandr
Kholodnaia, Vera
Maître, Maurice Andrá
Mosjoukine, Ivan
Protazanov, Jakov
Starewicz, Wladyslaw
Thiemann, Pavel
Yermoliev, Iosif

SPAIN
Chomón, Segundo de
Gelabert, Fructuoso
Gual, Adrià
Marro, Albert
Ors, Eugeni d'
Togores, José de

SWEDEN
Bergqvist, John
Friberg, C. A.
Klercker, Georg af
Lundberg, Frans
Magnusson, Charles
Nilsson, N. P.
Sjöström, Victor
Stiller, Mauritz

SWITZERLAND
Burlingham, Frederick
Dussaud, François
Joye, Joseph-Alexis
Lavanchy-Clarke, François-Henri
Le Blond, Elizabeth Alice Frances
Sivan, Casimir

USA
Addams, Jane
Aitken, Harry
Anderson, Gilbert M.
Arbuckle, Roscoe ("Fatty")
Armat, Thomas
Baggot, King
Bakshy, Alexander
Balaban, Barney and A. J.
Balshofer, Fred J.
Baumann, Charles O.
Bedding, Thomas G.
Berst, Jacques A.
Bitzer, Wilhelm ("Billy")
Blackton, J. Stuart
Boggs, Francis
Bonine, Robert Kates
Bosworth, Hobart
Brady, William Aloysius
Brulator, Jules E.
Buckwalter, Harry H.
Bunny, John
Bush, W. Stephen
Bushman, Francis X.
Cabanne, W. Christy
Chaplin, Charles
Clement, Josephine
Clune, William H.
Cody, William F. ("Buffalo Bill")
Collier, John
Corbett, James J.
Costello, Maurice
Cunard, Grace
Davis, Harry
Dawley, J. Searle
DeMille, Cecil B.
Dickson, William Kennedy Laurie
Dintenfass, Mark M.
Dwan, Allan
Dyer, Frank L.
Eastman, George
Edison, Thomas Alvin
Farnum, Dustin
Finch, Flora
Ford, Francis
Foster, William

Fox, William
Freuler, John L.
Fuller, Loië
Fuller, Mary
Fynes, J. Austin
Gardner, Helen
Gauntier, Gene
Gilmore, William E.
Gish, Lillian
Grau, Robert
Grauman, Sid
Gregory, Carl Louis
Griffith, David Wark
Harrison, Louis Reeves
Hart, William S.
Heise, William
Hodkinson, W. W.
Holmes, Elias Burton
Holmes, Helen
Horsley, David
Howe, Lyman H.
Hulfish, David S.
Hutchinson, Samuel S.
Ince, Ralph
Ince, Thomas H.
Jenkins, C. Francis
Johnson, Arthur
Johnson, Jack
Johnson, Noble M.
Jones, Aaron J.
Joyce, Alice
Katz, Sam
Keith, B. F.
Kennedy, Jeremiah J.
Kessel, Adam
Kleine, George
Laemmle, Carl
Lasky, Jesse
Latham, Gray and Otway
Lauste, Eugene
Lawrence, Florence
Leonard, Marion
Lindsay, Vachel
Loew, Marcus
Long, Samuel
Lubin, Siegmund
Mace, Fred
Marion, Frank J.
Mark, Mitchell H.
Marvin, Arthur
Marvin, Harry
Mastbaum, Jules and Stanley
McCay, Winsor
McCutcheon, Wallace
McRae, V. H.
Méliès, Gaston
Miller, Arthur C.
Mix, Tom
Moore, Annabelle
Moore, Owen
Munsterberg, Hugo
Murdock, J. J.
Muybridge, Eadweard
Normand, Mabel
Olcott, Sidney
Paley, William ("Daddy")
Pickford, Mary
Poli, Sylvester
Porter, Edwin S.
Power, Nicholas
Powers, Patrick A.
Richardson, Frank Herbert
Robertson, D. W.
Rock, William T. ("Pop")
Roland, Ruth
Rothapfel, S. L. ("Roxy")
Sandow, Eugen
Sargent, Epes Winthrop
Saunders, Alfred Henry
Saxe, John and Thomas
Schenck, Nicholas and Joseph
Schneider, Eberhard
Selig, William Nicholas
Sennett, Mack
Shepard, Archibald
Shipman, Nell
Skouras, Spyros
Smalley, Phillips
Smith, Albert E.
Spoor, George K.
Steiner, William
Sterling, Ford
Storey, Edith
Swanson, William H.
Sweet, Blanche
Tally, Thomas Lincoln
Talmadge, Norma
Turner, Florence

Turpin, Ben
Walthall, Henry B.
Warner brothers
Waters, Percival Lee
Weber, Lois
White, James Henry
White, Pearl
Williams, Kathlyn
Woods, Frank
Young Deer, James
Zukor, Adolph

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chase films
comedy
comic series
crime films
detective films
facial expression films
féeries or fairy plays
filme cantante (sung films)
film d'art
historical films
melodramas, domestic
melodramas, sensational
mythologicals
phonoscènes
pornography
serials
Shakespeare films
Tonbilder
trick films
westerns: cowboy and Indian films
white slave films
women's suffrage films
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advertising films
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dance films
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law and the cinema: regulating exhibition
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Africa: British Colonies
Africa: French Colonies
Africa: German Colonies
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Australia
Cambodia
China
India
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Japan
Malaya
New Zealand
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Philippines, the
Thailand (Siam)
Vietnam
EUROPE
Austria-Hungary
Balkans, the
Belgium
Denmark
Finland
France

    - Germany
    - Great Britain
    - Greece
    - Ireland
    - Italy
    - Luxemburg
    - Netherlands, the
    - Norway
    - Poland
    - Portugal
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    - Scotland
    - Spain
    - Sweden
    - Switzerland
    - Wales
  - MIDDLE EAST
    - Egypt and other Arab countries
    - Iran
    - Palestine
    - Turkey/Ottoman Empire
  - NORTH AMERICA
    - Canada
    - Canada, Quebec
    - Cuba
    - Mexico
    - USA
      - black cinema, USA
  - SOUTH AMERICA
    - Argentina
    - Bolivia
    - Brazil
    - Chile
    - Colombia
    - Peru
    - Uruguay
    - Venezuela

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TECHNOLOGY AND MATERIAL

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- PROJECTING MOVING IMAGES
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- RECORDING MOVING IMAGES
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    - Bell & Howell studio camera
    - Biograph 70mm camera
    - Cinématographe Lumière
    - Debrie "Parvo" camera

- Edison Kinetograph camera
- English pattern cameras
- Newman & Sinclair Reflex camera
- Pathé-Frères cameras

lighting apparatus

synchronized sound systems

- films sonores: Pathé-Frères
- Chronophone Gaumont
- Kinetophone
- Messter Biophon

TRADE PRESS

DENMARK

- *Filmen*

FRANCE

- *Ciné-Journal*
- *Cinéma et l'Echo du cinéma réunis, Le*
- *Courrier cinématographique, Le*
- *Phono-Ciné-Gazette*

GERMANY

- *Kinematograph, Der*
- *Lichtbild-Bühne, Die*

GREAT BRITAIN

- *Bioscope*
- *Optical Lantern Weekly/Kinematograph and Lantern Weekly*

ITALY

- *Cine-Fono e la Rivista Fono-Cinematografica, La*
- *Vita Cinematografica, La*

USA

- *Moving Picture News*
- *Moving Picture World*
- *New York Dramatic Mirror*
- *New York Morning Telegraph*
- *Phonogram, The*
- *Phonoscope, The*
- *Views and Films Index*

Introduction

For the purposes of this encyclopedia *early cinema* refers to the first twenty or twenty-five years of the cinema's emergence at the end of the 19th and beginning of the 20th centuries. That is, if one thinks of Europe and North America, early cinema "begins" approximately in the early to middle 1890s and "ends" in the middle 1910s. However, certain entries discuss the "pre-cinema" period not only to describe the apparatuses (and their inventors) on which early cinema would be predicated but also to explore the cultural, philosophical, and socio-economic contexts within which it emerged. Likewise, certain entries extend beyond the middle 1910s, especially for countries or regions outside Europe and North America.

Those initial decades, again thinking of Europe and North America, encompass at least two overlapping periods. The first period is perhaps best described as a "cinema of attractions," whose defining characteristic was not so much storytelling or narrative but rather attractions—that is, forms of spectacle or display. In other words, it assumed venues of exhibition that primarily featured novelties foregrounding acts of shock, surprise, and/or amazement. The second is characterized by the transition to a cinema in which attractions generally were subordinated to narrative yet in different ways, with a variety of alternatives developing (in Europe and elsewhere) in parallel, and sometimes in competition, with the American model of what would become the "classical Hollywood" cinema. At the same time, however, an aesthetic of attractions continued to strongly mark certain kinds of fiction films, predominated in nonfiction, and also emerged in animation.

Until the early 1980s, the basic story of early cinema history focused on film production or filmmaking—whether that involved apparatuses, companies, filmmakers, or groups of film texts—and on developing modes of representation and narration. Since then, however, interest has been focused almost equally on film exhibition, and not only changes in the sites or venues of exhibition but also the cultural contexts and social spaces within which early films were distributed and shown. This shift has drawn new attention to those regions in Asia, the Middle East, South and Central America, and Africa where filmmaking initially may have been minimal but movie-going was significant. Moreover, it has led to greater consideration of who actually made up the audiences for early cinema, what was the use value of going to the movies—for pleasure, distraction, education, communality or sociality—and what was its impact on spectators for the social construction of identity or subjectivity, particularly given a historical context of heightened nationalism and growing mass consumption in Europe and North America.

This encyclopedia presents as much information as possible from the basic story of early cinema history, with its traditional focus on film production, filmmakers, kinds of films, and even individual films. Yet it also is committed to presenting information from the "revisionist" history of early cinema, with its focus on the changing nature of film distribution and exhibition and changing patterns of reception. Of particular importance is the notion that early cinema was inextricably bound up with other forms and practices of mass culture, that it emerged as a *combinatoire* of existing and innovative elements (audio as well as visual), and that it was a hybrid

medium which only gradually coalesced into something more or less distinct as *cinema*.

The recent renewal of interest in early cinema has been spurred by special events as well as a variety of sustained activities. What perhaps most caught public attention were the 1990s centennial celebrations of the cinema's "origins," from well-publicized exhibitions to scholarly conferences, from catalogues focused on film manufacturers to essay collections and special journal issues. Long before those celebrations, however, the 1978 Congress of the International Federation of Film Archives (FIAF), held in Brighton, England, probably did more to revive this interest by bringing together archivists and academics from across the world for a full week to view and discuss nearly 600 fiction films made between 1900 and 1906, many of them newly rediscovered and available in new viewing prints. The so-called Brighton Conference soon led to long-term archive efforts to collect, preserve, and restore as much as possible of what early film material has survived and related efforts to present those "restorations" in annual festival venues such as Le Giornate del Cinema Muto (Pordenone/Sacile, Italy) or in special museum film series and workshops such as those held at the Nederlands Filmmuseum. As academics and archivists began to realize how unique and distinct early cinema had been from the "classical Hollywood" cinema and other later cinemas, they created, in 1987, an international organization, Domitor, specifically devoted to its study. This, in turn, led certain universities, especially in North America and Europe, to encourage and support theses and dissertations on the subject of early cinema, increasing numbers of which have researched little-known collections of material related to the circulation, exhibition, and reception of moving pictures.

In any enterprise of this scope and magnitude, certain caveats are in order. In choosing consultants, selecting contributors, and determining what entries would be included, I have sought, as general editor, to be as broadly representative as possible. However successful those efforts may have been, it has proved impossible, inevitably perhaps, not to seem to privilege North America and Europe, where cinema initially was so predominant and where cinema studies as an academic discipline has been most institutionalized. Similarly, it has been impossible to include or adequately cover every country or region, every company or "pioneer," every relevant concept or category that readers might wish or even expect to find in seeking to become more knowledgeable about early cinema and its emergence (perhaps certain gaps or lacks will be addressed in a subsequent edition). Moreover, having contributors write entries in English or having those entries translated from another language has revealed certain differences between cultures that may produce discrepancies in terminology and even conceptualization. This is especially the case when considering legal or business terms as well as patterns of social behavior: for instance, in the case of companies, the distinction between *société anonyme* and *société en nom collectif par actions* in French has no precise equivalent in English. Indeed, the sheer dominance of English as the *lingua franca* of academic culture in the early 21st century inevitably has had its "imperial" effects on this volume, not all of them perhaps recognized.

That said, I am deeply indebted to the ten consultants and nearly 150 contributors from around the world for the stellar work they have achieved (including their generosity in negotiating revisions), in order that this encyclopedia be completed. For his initial translations of entries written in French by François de la Bretèque, Roland Cosandey, André Gaudreault, Germain Lacasse, Laurent de Forestier, Eric Le Roy, Thierry Lefebvre, Laurent Mannoni, Jean-Jacques Meusy, and Jean-Pierre Sirois-Trahan, I humbly thank Franck Le Gac, at the time a Ph.D. candidate in Cinema and Comparative Literature at the University of Iowa. Finally, I am immensely grateful for the consistent support and dedicated work of the editorial team at Routledge, especially Fiona Cairns, Stephanie Rogers, Aileen Harvey, and Faye Kaliszczak. Such a global cooperative effort is all the more to be applauded, given that this text is being written during and after the depressing days of my own country's divisive, arrogantly misguided, even deceptive war on Iraq.

Richard Abel

A

access

Research on early cinema is primarily conducted in moving-image **archives** (through public screenings and in structures designed for individual study) and specialized **film festivals and occasional events** (Pordenone, Bologna). Because of their fragility, original nitrate prints can be consulted only in exceptional cases. This is unfortunate because much of the visual quality of the film is lost in the **preservation** process through the creation of a duplicate, normally a 35 mm or 16 mm viewing print. Although useful as a reference tool, a reproduction through electronic media is not considered a proper substitute for film, as it lacks the basic component of the cinematic work: a series of complete, consecutive photographic images projected through an intermittent mechanism.

A moving-image archive does not function like a library: a film is not a text, and access to a film print cannot be granted as quickly as in a repository of books and journals. Before being given to the researcher, a print is retrieved from a climatized vault, slowly brought to ambient temperature (this procedure takes at least 24 hours), and inspected. The most complete listing of extant films of the early period is published by the International Federation of Film Archives (FIAF); however, a surviving film is not necessarily available for viewing, because it may not yet have undergone preservation.

Research in the archive is greatly facilitated by the adoption of a few practical rules. Requests are to be submitted in writing with reasonable advance, specifying the original title and, if possible, the production year. Viewing sessions are scheduled by appointment in a study center where prints are seen on editing tables (the preferable method for in-depth analysis, as the film can be run slowly through the machine), or projected on a large screen. No more than three features or a dozen shorts can be viewed during an average working day. Film prints must be treated with the utmost care for their physical integrity: replacing a damaged copy is very costly in terms of laboratory work and staff labor. Information on the provenance of the print is sometimes subject to restrictions imposed by the donors. Finally, the results of the viewing session should be shared with the archive's staff for their cataloguing and documentation records in order to foster better public knowledge of the collection. With the exception of the Library of Congress in Washington D. C. and a few other institutions where research can be done at no cost, archives normally charge for access to their holdings.

Archives may loan their prints for showings outside the institution's premises to non-profit organizations and festivals with an established reputation for quality of presentation (variable speed **projectors**, three-blade shutters) and care for the archival elements. In doing so, they request that prints are shown with changeover (non-platter) projectors in order to minimize physical damage to the artifact. Many films of the early period are in public domain; however, borrowers are asked to obtain **copyright** clearance from the legal owners when this is required by law.

Further reading

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International Federation of Film Archives (2001ff.) *Database of Archival Holdings*, Brussels: FIAF (CD-ROM).

Klaue, Wolfgang (1993) *World Directory of Moving Image and Sound Archives*, Munich: K. G. Saur.

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PAOLO CHERCHI USAI

Acres, Birt

b. 1852; d. 1918

inventor/filmmaker, Great Britain/Germany

A photographic technician, Acres designed a cinematographic **camera** by early 1895. He took the first British films during a short-lived partnership with Robert **Paul**, notably *Arrest of a Pickpocket* and *The Derby*; then, in June 1895, he took the first films in Germany, for Ludwig **Stollwerck**, at the opening of the Kiel Canal. Acres exhibited these films with his own **projector** in London in January 1896, then elsewhere, chiefly to scientific and photographic societies. Temperamentally unsuited to life as a showman, he marketed a 17.5 mm amateur camera, the Birtac, in 1898, and then retreated to work in his small film laboratory and apparatus manufacturing firm.

DEAC ROSSELL

acting styles

The earliest instances of acting on film consist of photographic reproductions of pre-existing acts: several **Edison Kinetoscopes** show the strong man Eugene **Sandow** flexing his muscles; others include Annabelle Whitford performing one of her fan dances. Slightly later, in the popular **chase** and **trick films**, people go through the requisite actions with only minimal attention to performance. Film acting as a profession, and as a set of specifiable techniques, does not really begin until after 1908, as story film production increased and the major producers formed their own stock companies, drawing from the pool of available theatrical talent. It is only after this point that one can begin to think about the development of cinematic acting styles as such.

Discussions of acting in the American, British, and French **trade press** in 1908–1909 frequently compared it to pantomime as another form of acting without words. However, the overt substitution of gesture for dialogue soon came under criticism for being artificial, too obviously directed toward the audience. Filmmakers rapidly found other ways of conveying the kind of information normally conveyed in dialogue on the legitimate stage: using **intertitles and titles**, stage business, props, or **editing**. The evolution of film acting lay, rather, in the elaboration of devices for expressing emotion, underscoring dramatic situations, and blocking scenes in ways that were pictorially coherent and pleasing.

Film actors drew upon a panoply of 18th- and 19th-century acting styles—styles elaborated in the legitimate **theater** (and in **opera** and ballet, as well as pantomime—which relied upon poses, sometimes called attitudes, to control how the actor looked and moved on stage. Actors were enjoined to study statues and **paintings**, and to practice poses, and there was a consistent use of illustrative drawings in manuals on acting and oratory. Actors struck poses upon entering or exiting a scene, to indicate their interior states, to call attention to significant bits of stage business, and to signal major turning points in the action. Poses by the entire acting ensemble, called tableaux, were used at scene and act ends, and carefully planned by directors and playwrights. If, by the 1910s, stage actors eschewed posing in certain genres—naturalist drama, and light, sophisticated comedy set in a contemporary, urban milieu—these techniques still widely were employed and appreciated in opera, in many stagings of Shakespeare and classical tragedy, and for melodrama, romantic drama and history plays. In addition, some avant-garde stage directors associated with anti-naturalist movements such as symbolism and expressionism also sought to re-institute a highly posed acting style. Thus, these techniques remained available, and proved highly adaptable to the medium of silent film.

The cinematic use of poses varied by actor and genre as on the stage but was also affected by other stylistic developments: as filmmakers moved to closer camera **framing**, actors frequently adopted more restrained attitudes, and as cutting rates increased, actors necessarily shortened the sequences of poses that they employed, and the way they handled the problems of the acting ensemble. In particular, the rapid development of editing techniques in the USA, and the predilection for **staging in depth** as an alternative to editing in Europe, meant that the two film acting traditions developed differently.

One of the first companies celebrated for its acting was **Film d'Art** in **France**, which used highly trained actors from major theatrical companies, including the Comédie Française in Paris. These films demonstrate the way that the acting ensemble could accommodate, and even benefit from, the stylistic parameters of the earliest films: scenes presented in a single take with long-shot framing. Actors pose in turn to direct the spectator's attention within the frame, while larger groupings form harmonious compositions. In *La Tosca* (1909), in the famous scene in which Tosca (Cécile Sorel) kills Scarpia (Charles **Le Bargy**), Sorel rests very still on a couch in the foreground so that the action of Le Bargy, gesturing to his lieutenant in the rear, becomes prominent. Later, Le Bargy is at the rear of the set with his head down writing when Sorel in the foreground sees a knife on a table and strikes a pose indicating that she has conceived the idea of Scarpia's murder. *L'Assassinat du duc de Guise* [The Assassination of the Duc de Guise] (1908) is structured through the contrast between the poses assumed by a single actor (in some scenes Le Bargy as Henri III, in others Albert Lambert as the Duc de Guise) and the group poses assumed by the courtiers. In the scene in which Henri III plans the murder, for example, the courtiers cluster around Le Bargy as he moves from the bed, front left, to the window, rear right, and back again; often they strike attitudes in unison, as when they raise their swords together or kneel together at the king's command.

The **multiple-reel film**, which began to develop in Europe in 1910, had significant consequences for European acting styles. Some of the earliest, made in Denmark, featured one of the first international **stars**, Asta **Nielsen**. In Italy, as manufacturers moved into long film production, they too began to make films based around star performances and performers, most notably Lyda **Borelli** and Francesca **Bertini**. Although this phenomenon is most often thought of in connection with "diva" acting, there were films based upon the work of male performers as well, for example the Danes Valdemar **Psilander** and Viggø **Larsen**, or the Italian Bartolomeo **Pagano** (Maciste).

The length of the feature film made possible more elaborate successions of poses. In *Ma l'amor mio non muore!* [Love Everlasting] (1913), the heroine (Borelli) writes a letter calling off her love affair with a prince, for his own good and the good of their country. The scene, presented in a medium-shot framing interrupted by a title, lasts over three minutes, and provides no new narrative information: the acting functions to embellish a situation which has already been clearly established. Borelli alternates the business of writing the letter with expressive poses: trying to suppress tears, giving way to them, burying her face in her hands, assuming an attitude of prayer. In addition to a deliberately slow pace, the highly ornamented acting characteristic of the diva film was produced by tailoring other stylistic elements to the demands of the performance. Closer framings or cut-ins displayed nuances of facial expression and gesture, staging in depth provided for highly choreographed entrances and exits, and the figure and movement of the actor were set off both by **camera movement** and by any number of visual devices within the frame: mirrors, windows, hats, and veils.

While the diva film prototypically focusses attention on a single performer, one often left alone on camera to express her reaction to her plight, this style also encompasses highly intricate ensemble acting, with gestural duets or trios in which the actors sometimes trade off expressive gestures, sometimes come together to form group poses or tableaux. In Albert **Capellani**'s *Les Misérables* (1912), Fantine (Marie Venture), ill and dying, is terrified by the appearance of Javert (Henri Étiévant), who has previously tried to arrest her, and who has followed the disguised Jean Valjean (Henry **Krauss**) to her bedside in order to arrest him. Krauss leans over talking to Venture,

who lies in bed midground left. Suddenly, the door midground right opens and Étiévant enters, standing on the threshold. Venture sees him and assumes an attitude expressing terror. Étiévant folds his arms over his cane forming a barrier as if to prevent his prisoner from the leaving the room. Venture points to Étiévant and maintains this pose. Krauss turns, keeping his back to Étiévant and moves to front center, then turns again, glances at Étiévant, and turns to face front once more. All of the actors then hold their positions in a tableau. In this simple entrance, the postures of the actors are varied to form striking visual compositions, to shift attention from one to another, and to represent each character's reaction to the situation: the terror expressed by Venture, the aggressive threat indicated by Étiévant's pose, and the cool indifference and protective stance assumed by Krauss, accentuated by his front center position.

The films produced by the members of the **Motion Picture Patents Company** (MPPC) provide a clear contrast with the European tradition. In 1908–1909, no American company could have achieved the sophisticated ensemble work of the Film d'Art actors, although a film like D. W. **Griffith**'s *Confidence* (1909) suggests that he was trying to replicate that style at **Biograph**. Further, by the time the first important generation of American film actors had developed a following, and their own individual acting styles—people like Florence **Turner** and Maurice **Costello** at **Vitagraph** or Henry **Walthall** and Blanche **Sweet** at Biograph—conventions of filmmaking had altered, and with them, the way that actors handled blocking and the assumptions of attitudes. Closer framings meant that actors in the foreground were now "bigger," positioned at the nine-foot line, framed from knees to head, simplifying the problem of directing the spectator's attention in the frame. Thus, in Vitagraph's *Red and White Roses* (1913), the vamp Lida (Julia Swayne Gordon) slouches on a divan in the right foreground, dominating our attention and the space, while the politician she seeks to seduce moves forward through the depth of the hotel-room set. In addition, as the MPPC manufacturers adopted faster cutting rates, there was less time and less necessity for posing. Blanche Sweet's performance in *The Painted Lady* (1912) is an often-discussed example. Sweet plays a girl deceived by a thief who courts her in order to gain access to her father's house. On the night of the attempted robbery, she shoots and kills the man, and then, after lifting the kerchief which had obscured his face, discovers his identity and goes mad with grief. The scene of the murder and discovery takes place in 18 shots with two titles, the action largely split between two adjacent rooms. A single gesture or a small number of them are contained within each shot, obviating the need to repeat and vary poses, and helping the actress engineer the transitions from one pose and emotional mood to another. There is only one pose when she realizes she has killed the masked intruder at the end of shot 12, while shot 13 similarly makes room for only two, a call for help which also functions as an expression of horror, with hands raised above head, and a turn and start at the sight of the body. The interpolation of a title, "Shattered," and the move to another room articulates the onset of madness, and it is accompanied by a cut to a closer framing that permits Sweet to act out her madness with smaller gestures. But such editing also means that the transition between one phase of the action and the next is no longer a matter of how and when she poses. Thus, while actors do strike attitudes in the more highly edited American cinema, one is much less likely to find the sequences of poses, or the methods for directing the spectator's attention in ensemble scenes that characterize European acting.

See also: *Autorenfilme*; biblical films; historical films

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LEA JACOBS

actualités

A word of French origin, *actualités* can refer to different types of films. In its most general meaning it can be seen as synonymous with "factual film." The French term quite often takes this sense in Anglo-American writings, probably because of its consonance with the English word "actuality," commonly used as a synonym for "reality." Consequently, all sorts of non-fiction pictures such as **travelogues**, **industrial films**, **scientific films**, **sports films, boxing films**, etc. can be considered *actualités*. In the light of this broad conception of *actualités* as early non-fiction films, John Grierson's famous definition of the documentary as the "creative treatment of actuality" has been understood by several historians as an attempt to distinguish films like those made by Robert Flaherty from the earlier practice of factual filmmaking.

The original French term, however, clearly implies a temporal reference: an *actualité* is a current event or something which happened relatively recently. In this narrower sense, commonly used on the European continent, *actualités* are topical films and can be seen as an early form of **news event films** and **newsreels**. *Actualités* defined as pictures presenting topical events can in fact be found among the earliest films: a considerable part of the **Lumière** production consists of views depicting state visits, inaugurations of monuments, parades, processions or other affairs that were of interest to the public and treated by other media as well. These were sold not only as single views but as series of views that exhibitors could arrange in their programs in different ways.

Yet another important sense of the term came from the French company **Pathé-Frères**, who wrote in their 1904 catalogue: "By this we mean scenes of general and international interest, which are so important that they will be able to thrill the masses." In short, the subject matter of *actualités* had to be sensational enough to attract audiences.

Figure 1 Frame still from *Sortie d'usine* (Lumière, 1895).

These two characteristics—the reference to current events and the search for the sensational—were indeed the main ingredients of *actualités*, at least when defined according to the European use of the term. In late 19th-century France, the word also appeared in advertisements for other forms of visual entertainment, such as **dioramas and panoramas** or the displays of **wax museums** presenting recent events or the celebrities of the day. Thus *actualités* contributed to the emerging modern media landscape, adding moving pictures as a means to record or represent current political and social affairs.

In contemporary catalogues both "actuality" films (for instance, pictures taken while the event occurred) and **re-enactments** appear as *actualités*. Sometimes these are clearly separated as in a 1903 R. W. **Paul** catalogue distinguishing between "Pictures of the Transval War" and "Reproductions of Incidents of the Boer War." In other cases staged and unstaged *actualités* appear under the same heading. Battle scenes in war films, for instance, almost always were re-enactments since it was hardly possible for cameramen to capture any of the fighting except from a very great distance. Georges **Méliès** filmed a number of well-known re-creations of topical events such as his series of films on the "Maine" incident (1898) during the Spanish–American War, on the Dreyfus affair (1899), and on the coronation of King Edward VII (1902).

It would be anachronistic to consider these films as "fakes." There is hardly any evidence that contemporary audiences distinguished factual views from staged ones, at least in the way they might acknowledge the difference between a drawing and a **photograph** illustrating an article in a newspaper. In a short story published in *L'Illustration*, in 1900, and translated into German the same year, Maurice Normand has a young Irish maid watch pictures of the Boer War in a Paris theater. Believing she has witnessed her fiancé being shot in one of the films, she faints away. Later a Parisian gentleman assures her that these battle scenes were staged. This very interesting source suggests that an educated, urban (male) spectator could recognize a staged view, whereas a naïve and credulous (female) spectator could not. However, after 1907–1908, re-enactments sharply decline and *actualités* generally use "documentary" footage recorded at the scene.

During the early years of cinema, especially once the novelty effect of the moving picture machine had worn off, *actualités* contributed to building an **audience** for moving picture shows, sustaining their interest and attracting new groups of spectators. In the Netherlands, the **British Mutoscope and Biograph**'s pictures of the 1898 coronation of Queen Wilhelmina were immensely popular: they were screened throughout the country for many weeks. About the same time, in the United States, images of the Spanish–American War, which were shown mainly in **vaudeville** theaters, had a similar effect. In Germany, before the coming of permanent cinemas, variety theaters catering to the middle and upper classes differentiated films from the rest of the program by focusing on *actualités* which appeared on the bill as *Optische Berichterstattung* or "optical reports." In this context, even a film like Edwin S. **Porter**'s *The Great Train Robbery* (1903) could be presented as an "optical report," giving a true-to-life account of a train hold-up in the United States. As early as 1901 the Musée Grevin in Paris organized special programs with *actualités* presented first as *Journal lumineux* and then, from 1904 on, as *L'actualité par le cinématographe*. From 1906 on, the Kinema-Théâtre Gab-Ka in Paris also specialized in *actualités*, showing new programs every Friday. Others followed this model all over the world.

In the following years, *actualités* continued to draw audiences and were often highlighted on the programs. Public events such as coronations, jubilees, visits of state, and other ceremonies, natural disasters such as volcanic eruptions or floods, but also the exploits of daring criminals—such as the rise and fall of the French automobile gang of Jules Bonnot in 1911–1912—were extensively covered, both through actuality footage and re-enactments. In Germany, images of the Kaiser were so popular that the monarch and his family could even be considered to have been the first German film **stars**.

In 1909 Pathé launched its first newsreel series, *Pathé faits divers*, which then became *Pathé Journal* (*Pathé Weekly* in the USA). Other companies soon followed suit. These newsreels consisted of about eight to twelve different items presenting a broad range of subjects from political events to crime, sports, fashion, and beauty contests. However, individual *actualités* continued to exist alongside newsreels, now more often than not as news event films.

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FRANK KESSLER

Addams, Jane

b. 1860; d. 1935

reformer, USA

Jane Addams, a major figure during the Progressive era, worked for legal reforms to ameliorate social conditions associated with industrialization, **migration/immigration**, and **urbanization**, held key positions in trade-union (see **labor movement**),

social-work, and **women's suffrage** organizations, and viewed recreation as an important municipal responsibility. In 1889, she co-founded Hull House, a model social settlement in Chicago. Addams critiqued commercial moving pictures for their lessons in crime, the trite morality of **illustrated songs**, and lurid **advertising** in posters. She also observed the communal atmosphere in **nickelodeons**; in an attempt to redirect their popularity, Hull House, in 1907, briefly ran its own nickelodeon.

CONSTANCE BALIDES

advertising

Neither those who made films nor those who viewed them came to their places in early cinema history in a vacuum. Producers and consumers of film enacted an exchange that was monetary but predicated on the expectation of meaningful or otherwise useful **communication**. As such, they brought with them the tendencies and resources of their cultures, and there was no more visible and influential signpost strewn across those cultures than advertising. For capitalist nations in particular, advertising formed a pervasive cultural context that influenced how films were made, how they were packaged and promoted, and how they were understood by audiences.

The practice of advertising has long roots that stretch back into the histories of many countries including Great Britain, France, Germany, and the USA. In the USA, which offers a prime example, an industry devoted exclusively to crafting and circulating commercial messages first developed in the 1840s. At that time, agencies emerged in response to the needs of penny **newspapers**, which increasingly relied on advertising to defray expenses, and the needs of manufacturers, who sought broader markets for mass-produced goods. Agencies built a profitable bridge between mass media and modern business.

As agencies multiplied—by 1861 there were twenty in New York City alone—so did the number of advertising messages. Advertising became the privileged discourse for educating people about the qualities and uses of branded commodities, and it communicated a vision of life in which consumption was heralded as a means for shaping personal identity, communicating status, and establishing successful social relationships.

Before moving pictures, advertising appeared in many forms. Handbills were distributed to people in public spaces, and outdoor advertising (broadsides, posters, billboards, signs painted on rocks and buildings) was widespread. Newspapers sold increasingly large amounts of advertising, much of it to **department stores**, and in the 1860s advertising appeared regularly in **illustrated magazines** such as *Harper's Bazaar* and *Vanity Fair*. During the 1870s and 1880s, trade cards were a popular form of advertising. These small but vibrant images were distributed inside packaged goods and collected by consumers. **Postcards** were used to communicate with consumers as well.

When moving pictures were introduced in the 1890s businesses and agencies quickly became involved in producing **advertising films**. Like newspaper editors who deftly inserted messages into a loosely connected layout of diverse stories and images, theater showmen used advertising films as part of the assembled mix that formed the **cinema of attractions**. Because these films were thought of as "animated posters" or "animated billboards," showmen occasionally projected them on open-air **screens** at crowded intersections, in keeping with existing practices for outdoor advertising.

If businesses used the film medium as a resource for advertising, so too did film manufacturers use advertising as a resource for films. During the pre-**nickelodeon** era, films were short and did not possess a high degree of internal coherence. Manufacturers depended on exhibitors (perhaps using **lecturers** or **dialogue accompaniment**) and movie-goers to supply missing information. Filmmakers chose images, topics, and stories familiar to **audiences**. Advertising campaigns provided a ready-made stock of knowledge.

In the 1890s, American Tobacco Company controlled nine-tenths of the domestic cigarette market and inserted trade cards depicting famous or exotic women into the packs of some of its brands. A person familiar with this practice thus had little trouble understanding the visual pun in *Admiral Cigarette* (1897), where a woman in

striking costume bursts from a large pack of Admiral cigarettes.

Edison's *The Great Train Robbery* (1903) based its famous image of a robber firing his pistol directly at the audience on Sam Hoke's "Highwayman" poster for Gold Dust brand powdered cleanser (a poster that gave new meaning to the phrase "cleaning up crime"). This shot intensified the audience's reaction by associating the film with an advertising image that was controversial for its alleged power to mesmerize those who stared too long at it.

Edison's *Romance of the Rail* (1904) spoofed a popular advertising series done for Lackawanna Railroad by famed copywriter Earnest Elmo Calkins. The company sought to differentiate its passenger service, which used "clean-burning" anthracite coal, from competing services using bituminous coal (which produced heavy clouds of soot that clung to clothes). To personify the distinction, Calkins created Phoebe Snow, whose white hat and dress remained spotless throughout her many travels on Lackawanna Railroad—dubbed the "Road of Anthracite." In *Romance of the Rail*, Snow and a new acquaintance fall in love and are married in the course of a single trip. Lackawanna's trademark appears prominently on the suitor's luggage and train's box cars. At film's end, two tramps crawl from beneath a train car and rebuff a porter who tries to brush their clothes, an unnecessary gesture on the "Road of Anthracite."

Film companies also used advertising for ideas about how to market the film product itself. Early exhibitors showed continuous programs of shorts, often changed daily, and had little advance knowledge about the content and release dates of new films. This made it difficult for nickelodeons to advertise individual films. However, with the development of a reliable distribution system, exhibitors received more information about upcoming releases and film producers began to differentiate their brands by supplying lithographed posters and other materials to promote company **trade marks** and advertise specific film titles.

Manufacturers hired advertising agencies to develop organized marketing campaigns. Film posters became highly artistic, like much advertising generally, because agencies believed beauty and style stimulated visual interest and consumer desire. A film's genre, spectacle, and the **star system** became increasingly important as marketing elements that were tied-in with other products (such as designer **fashions**) and repeated across a variety of advertising mediums and formats. By 1910, advertising slides—long a source of revenue for exhibitors who used **magic lanterns** to project commercial messages for a variety of goods and services onto movie screens—were being used to build studio brand names, generate anticipation for upcoming releases, and promote stars. By 1915, a new type of advertising—the movie trailer—developed to help stimulate and control demand for individual films that increasingly could be conceived and produced with their advertising potential in mind.

Figure 2 Flip book showing a clown juggling boxes of Church and Co.'s Arm and Hammer baking soda, *c.* late 1880s or early 1890s. (Courtesy of Jeffrey Klenotic.)

See also: consumer cooperatives: Europe; industrial films; monopoly capitalism: USA; program formats; publicity; travelogues

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JEFFREY KLENOTIC

advertising films

With their emergence as a new form of screen practice and mass **communication**, moving pictures were perceived as a dynamic medium for **advertising** and promotion. Film manufacturers cultivated the market for advertising by creating **travelogues**, **industrial films**, and other types of short films to stimulate demand for consumer goods and services and promote product brand names and company **trade marks**.

The idea of using moving pictures for advertising was not radically new. Rather, it extended and synthesized existing forms of advertising and screen practice. For well over a decade before the development of cinema, advertisers personalized and animated the expanding world of anonymous mass-produced objects, giving life and movement to commodities by inserting their trade-marked packages into the ephemeral images and fleeting narratives of thumb books and mechanical trade cards. When motion-picture projection was achieved and films captured a place in the landscape of commercial imagery and amusement, advertisers were there. Like billboards vying for the attention of distracted urbanites, advertising films (and slides) were projected as part of the showman's **cinema of attractions.** Better than billboards, though, advertising films reached an invested (paying) and relatively immobilized public that was not likely to turn away. This "captive" aspect of the cinema audience has intrigued advertisers ever since.

As with the emergence of cinema generally, advertising films were an international phenomenon. In Great Britain, Arthur Melbourne Cooper was hired in 1897 by Bird's Custard Powder to make a film based on one of the company's advertising posters. Some manufacturers purchased equipment and made films themselves, as when Nestlé and Lever Bros. jointly produced *The Sunlight Soap Competition* (1897) and other advertisements.

French filmmaker Felix **Mesguich** created "animated posters" in 1898 that were projected onto an open-air billboard affixed to the third floor of a Montmartre building in Paris. Georges **Méliès**, celebrated for his **trick films**, was also a prolific producer of innovative advertising films. These were sometimes shown on a screen above the entrance to the Robert-Houdin Théâtre. Among his clients: Bornibus mustard, Chocolat Ménier, Delion hats, Dewar's whiskey, Mystère corsets, Orbec beer, Widow Brunot's wax, and the hair-restoring Xour lotion.

In the USA, the International Film Company employed Edwin S. **Porter** in 1897 to project a mix of advertising films (Haig whisky, Pabst beer, Maillard's chocolate) and topical subjects for an open-air show in New York. When Porter projected the films onto a large **screen** atop the Pepper building on 34th Street and Broadway, he was reportedly charged with creating a public nuisance for inciting pedestrians to crowd the sidewalks below. **Edison**, Porter's next employer, also produced advertising films, such as *Admiral Cigarette* (1897), *Crawford Shoe Store* (1897), *Lickmann's Cigar and Photo Store* (1898), and *North Side Dental Rooms* (1898).

While some films made direct pitches to spectators, many more took an indirect approach. Serving as sponsors, businesses and other organizations—primarily **transportation** companies, but also heavy industry, the military, and chambers of commerce—subsidized production costs for films

that subtly promoted their interests and brand names. Between 1896 and 1900, nearly half of all Edison films were financed this way.

These films were presented by exhibitors as entertainment that was exciting and educational. Travel films offered vivid glimpses of life in distant and sometimes exotic settings that were increasingly open to tourists by rail or steamship. Military films depicted the daily life of soldiers and sailors, and granted privileged battlefield views, thereby visually punctuating recruiting efforts. An industrial film demonstrating wine production in California educated the consumer, promoted the wine industry, and fostered West Coast tourism. Other industrials presented an attractive vision of factory production as a safe, clean, and well-organized process.

In addition to their covert appeals, sponsored films were used by sales people to make a more direct and targeted pitch, as when prospective clients were treated to a pre-meeting screening of the sponsor's film at a local theater. With the development of positive safety film stock around 1908, sales agents could even use portable **projectors** to show films in their offices or take films for meetings on the road.

Although the number of advertising films as a percentage of total film output probably peaked between 1896 and 1900, such films were produced throughout the period of early cinema and beyond. The efforts of Germany's Julius **Pinschewer** in the 1910s were especially significant. He commissioned and distributed internationally advertising films made by avant garde **animation** artists like Lotte Reininger, Walter Ruttmann, and Guido **Seeber**. Another trend in the 1910s was the production of fiction films that concealed their advertising intent within an entertaining narrative. Thus the dramatic resolution of Edison's *The Stenographer's Friend* (1910) hinged on the effectiveness of the company's business **phonograph**, while the harried housewife in *The Family Jar* (1913) solved her husband's chronic indigestion by providing "pure food" Beech-Nut bacon. One exhibitor who recognized the advertising intent behind *Chew Chew Land* (1910) complained to ***Moving Picture World*** that it was unfair "to deal out for amusement and edification a picture embellished with the trade marks of the certain manufacturer of the goods it is desired to advertise."

Although no one knew if advertising films actually stimulated demand, no one knew for sure they didn't. So advertisers continued to use the film medium. By the 1910s, when advertising films averaged 1,000 feet in length, sponsors were willing to pay one dollar per foot for the original negative and initial positive print, and fifteen cents per foot for additional prints. There were also costs for travel when outdoor scenarios were used and costs for portable lights when indoor sets applied. On average, the subsidy to produce and distribute an advertising picture was roughly $5,000. Yet agents estimated that such a film, distributed in theaters across the USA for seven months, reached fifteen to twenty-five million people.

See also: consumer cooperatives: Europe; department stores; fashion; monopoly capitalism: USA; publicity

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JEFFREY KLENOTIC

Aeroscope camera

Patented in 1909 by Poland's Kasimir de **Prószynski**, but manufactured from 1912 on by **Newman and Sinclair** in London and then commercialized by Cherry **Kearton**, the Aeroscope was one of the first cameras whose claw mechanism was driven by compressed air, which required tanks that had to be filled with a pump. The advantage of

such a system was that it gave the camera greater autonomy, because a cameraman no longer needed to turn a crank to advance the film. Abel Gance used the Aeroscope camera for the horse chase scene in *Napoleon* (1927), shot in Corsica.

LAURENT MANNONI

Africa: Belgian colonies

The first films successfully shot in the Congo Independent state occurred in the summer of 1908, probably taken by a Belgian officer in the northern part of the country: the Uélé river, Redjaf, and the enclave of Lado. The films were presented at the Club Africain-Cercle d'Etudes Coloniales in Antwerp the following November.

In 1909, when the Congo became a Belgian colony, scenes of life in the harbor towns of Boma and Matadi and along the railroad between Matadi and Leopoldville (Kinshasa) already were circulating in Brussels as a means of propagating the Belgian presence in Africa. Le Cinématographe des Colonies was founded to exhibit films of the new territories in Africa in the company's own cinema in Brussels. Its cameraman Léon Reinelt shot urban centers, harbors, new railways and the Belgian military presence in such films as *L'Estuaire du fleuve Congo*, *Banana*, *Boma*, *Le marché de Boma*, *Le défilé de la Force Publique*, *Le chemin de fer des Cataractes*, *Au Kasai*, *Voyage dans le Mayumbé*. He also gave special attention to the natural resources in such nonfiction films as *Travaux forestiers au Congo* and *Le Poste et la ferme de Duma*.

Between 1909 and 1913, a number of personalities were filmed on their travels to the Belgian Congo: i.e., *Le voyage du prince Albert au Congo*, *Le comte de Turin au Congo*, *l'Arrivée du Ministre des Colonies à Banana, Boma et Matadi*, *Les manoeuvres de la Force Publique Noire devant le prince Albert*.

For the British weekly, *The African World and Cape Cairo Express*, published in the Belgian Congo, the South African cameraman R. C. E. Nissen filmed daily life in the newly built mine town of Elizabethville (Lubumbashi), the copper mines of Katanga, the commercial city of Stanleyville (Kisangani), and the Kambove mines. In 1913, this footage was edited into a two-hour program entitled *From Rhodesia via Katanga to Angola, Bulawayo to Elisabethville and Kambove to Lobito Bay*, which met with success throughout the British and Belgian colonial world.

The first films seem to have been projected in the Belgian Congo about 1910 in Leopoldville. A year later a travelling showmen from Italy showed films from **Méliès** and **Pathé-Frères** in both Stanleyville and Elisabethville. By 1913 **itinerant exhibitors** had reached the most remote parts of the Congo: i.e., in Yungu and Lemfu near Ngidinga at the Angolan border (Upper Congo). Of the first cinema halls opened in Leopoldville in 1916, one was owned by a Belgian, Henri Legaert, who showed French and British films about the battlefields of **World War I**. Soon after, a cinema also opened in Elizabethville, as did the Cinéma Hennion (with French **projectors**), on the site of a former café-restaurant in Boma.

During the war, the Ministry for the Belgian colonies created a special service to produce films in the Congo. Between 1917 and 1919, cameraman Ernest Gourdinne worked almost everywhere in the colony. He shot films about the copper mines in Katanga, the industrial center of Lusambo, Catholic mission work, the palm oil industry, the cacao plantations in Mayumbe, colonial farms in the Kasaï, and the newly constructed railways. These films were shown in Belgium and elsewhere after the war.

See also: Africa: British colonies; colonialism: Europe; ethnographic films; industrial films; travelogues

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GUIDO CONVENTS

Africa: British colonies

In British-controlled Africa, the first moving pictures were made in the Sudan, in 1897, by John Bennet Stanford (1870–1947), who shot a film of the battle of Omdurman, entitled *Alarming Queen's Company of Grenadier Guards at Omdurman*. Fifteen years later, Charles **Urban** had a Kinemacolor film shot in Khartoum of Lord Kitchener, the "hero" of Omdurman, reviewing Egyptian troops. During these years, numerous filmmakers travelled up the Nile to the Sudan and even Kenya because there was no tropical forest to hinder their filming. One of the more famous, Félix **Mesguich**, filmed for **Charles Urban Trading Company** in Khartoum in 1906. Later that year, the Colonial Office in London, also now interested in showing the British presence on the continent, granted **Warwick Trading** (cameraman E. L. **Lauste**) special privileges to film around Mombassa in East Africa. Other well-known filmmakers active in the area of Sudan, Uganda, and Kenya were Alfred **Machin**, Cherry **Kearton**, Paul Rainey, and Theodore Roosevelt. Between 1909 and 1913, moving pictures also were projected in theaters as well as in the open air by **itinerant exhibitors** in cities such as Nairobi.

By 1903, the British government set about making films to demonstrate economical development and modernization in its African colonies. Between late 1906 and late 1908, British cameramen filmed in Rhodesia, Mashona, and Barotseland. An impressive surviving image was that of the Victoria Bridge, the highest in the world at the time, near Victoria Falls on the Zambezi River. Specifically, as a result of the Urban-Africa Expedition, films such as *Life on the Zambezi River*, *Amongst the Central African Natives*, and *A Trip on the Rhodesian Railway* were shown around the world. Because investment in the colonies was a long-term financial adventure, moving pictures could assure "anxious shareholders" that their money was being well spent so far from home. British investors such as the British South Africa Company (BSAC) used films about the construction of railways and bridges—for instance, connecting the diamond, copper, and tin mines in Rhodesia—not only to attract shareholders but also to present themselves as essential in conquering the world for the Empire. In 1912, BSAC produced *Rhodesia To-Day*, shot by Alfred Kaye and R. C. E. Nissen in the region between Bulawayo and the Zambesi. That film especially nourished the British Imperial dream of constructing a Cape to Cairo railway. Itinerant showmen also were active in the mining areas of Rhodesia and densely populated cities such as Bulawayo or Salisbury early in the century. Around 1910, films were being programmed (for whites) at theaters such as the New London Bioscope and Empire in Salisbury (Rhodesia). In 1912, as film screenings in theaters became accessible to the black population, Rhodesia's Native Affairs Department, along with the industry, was pressured by (white) women's groups to censor those films presented to blacks.

Moving pictures also arrived relatively early to Nigeria on the west coast. The first screenings took place at Glover Memorial Hall in the capital of Lagos, on ten consecutive nights, beginning 12 August 1903. Ten years later, a BSAC film expedition shot more than 10,000 feet of high quality film showing the tin mines of Nigeria and the countryside as far inland as Kano. By 1913, itinerant showmen had brought moving pictures to most of the coastal cities of British West Africa (Nigeria and Ghana).

See also: Africa: Belgian colonies; Africa: French colonies; Africa: German colonies; colonialism: Europe; racial segregation: USA; travelogues

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GUIDO CONVENTS

Africa: French colonies

French cameramen probably shot the most films in Africa. The first moving pictures from North Africa (Algeria and Tunisia) were produced for the **Lumière** Company by Alexandre **Promio** in 1896–1897. In 1903, he filmed again in this area. In 1902, **Pathé-Frères** also sent cameramen to Algeria and Tunisia, where they produced such films as *Marché à Biskra* and *Laveuses, Baigneurs dans l'Oued Senia* (Algeria), and *Place principale à Tunis* and *Panorama de Constantine* (Tunisia).

Films from tropical French Africa seem to have been made regularly from 1905 on. One of the pioneers was the Pathé cameraman Léo Lefébvre, who filmed daily life and natural resources in French West Africa (Senegal and Guinée). His films, such as *Panorama en Guinée*, were shown at the colonial exhibition in Marseilles in 1906. For Pathé, Alfred **Machin** entered French Africa via Egypt and the Nile in 1909. He brought back moving pictures from Fachoda in the French Sudan, a mythical space for French colonial history: i.e., *En Afrique Centrale: Fachoda*. During this expedition, he also shot hunting scenes such as *Voyages et grandes chasses en Afrique*. Later, Pathé cameramen were active in Madagascar (*Fabrication Malgache des Sobikons*) as well as West Central Africa (*Au Congo*).

Around 1910 other French companies began to produce films in Africa, and eventually almost every city of French colonial Africa found its way onto film. **Gaumont** even had a policy of collecting a full range of moving pictures from this part of the world: i.e., dozens of scenes from Senegal (Kayes, Saint-Louis, Dakar), Brazzaville-Congo, Niger (Bamako, Timbuktu, Koudoussou, Kankan), etc. These were shot entirely from the colonialist point of view, as can be seen in *Vues de Soudan Français-Tombouctou*, which contained scenes of the chief of the Ouled Mechdouff (a Touareg tribe) offering his submission to the French military governor.

From the moment cameramen became active in the French colonies in the Magreb and the tropics, films also were shown in the open air or in existing theaters or halls. In the Magreb, for instance, **itinerant exhibitors** already were operating before 1905. Europeans had an important presence in cities such as Algers, Casablanca, and Tunis, where they owned and frequented **music halls**. In 1911, the Excelsior Cinéma opened in Casablanca and was a success among not only Europeans but also the Arab population. About the same time, theaters like the Splendide Cinéma opened in the small Algerian city of Mostagane. Most French distributors bought rental rights for Italian, German, American, Spanish or British films not only for France but also for the "colonies." By 1910, for instance, A. Bonaz in Paris had agencies in Algers, Tunis, Alexandria, and Cairo. In the early 1910s, exhibitors became active in Dakar, Saint-Louis and other important centers in West and Central Africa.

In the **World War I**, the French army initiated film production in Africa; among its films were *L'aide des colonies à la France* (1917).

See also: colonialism: Europe; Egypt and other Arab countries; ethnographic films; travelogues

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GUIDO CONVENTS

Africa: German colonies

In South West Africa (Namibia) and German East Africa, Karl Müller probably shot the first films in 1904, recording the natural environment of the colonies and the work of the colonists. Due to their successful exhibition among colonial pressure groups in Germany, he returned to Africa in early 1906 and shot 2,000 meters of film in the German Sudan (Togo), Cameroon, and Namibia.

Through an arrangement with Deutsche Kolonial Gesellschaft, he then showed these films all over Germany to thousands of school children and anyone interested in the German colonies.

The collection of scientific data in the colonies was important to Europe, and cinematography became an essential means of collecting. Karl Weule (1864–1926), from the Museum of Ethnology in Leipzig, used an **Ernemann** camera to record the rituals of the Wakonda in the German East African colonies in 1906. Adolf Friedrich (1874–1969) of Mecklenburg brought similar films back from Urundi, Ruanda and the regions of the Uele and the Aruwimiriver in 1908. Appointed governor of Togo in 1911, he encouraged filming there as well.

German companies also produced a small number of films in the African colonies before 1914. For Bioscop-, Kolonial- und Eisenbahngesellschaft, Georg Furkel filmed in Namibia, where he captured images of the victorious Germans as well as the Hereros and Namas who had survived the gruesome colonial war. Deutsche-Bioscop Gmbh sent several cameramen into German Africa to make such films as *Leben und Treiben in Tangka*, *Linienlaufe unter dem Aequator*, *Die Sigifälle in Cameroun und Togo*. Other specialized film companies included Deutschkoloniale Kino-GmbH and Deutsche Jagdfilm Gmbh, the latter of which hired the big game hunter Robert Schumann to shoot *Nashorn Jagd in Deutsch Ostafrika* in East Africa (Ruanda/Urundi). The most famous producer, however, was Hans Schomburgk (1880–1967) who, with cameraman Georg Bürli, crossed the territories from Liberia to Northern Togo just before **World War I**. He made both documentaries (i.e., *Aus dem Kriegsleben in Süd-Westafrika*, *Unsere Polizeitruppe in Togo* and *Im Deutschen Sudan*) and fiction films (i.e., *The White Goddess of The Wangora* and *The Outlaw of the Sudu Mountains*).

The first screenings in German East Africa were organized by a German travelling showman by the name of Wexelsen in April 1908, specifically in the city of Tanga (north-eastern Tanzania) on the Indian Ocean. In September, he had a cameraman film daily life there. In May 1909, the same showman came to Dare salaam, where he exhibited films to both black and white audiences. It was Wexelsen who also organized film shows in June 1911 in Usumbura (the capital of western Burundi, on the northeastern shore of Lake Tanganyika). By then he had been joined by other **itinerant exhibitors** such as Ohlmanns Kinematograph and Prinsenschaums Kino, all of whom regularly received new films from Germany. Ohlmanns and Prinsenschaums also organized film screenings on a regular basis in Swakopmund and Windhoek in German West Africa. According to the local press in Swakopmund, in June 1911, Ohlmanns opened a cinema hall and nearby garden restaurant, where he offered not only music with an electric organ and presented **synchronized sound** films but served excellent beer. Prinsenschaum also is known to have travelled with his films to South Africa (i.e., the city of Bloemfontein).

See also: colonialism: Europe; ethnographic films; travelogues

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GUIDO CONVENTS

AGC

The Agence Générale Cinématographique (AGC) emerged eventually from American Kinetograph, a small company specializing in exhibition founded in 1904 by Théophile Michault, Maurice Astaix and François Lallement, three former Georges

Méliès employees. On 10 May 1907, their company was taken over by the Compagnie des **Cinéma-Halls**, which operated, among other theaters, the Hippodrome (the future Gaumont-Palace). In August 1909, Cinéma-Halls went bankrupt, and American Kinetograph set up a new business renting films and apparatuses. Early in 1910, Michault sold his shares to his two associates, and in April–May, Astaix, Lallement and Paul Kastor (co-owner of the moving picture theaters, Le Panthéon and Les Mille-Colonnes, in Paris) created a general partnership under the designation of Agence Générale Cinématographique and the corporate name "Astaix, Kastor et Lallement." The company acquired the exclusive rental rights to the films of **Film d'Art**, after the latter was taken over by Charles **Delac** (in 1911), and shared rights to **Éclair** films with the Union des Grands Editeurs. In late 1912, AGC could boast weekly rental purchases of 18,000 to 20,000 meters of films. Besides Éclair and Film d'Art, it also rented and distributed American films from **Biograph**, **Kalem**, **New York Motion Picture (Bison)**, **Edison**, and **Vitagraph**; French films from **Eclipse**, Le Lion and **Lux**; Italian films from **Ambrosio**, **Itala**, **Milano-Films**, **Cines** and **Aquila**; and English films from Kineto and **Clarendon**. From 1915 on, AGC distributed Charlie **Chaplin** films which quickly had tremendous success. It was taken over by Franco-Films in 1927.

See also: distribution: Europe

JEAN-JACQUES MEUSY

AGFA

In 1892, Dr. Momme Andresen, inventor of Rodinal, Metol, Amidol, and Glycin, set up a photographic department to research and eventually manufacture photographic material at the Actien-Gesellschaft für Anilin-Fabrikation (AGFA) in Berlin. Early in 1908, AGFA began to supply French production companies with **celluloid** film stock (positive nitrate). By summer's end in 1913, AGFA was supplying 40% of the European market and was **Eastman Kodak**'s main competitor. AGFA's customers included **Gaumont**, **Eclipse**, **Éclair**, **Lux** and **Raleigh & Robert** in Paris as well as **Ambrosio**, **Itala**, Comerio, and Ottalinghi in Italy. In 1908, AGFA also began producing an acetylcelluloid non-flammable photographic base.

CARLOS BUSTAMANTE

airdomes

A very common, generic term used in the USA to describe one type of outdoor venue for screening moving pictures from the **nickelodeon** era through the 1910s. Unlike storefront moving picture shows, airdomes were open-air, usually roofless theaters designed exclusively for warm-weather climates or for summertime use. Though they were in most cases operated as seasonal amusement venues, airdomes differed from traveling carnivals (which sometimes included moving pictures) and tent shows because they were permanent theaters typically run by local entrepreneurs. Open-air moving picture theaters operating in small commercial **amusement parks** or in municipally owned parks sometimes also were referred to as airdomes. If airdomes in certain ways looked forward to the drive-in theaters of the post-World War II era, they also were very much a product of the early 20th century, when communal, outdoor, warm-weather venues were an essential part of the leisure-time experience across the USA.

As David **Hulfish** notes in *Motion-Picture Theater Management* (1911), an airdome could be set up in a country town as well as a large city, since it required only a fenced-in vacant lot, a **screen**, chairs, and a projection booth or platform. A more elaborate airdome might include an ornate entryway, a separate area with tables and chairs, concession stands for food and drink, and a small stage. Airdomes offered programming that was comparable to indoor moving picture venues, at first combining films with live performances, including **illustrated songs** and **vaudeville** acts, then introducing more "balanced" film programs by the early 1910s. In a time before air conditioned theaters, airdomes filled a lucrative niche in the marketplace, most notably in places where indoor

theaters traditionally had been closed once summertime heat and humidity set in. As a result, airdomes helped establish film exhibition as an everyday, year-round business in the USA.

Moving Picture World duly noted the spread of airdomes in 1907, which were most likely to be found in midwestern states like Missouri, Kansas, Indiana, and Oklahoma. Well into the 1910s, airdomes remained a significant site for film exhibition in this region and elsewhere. In the summer of 1915, for example, there were permanent open-air movie theaters from Bar Harbor, Maine to Fresno, California, and in a number of large cities as well, including Washington, D. C., Nashville, and Kansas City. Urban airdomes could contain fancy gardens and 2,000 or more seats. Sometimes they were joined with an indoor theater, allowing patrons to see the show regardless of thunderstorms or unseasonable cold spells. In cities like St. Louis, Missouri, and Louisville, Kentucky, the many airdomes operating in residential areas helped to spread film exhibition out of the central business district and to foster investment in "neighborhood" theaters.

See also: leisure time and space: USA

GREGORY A. WALLER

Aitken, Harry

b. 1878; d. 1956

distributor, producer, entrepreneur, USA

Aitken was a Milwaukee exchange man who, in order to supply clients after his **Motion Picture Patents Company** (MPPC) licenses were revoked in 1910, founded and acquired production companies, eventually owning outright **Majestic** and **Reliance** and having some stake in **American Film Manufacturing**, **New York Motion Picture**, and **Keystone**. In early 1912, together with John **Freuler**, C. J. Hite, and Samuel **Hutchinson**, he founded **Mutual**, soon a national distributor of short film programs. In 1913, he hired D. W. **Griffith** away from **Biograph** to supervise Reliance and Majestic production in a new studio in Los Angeles. Aitken supported Griffith's project for *The Birth of a Nation* and, when his partners refused backing, set up the Epoch Producing Corporation to produce and distribute the film. In 1915, he left Mutual and established the Triangle Distributing Corporation to provide a national program of feature films made by Fine Arts (the renamed Reliance-Majestic Studio), Keystone, and Thomas **Ince**. In 1917, he had to cede control of Triangle, which rapidly lost its product suppliers to Paramount and First National. Although Aitken remained a film distributor for the rest of his life, never again was he a major player in the industry.

BEN BREWSTER

Alberini, Filoteo

b. 1865; d. 1937

inventor, producer, Italy

Nine months after the patenting of the **Cinématographe Lumière** and four years after the **Edison** had submitted a claim for the **Kinetograph**, on 11 November 1895 Alberini patented a *Kinetografo*, a device for recording and projecting moving pictures. Without industrial support, however, Alberini moved into moving picture exhibition in 1901 and then film production in 1904. He established the first Italian production company, Alberini & Santoni (sold to **Cines** in 1906), and produced *La presa di Roma* [The capture of Rome] (1905), Italy's first fiction film. In later years, he invented **cameras** that recorded stereoscopic and panoramic images.

GIORGIO BERTELLINI

Almirante Manzini, Italia

b. 1890; d. 1941

actor, Italy

Born to a Southern Italian family of travelling actors, Almirante Manzini began her acting at **Itala**, as the most matronly of all Italian divas, in

such films as *Sul Sentiero della Vipera* [In the Viper's Path] (1912) and *Bacio della Zingara* [Gypsy's Kiss] (1913). Her career peaked with the role of Sofonisba, a North-African queen lying on leopard skins all day long, in Giovanni **Pastrone**'s *Cabiria* (1914). After *Patria* [Homeland] (1915), she lost her place in the company to Pina **Menichelli**. Throughout the late 1910s and 1920s, she continued to act in films, in Rome and Turin. In 1935, after appearing in one sound film, she moved to Brazil and did stage work in the theaters of Rio de Janeiro and San Paolo.

ANGELA DALLE VACCHE

Alpha Trading Company

In 1901, the Alpha Trading Co. was established at St. Albans, Hertfordshire, England, by Arthur Melbourne Cooper (1874–1961), who had worked for Birt **Acres** in the 1890s. Alpha produced **trick films**, **animation** films, and a variety of nonfiction films, often for distribution by other companies. Its engaging stop-motion *Dream Of Toyland* (1908) featured animated toys careening around a miniature replica of High Street in St. Albans. Cooper himself opened two local cinemas, later established the Kinema Industries production company, and in the 1920s made some **advertising films**.

STEPHEN HERBERT

Altenloh, Emilie

b. 1888; d. 1985

economist, politician, Germany

Altenloh's dissertation, "Zur Soziologie des Kino" (1914), is the sole study of early cinema **audiences** in any country. Based on inadequate, quickly gathered empirical evidence, it reflects the attitude of the German educated class toward moving pictures as an amusement for the "uneducated masses." However overrated (it fares better as an economic study), the dissertation makes some valuable observations: for instance, the young and unmarried had the greatest interest in moving pictures, and boys attended more often because girls had far more duties at home. Later Altenloh would become seriously engaged in local politics and environmental research.

CORINNA MÜLLER

Alva, Carlos, Guillermo and Salvador

producers, cameramen, exhibitors, Mexico

Natives of Morelia, the family of Guillermo, Carlos, and Salvador Alva owned a bicycle factory, which the brothers abandoned in order to dedicate themselves to moving picture exhibition in Morelia and later to film production in Mexico City. They created a characteristic structure for Mexican films by appropriating the apotheosis finale from Georges **Méliès** and the strategy of parallel **editing** from **Pathé-Frères** and other companies in the USA. This format first appeared in October 1908, in a 45-minute film presenting President Porfirio Díaz's interview with William Taft, his counterpart in the USA. In May 1911, they filmed the taking of Ciudad Juarez by the Revolutionaries in parallel with President Maderos' journey from that city to Mexico City. Their most ambitious film, *The Orozquista Rebellion* (May 1912), portrayed both the federal and revolutionary sides of the battle, with a finale representing the victors. The National Autonomous University of Mexico has preserved a large part of the Alva film archive.

AURELIO DE LOS REYES

amateur film

Before about 1910, it can be misleading to separate professional and amateur film apparatuses and/ or activity. The renowned **Cinématographe**

Lumière began life in its inventors' eyes as a lightweight multi-purpose domestic moving picture machine that would provide French photographic plate manufacturers with years of steady sales of film and developing services, modeled on the business success that the Kodak system had provided for the American plate-making company of George **Eastman**. Yet it turned out to be a consummate professional apparatus that could—and did—go anywhere and take and exhibit films under almost any circumstances. We remember John Montagu Benett-Stanford for his Boer War films and a striking film portrait of Lord Kitchener, the British commander, released by **Warwick Trading**, but his own curiosity about moving pictures paled in comparison to his Eton education, long Army career, and management of the family estate in Wiltshire: he failed to mention his film work in either his account of the Boer War or his unpublished autobiography. Conversely, the "amateur" productions of Robert A. Mitchell, a lawyer from County Down, Ireland, or William Henry Youdale, a draper from Cockermouth, England, show little difference from "professional" work of the late 1890s, and include a shipboard comedy, street scenes, a fire company answering an alarm, a parade, sea waves, and a train entering a station.

In the early years, there were many varied ideas about how to use moving pictures and what marketplace would secure their future; consequently, most apparatuses retrospectively called "amateur" were designed for film narrower than the 35 mm bands that later became the standard size. These included the 17.5 mm Birtac camera and projector of Birt **Acres**, introduced in October 1898; T. C. **Hepworth**'s Biokam of 1899, another 17.5 mm design sold with accessories allowing it to be used as a **camera**, **projector**, or printer, with the additional facility of taking single-frame still **photographs**; and J. A. Prestwich's Junior Prestwich of the same year, using 13mm wide film. **Ernemann** in Germany, **Reulos** and Goudeau in France, and many others also sold small-format apparatuses designed for home use, while some companies made attempts to convert the longstanding experience of photographers in working with glass plates with apparatuses that made rows or spirals of tiny images on glass, like those of Leonard Ulrich **Kamm**, Robert Krayn, and Theodore Brown. By 1912, when **Edison** introduced the **Edison Home Kinetoscope** using 22 mm film, and **Pathé-Frères** marketed its **Pathé Kok projector** Home Cinematograph for 28 mm film, both intended for non-flammable safety film stock, an amateur home market was clearly distinguished from professional users dependent on the public sale and distribution of their work. Both systems were attempts to reach new markets for existing theatrical films supplied in reduced-size prints.

Not until the early 1920s were substantial amateur filmmaking apparatuses introduced, with the Pathé-Baby system for 9.5 mm film in France (1922) and the Eastman Kodak 16 mm system in the USA (1923).

See also: glass plate projectors

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DEAC ROSSELL

Ambrosio

The Ambrosio film company was founded in 1906 in Turin by Arturo **Ambrosio** and Alfredo Gandolfi, first as "Società Ambrosio & C." and then, in 1907, as a public corporation "Società Anonima Ambrosio, Torino." From 1908, when it opened its new studio complex, until 1912, it flooded the world with its short films and, from 1911 on, with

its **multiple-reel/feature films**, beginning with *L'ultimo dei Frontignac* [The Last of the Frontignacs] (1911). In 1912 and 1913, Ambrosio managed to release around 200 films per year and shared with **Cines** the role of leading Italian manufacturer on the international market. Ambrosio first established its worldwide reputation, and that of Italian cinema, with the historical dramas, *Gli ultimi giorni di Pompei* [The Last Days of Pompei] (1908) and *Nerone* [Nero] (1909), both directed by Luigi **Maggi**. Ambrosio's **historical films**, released from 1909 on as "serie d'oro" [Golden Series], were the firm's business card. Among them were the first in the "serie d'oro", *Spergiura!* [Swear!] (1909), *Il granatiere Roland* [Grenadier Roland] (1911), and the second version of *Gli ultimi giorni di Pompei* in 1913, released in competition with that of **Pasquali**. In 1911 the company received the prize for the best artistic film and best documentary at the International Exposition in Turin with the Risorgimento drama *Nozze d'oro* [The Golden Wedding] (1911), featuring the leading Ambrosio actors Alberto **Capozzi** and Mary Cléo Tarlarini, and the documentary *La vita delle farfalle* [Life of the Butterflies] (1911), based on a text by Guido Gozzano.

Considering other genres, Ambrosio promoted itself mainly through **comic series** with the tall and anarchic Marcel **Fabre**, alias Robinet, and the corpulent but swift Ernesto Vaser, alias Fricot. It also became well known for its boulevard-style **comedies** with Gigetta **Morano**, Eleuterio **Rodolfi** and Camillo **de Riso**. The company also was famous for its *actualités* and **travelogues** from all over Europe, sometimes including remarkable split-screen effects such as in *Tripoli* (1912), and its **scientific films** such as *La nevropatologia* [The Neuropathology] (1908) on hysteria. Ambrosio's distribution reached as far as Russia. In 1909–1910, Ambrosio cameraman Giovanni **Vitrotti** shot films there and contributed to the beginnings of Russian film production. In 1912 Ambrosio hired lion tamer Alfred Schneider and his lions for a series of sensational **melodramas** such as *La nave dei leoni* [The Ship with the Lions] (1912). Ambrosio never really was a production company for diva films, notwithstanding the sole production with stage star Eleonora **Duse**: *Cenere* [Ashes] (1916).

After 1911, Ambrosio's international market share began to decline in favor of that of Cines. The most serious problems, however, arose with the outbreak of the **World War I** and Italy's decision to join the Allied forces. The government requisitioned the studio complex for the construction of airplane propellers, and production dropped to just nine films in 1917. After the war Ambrosio tried to revive itself through expensive productions such as *La Nave* [The Ship] (1921) and *Teodora* [Theodora] (1922), but they were economic failures. When Arturo Ambrosio left the company, production halted in 1923; one year later the company was dissolved.

In the two decades of its productivity, Ambrosio released 1400 films, of which a little more than ten per cent survives, mainly in the film archives of Turin, Amsterdam, London, Gemona, Bologna, and Rome.

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IVO BLOM

Ambrosio, Arturo

b. 1870; d. 1960

cameraman, producer, Italy

After a trip to Paris, London, and Berlin in 1904, Ambrosio (an amateur photographer and professional accountant) began shooting local *actualités* in Turin with Roberto **Omegna**. One year later, also in Turin, he created the Arturo Ambrosio & Co. supported by financier Alfredo Gandolfi. Soon this "Italian Zukor" built larger studios, recruited

the best technical, acting, and literary talents in Italy and abroad, and established worldwide commercial links by directly visiting foreign competitors and markets. From 1908 until **World War I**, Società Anonima Ambrosio (or **Ambrosio** Film) represented a most modern and cosmopolitan film company.

GIORGIO BERTELLINI

American Biograph (France)

The Biograph and Mutoscope Company for France, a branch of the **British** and **American Mutascope and Biograph** companies, was established in 1898 to produce films and distribute its own product and that of other branches. Julian Orde managed the Paris office and a studio was opened in the Paris suburb of Courbevoir with Eugene **Lauste** as manager. Although the studio only operated for a short time, it produced more than 300 films. Lauste and Orde left the company in the fall of 1900, after which it was converted into a distribution branch that supplied large-format Biograph films for projection at the Casino de Paris and Folies Bergère.

PAUL SPEHR

American Film Manufacturing Company

The American Film Manufacturing Company was founded in Chicago by John L. **Freuler** and Samuel S. **Hutchinson**, when the **Motion Picture Patents Company** (MPPC) licenses of their film exchanges were revoked in 1910, in order to help supply product for their theatrical clients. Harry **Aitken** also had a stake in the company until he abandoned **Mutual** in 1915, but Freuler remained the executive director of American until its demise in 1921, and Hutchinson continued to operate its Chicago laboratories.

At its foundation, American hired most of its initial personnel, including actor J. Warren Kerrigan and scenarist Allan **Dwan**, from one of the MPPC-licensed Chicago production companies, **Essanay**. It also imitated Essanay, starting in November 1910, by producing three titles a week: a drama, a comedy, and a **western**. In 1911, it sent its unit for westerns to California under director Frank Beal, with Kerrigan as the lead player. The western company was initially based in San Diego county, at San Juan Capistrano, Lakeside, and then La Mesa, but in the summer of 1912, well after Dwan had replaced Beal, it moved permanently to a studio in Santa Barbara. There, Wallace Reid directed social dramas, while Dwan made westerns. By late 1912, American was releasing three reels a week under the "Flying A" logo, with their distribution by Mutual. In 1913, Dwan left the company with his wife, western lead Pauline Bush, after a dispute with Kerrigan, and was replaced by Lorrimer Johnston and Sydney Ayres. From 1914, American concentrated on producing **comedies** under the Beauty label. A dispute over Mutual's handling of the first Flying A feature, *The Quest* (1915), contributed to Aitken's leaving Mutual the same year, taking with him a large share of Mutual's product suppliers, after which Freuler quickly expanded American's output. For instance, American jumped on the **serial** bandwagon with *The Diamond from the Sky* (1915), and made the sensational **melodrama** feature, *Damaged Goods* (1915). By 1916, the company was producing twelve reels a week, mostly as feature films. The expansion could not be sustained, however, and when Mutual went bankrupt in 1918, American released a declining number of titles, many of them re-releases, through Pathé-Exchange, until it ceased operations in 1921.

See also: multiple-reel/feature films

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BEN BREWSTER

American Mutoscope and Biograph (AM&B)

The American Mutoscope Company was a production and distribution company established at the end of 1895 by KMCD, a syndicate of four friends, Elias B. Koopman, Harry **Marvin**, Herman Casler, and W. K. L. **Dickson**. With substantial financial backing from a consortium of bankers, railroad men and industrialists, it offered Thomas **Edison** stiff competition in the US market, and it became one of the first multi-national film companies. The initial intent was to market a peep-show device, the Mutoscope, but the popularity of the **Lumière Cinématographe** and Vitascope led KMCD to introduce a projector, the **Biograph**, which they leased to large **vaudeville** theaters under a contract which included an operator and a changing program of films. Biograph's film stock was 2¾ inches wide by 2 inches high, larger than conventional 35 mm film and about the size of today's Imax film. This produced a striking image, and Biograph's programs earned a reputation as the most spectacular of early projections. The Biograph was featured at Keith-Albee's vaudeville theaters for a decade, beginning in 1896. The peep-show machines were leased in a similar, but less dramatic package.

In 1897, the company expanded to Europe, establishing the **British Mutoscope and Biograph**, then set up production and distribution in England, France and Germany; branches in Holland, Belgium and Austria, as well as offices in London to distribute to other parts of Europe, South Africa, and India.

Dickson organized film production in the USA, then in Europe. Dickson designed a roof-top studio in New York City, and outdoor studios in London and Paris. Films were made by a team consisting of a director and camera operator. From 1896 until 1901, AM&B specialized in producing short ***actualité*** films for middle-class family audiences and saucier fare for the peep show's fans. After 1901, **comedies** and melodramas dominated its programs. AM&B films generally stressed action and quality camera work, and they pioneered two "genres" that were very popular in the early years, the **phantom train ride** and the **chase film**.

In 1903, after one court decision, AM&B started making films in the more commonly used 35 mm format. This made it possible for the company to make longer, more complicated productions which could be sold to anyone with a standard **projector**. Although they still made some large-format films, the more popular smaller format soon dominated production and distribution.

From 1897 until 1908 the company was involved in a lawsuit with Edison's company that was pivotal in the so-called, **US patent wars**. After several inconclusive decisions, in 1908 the two companies negotiated an agreement to combine their patents, along with some others, to form the **Motion Picture Patents Company**. Although other American companies joined this trust, Edison and Biograph were the dominant members.

In 1899, the company changed its name to the American Mutoscope and **Biograph** Co., and in 1909 it became the Biograph Co. By this time, D. W. **Griffith** had become principal director, inaugurating a period when the company created a standard for production quality and creativity.

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PAUL SPEHR

amusement parks

In the years before **World War I**, there were more than 1,500 amusement parks in North America and scores more scattered across Europe. Most operated during the summer months and went by the names of Luna, Wonderland, Dreamland, White City, and Electric. They evolved out of certain turn-of-the-century amusement venues: international expositions or **world's fairs**, seaside bathing resorts, country fairs, and European

pleasure garden. Most of these parks featured moving pictures, especially since urban theaters tended to "go dark" in the summer due to the heat. They were shown either in nickel theaters or at free outdoor **airdomes**. In 1906, as many as thirty moving picture venues were operating in the three parks that made up Coney Island. In addition, **Hale's Tours** and Scenes of the World was a popular amusement park attraction, one that incorporated moving pictures into its simulation of a train ride. In short, amusement parks were an important site for early moving picture exhibition.

Amusement parks were so widespread because new electric streetcar and interurban railroad companies across the United States built them at the end of their rail lines. These traction companies, as they were called, did not need to make a profit at their parks so long as the parks encouraged excursions on their trolleys and railways, especially in evenings and on weekends. Metropolitan centers such as New York and Chicago each had as many as eight parks operating at one time. Medium-sized cities such as Cleveland, Pittsburgh, Toronto, or Washington, D. C. had at least three at any given time during this period. Even small cities in rural states almost always had at least one amusement park on the outskirts of town. Some European cities also built parks that capitalized on the success of their American counterparts.

Amusement parks, sometimes also called electric parks or trolley parks, featured mechanical thrill rides, games of chance, dancing, roller skating, band concerts, disaster shows, live acts and ethnographic displays, fireworks shows, food and drink, and swimming as well as moving pictures. The architecture of the parks often provided fanciful, exotic backdrops with ornate electrified towers, boldly painted facades, brilliant flags waving, and vividly colored gardens. Barkers attempting to lure customers to attractions, gramophone music, band performances, and mechanical pianos and orchestras filled the air. The moving pictures shown in the parks, therefore, always were experienced in the context of an atmosphere of visual and auditory excitement or kinesthesia, a showcase of new mechanical technologies, and crowds of diverse peoples.

Amusement parks were also among the first important subjects of moving pictures. As early as 1896, **Edison** began filming the shoot-the-chutes ride at Coney Island. This attraction was filmed several more times by both Edison and **American Mutoscope and Biograph** over the next ten years. Because of its proximity to the chief New York manufacturers, Coney Island was filmed more than any other amusement park in the USA. For Edison, especially in *Coney Island at Night* (1905), the brilliant electric illuminations also provided an opportunity to showcase both the dramatic spectacle that his company could offer and the product that his New York electric company supplied to Coney Island. Numerous other rides and outdoor acts of acrobats, dancers, and diving elephants and horses at Coney Island continued to be filmed during cinema's first decade.

Probably the most memorable film shot during this time at Coney Island is Edison's *Electrocuting an Elephant* (1903), which also demonstrates the power of Edison-supplied **electricity**. In this real-time electrocution, the film simply shows the elephant being led to an electrified plate and strapped in place. After several seconds, smoke rises from her feet, and she topples over. The film was made both to solve the problem of what to do with Lucy, the Coney Island elephant who had stomped to death a caretaker who had fed her a lighted cigarette, and to advertise electrocution by direct current as an improved method of capital punishment.

As narrative films increased in number, amusement parks also became an ideal setting for early **chase films** and slapstick **comedy**. Representative titles include: *Rube and Mandy Go to Coney Island* (Edison, 1903), *Boarding School Girls* (Edison, 1905), *Fat Jack and Slim Jim at Coney Island* (**Vitagraph**, 1911), and *Gavroche à Luna-Park* (**Éclair**, 1912). Amusement parks were particularly apt places for showcasing the comedy of the human body in motion as it was whirled, bounced, and turned upside down on mechanical rides. The excitement of the amusement park as a place of perpetual motion could best be captured only through the medium of cinema.

Most amusement parks went out of business either sometime before the end of World War I or by the Great Depression of the 1930s. Various factors led to their demise: devastating fires (in 1911 alone, five major parks burned to the ground)

and mismanagement were often singled out as major causes. Park land also became increasingly valuable real estate as cities grew beyond their boundaries. But the chief factor was that the railroad companies who had built the parks generally went out of business or became public utilities. Competition from the automobile proved too much for the streetcar and interurban railroad companies that had been running the parks as a means of attracting people to ride their trains. By the Great Depression, approximately only 400 amusement parks were left across North America and fewer than a dozen in Europe.

See also: advertising; advertising films; leisure time and space; nickelodeons; melodrama, sensational; transportation

LAUREN RABINOVITZ

Anderson, Gilbert M. [Max Aaronson]

b. 1880, Pine Bluff, Arkansas; d. 1971, Woodland Hills, California

actor, director, scriptwriter, executive, USA

Anderson, who came to be known by his screen persona "Broncho Billy," was a minor stage actor and male model when he made his first screen appearances for the **Edison** Manufacturing Company. Among his earliest screen credits were *The Messenger Boy's Mistake* (October 1903) and *What Happened in the Tunnel* (November 1903). He also played several different roles in Edwin S. **Porter**'s *The Great Train Robbery* (December 1903). After leaving Edison, Anderson joined **Vitagraph** and found his first opportunities as a director. *Raffles, the Amateur Cracksman* (August 1905) was well received, but he had strong ideas about the pictures

Figure 3 Production photo of G. M. Anderson as Broncho Billy. (Courtesy of the Robert S. Birchard Collection.)

he wanted to make and decided to become his own producer.

Moving to Chicago, Anderson became associated with the **Selig** Polyscope Company, and in Anderson's words, "With this start I took two women who could act and went to Montana to make 'hold-up' stuff." He then approached George K. **Spoor** with a similar proposition, and they incorporated the **Essanay Film Manufacturing Company** on February 5, 1907, with Anderson supervising production and Spoor managing business affairs. Anderson spent little time in the Chicago studio, preferring to shoot his films on location—first in Golden, Colorado, and later in Los Angeles, San Rafael, Los Gatos, and finally Niles, California. He developed several **comic series** with this traveling unit, including the *Hank and Lank*, *Alkali Ike*, and *Snakeville* films, but his most popular creations were the **westerns** in which Anderson himself took the leading role. His early films bore standard western titles like *Under Western Skies* (1910) or *The Two-Gun Man* (1911), but by late 1911 Essanay began to regularly identify his screen character as "Broncho Billy" and incorporated the name in such titles as *Broncho Billy's Christmas Dinner* (1911) and *Broncho Billy's Narrow Escape* (1912). Audiences seemed to love his rather beefy screen hero, and Anderson churned out a bi-weekly series of *Broncho Billy* films (mostly one-reelers) through 1915.

As a filmmaker Anderson was more than competent; as a person, given to extravagences. Residents of Niles recalled that he would often explode at his employees and fire them on the spot, only to re-hire them a few minutes later. He exploited his wealth and position in the community by sponsoring a semi-pro baseball team called the Essanay Indians and managed several prizefighters who doubled as actors between bouts.

The adverse Supreme Court decision against the **Motion Picture Patents Company**, declining revenues, and the high costs of maintaining Anderson's West coast operation led Spoor to buy out Anderson's interest in Essanay in 1916. Anderson himself remained active in the industry for several years, but with limited success. After producing a handful of features and a series of Stan Laurel shorts in the early 1920s, Anderson left the film business. When asked in later years what he had been doing since his retirement, he replied: "Just drifting along with the breeze".

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ROBERT S. BIRCHARD

Andréani, Henri [Gustave Sarrus]

b. 1877, La Garde-Freinet; d. 1936, Paris

filmmaker, producer, France

Sarrus chose "Andréani" as a pseudonym, probably to take advantage of the vogue for Italian cinema. He started working for **Pathé-Frères** around 1910 and was an assistant to Gaston **Velle** and Ferdinand **Zecca** before becoming a filmmaker himself. He soon specialized in directing period pieces such as *Le Siège de Calais* [The Siege of Calais] (1911), as well as producing the *Le Film Biblique* series (1911), for which he shot about fifteen **biblical films** based on scenarios by Eugène Creissel. In 1913, he created his own company, Les Films Andréani, which then became part of Les Grands Films Populaires in 1914. To this day, many questions about his career remain unresolved.

FRANÇOIS DE LA BRETÈQUE

Andreyor, Yvette [Yvette Roye]

b. 1892; d. 1962

actor, France

After a theatrical debut in Belgium and at the Théâtre Antoine in Paris, Andreyor was hired by **Gaumont** and, from 1910 to 1918, appeared in numerous **historical films**, contemporary dramas, and **crime films** directed by Louis **Feuillade**. She was an accomplice of Fantômas in *Juve contre Fantômas* [Juve Against Fantomas] (1913) and Judex's "fiancée" in *Judex* (1917), where her gentle

appearance, in sharp contrast to **Musidora**'s, embodied the new moral tone of Feuillade's later serials. During the 1920s, Andreyor scored memorable roles in Henri **Fescourt**'s *Mathias Sandorf* (1920), Germaine Dulac's *Âme d'artiste* [The Artist's Soul] (1925), and René Clair's *Les Deux timides* [Two Timid Souls] (1928). She performed in minor parts well into the 1940s.

MARINA DAHLQUIST

Andriot, [Camille-] Josette

b. 1886; d. 1942

actor, France

Andriot was *the* action actress of French silent films—as elegant as she was remarkably athletic. At the time, the only female characters with such physical edge and prowess were found in American sensational **melodramas**. Until Andriot retired in 1919, she appeared in about sixty **Éclair** films, among them Victorin **Jasset**'s **crime films** and adventure stories—*Zigomar* (1911–1913), *Tom Butler* (1912), *Balaoo* (1913)—and as the title figure in *Protéa* (1913). Despite Jasset's death in 1913, Andriot starred in four more *Protéa* features (1914–1919). Her character displayed a penchant for disguises and wore a tight black body-stocking years before **Musidora** appropriated the outfit in Louis **Feuillade**'s *Les Vampires* (1915–1916).

MARINA DAHLQUIST

animal pictures

Three basic types of animal pictures emerged and co-existed during the early cinema period: (1) **scientific** or educational films, (2) hunting or safari films, and (3) narrative adventures in which animals play a central or important role. All three reveal the common impulse to capture and to tame what is "wild" in wildlife, often via an analogy between the camera and the rifle, a metaphor that very often became deadly in hunting or safari films.

Etienne-Jules **Marey** literalized this analogy with his "photographic gun," a camera in the shape of a rifle designed to capture the movements of birds, suggesting the importance of animals as subjects for early moving picture experiments. The first serial photographs of Eadweard **Muybridge** featured Leland Stanford's racehorse, Occident; and Muybridge went on to "capture" photographically hundreds of wild animals at the Philadelphia Zoo. At one point, he set a tiger loose on a water buffalo in the interest of these photographs, inaugurating a tradition of "disposable subjects" and staged confrontation in animal pictures.

Animals were even featured in the earliest projected moving pictures: in Germany, Max **Skladanowsky**'s program included *Mr. Delaware and the Boxing Kangaroo* (1895). Titles from **Edison**'s *The Sea Lions' Home* (1897) or *Wild Bear at Yellowstone* (1897) to **Lubin**'s *Feeding the Hippopotamus* (Lubin, 1903) or **Charles Urban Trading Company**'s *Feeding the Otters* (1905) indicate that wild animals in their natural habitat or in zoos were useful as educational subjects. On the other hand, these relatively tame **actualités** did not compare to more dramatic confrontations of animals, in Edison's *Cock Fight* (1896), or to the gruesome and violent stagings of animal deaths, in the same company's *Electrocuting an Elephant* (1903).

By 1909, hunting or safari films (which often borrowed conventions from **chase films**) had outrun educational wildlife films in popularity. Although **Selig** Polyscope's *Hunting Big Game in Africa* (aka *Roosevelt in Africa*) (1909) featured a fake Roosevelt shooting a real lion in a staged scene in Chicago, it circulated widely and often in theaters and prompted adventurers and filmmakers to journey to Africa. Safari films such as *Paul J. Rainey's African Hunt* (1912) left an enduring legacy of onscreen killings, seen in the 1920s films of Martin and Osa Johnson.

A few narratives, such as **Hepworth**'s *Rescued by Rover* (1905), featured animal protagonists, but they were relatively rare in early cinema. However, filmmakers were not opposed to spicing up a story with lions, tigers, and bears; indeed, "jungle films" set in faraway (that is, colonial) locales were extremely popular in the early 1910s. In the USA, Selig Polyscope often included exotic animals housed in the Selig Zoo to lend a bit of dramatic excitement—from *Lost in the Jungle* (1911) to the

Figure 4 Poster for Cherry Kearton, *Bioscope*, 1912.

serial, *The Adventures of Kathlyn* (1914). In France, **Gaumont** and **Pathé-Frères** exploited their own menageries, respectively, in such **multiple-reel films** as *Au pays des lions* [In the Land of Lions] (1912) and *La Grotte des supplices* [The Grotto of Torture] (1912). Adventures featuring anthropomorphized animal protagonists—for instance, **Vitagraph**'s *Baree, Son of Kazan* (1917)—would become common only after the establishment of the studio system.

See also: ethnographic films; melodramas, sensational; museum life exhibits; scientific films; travelogues

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SCOTT CURTIS

animation

Animation appeared near the beginning of cinema history, and may be defined as a technique, as a mode of production, and as a cinematic genre. Its historical development was international, but it did not become a regular feature of the movie program until the subject matter and technology became somewhat standardized. Animation technique is any method of designing images that will appear to move when displayed in a sequence. When the positions of nearly identical figures are changed sequentially when displayed, we see them as one figure moving.

Non-cinematic methods of producing animation include flipbooks, **magic lantern** "slip slides," and the many optical toys and motion-study experiments that often are cited as forerunners of cinematography. Emile **Reynaud**'s "Luminous Pantomimes" (1889–1892) were well-known animated films made before cinematography. He painted frames on long celluloid strips which, when projected sequentially onto a screen by a system of mirrors, created the illusion of moving drawings.

The cinematic animation method consists of exposing the camera negative discontinuously, that is, one frame (or a few) frames at a time, rather the standard continuous exposure, and moving the object/drawing each time. In the pre-1915 era, this was accomplished by a quick turn of the camera crank to open and close the shutter rapidly. Some **cameras** were specifically adapted for the "one turn one frame" option. Between exposures the filmmaker would make small changes in the position of the subjects, which could be drawings, Plasticine (clay), household objects, toys or models, and, in at least one film by Segundo de **Chomón**, human beings. When projected normally, the filmed subjects would appear to move as convincingly as any other moving picture subject.

Film animation's mode of production during the pre-1915 period occurred in three phases: **trick film**, cartoonist, and industrialized. In the pre-1912 trick film period, a few artisan filmmakers experimented with the technique as a novelty effect. The resulting "attraction" often was a short section in a longer nonanimated film. Around 1912–1913, the cartoonist phase began with the

release of entire films (one reel in length) consisting entirely or mostly of animation. The films borrowed content from the newspaper **comic strips** of famous or would-be famous cartoonists. Around 1914, important technological changes and efficiency work methods were introduced that would change the cartoon to an industrial mode of production, anticipating the Hollywood studio system. Because of the outbreak of the **World War I**, the cartoonist and industrialized phases were delayed in Europe.

As early as 1898, filmmakers in Great Britain, the USA, and other countries started experimenting with animation. Because of the spottiness of the early cinematic record, the search for a "first" is futile. The rudimentary animated sequences that have come to light from cinema's first decade highlight the technique by calling attention to itself as a novelty. Around 1907, filmmakers began integrating their animated sequences into longer works with more narrative complexity.

Among the early pioneers of animation is Edwin S. **Porter**. Some of his trick film shots, for instance in *Bluebeard* (1901), verged into crudely executed frame-by-frame animation. Later, Porter introduced "jumble announcements," or animated title cards in three **Edison** films of 1905. In *The "Teddy" Bears* (1907), he integrated a scene of animated toy bears into the narrative as a POV shot.

J. Stuart **Blackton** was among the most prominent innovators. His **Vitagraph** studio released at least eight films with prominent animation sequences before1910, beginning with *Humorous Phases of Funny Faces* (1906). This film made drawings move. The others animated various objects and Plasticine, a clay, oil, and wax compound invented in 1897. The success of Vitagaph's films inspired the **Biograph** company, in early 1907, to use object animation in three films photographed by Billy **Bitzer**. Bitzer also shot a dream sequence with Plasticine for *The Sculptor's Nightmare* (1908), in which Mack **Sennett** and D. W. **Griffith** appear as actors.

The two most important practitioners of trick film animation in Europe worked for rival French companies: Chomón (**Pathé-Frères**) and Emile **Cohl** (**Gaumont**). Chomón moved to Paris in 1905 (going by the name Chomont) and worked as Pathé's special effects wizard. He shot scenes for Gaston **Velle**, Ferdinand **Zecca**, and others who later were credited with the trick shots. Chomón experimented with single-frame cinematography, visible in the extant *Le théâtre du Petit Bob* [Bob's Electric Theater] (1906, remade in 1910). In July 1907, Pathé released *La silhouette animé* [Animated Silhouettes], which consisted of shots of paper animals with moving limbs, and *Le sculpteur express* [Express Sculptor], using clay. In *Pas possible s'asseoir* [Impossible Seating] (1908), Chomón animated a man sitting on a chair to make him travel across a room. He accomplished more large-object animation with real furniture in *Le déménagement* [Moving Day] (1908) and in *Jim le glisseur* [Slippery Jim] (1908–1909). Animation remained a Pathé specialty until Chomón returned to Barcelona to co-found the Ibérico company in 1910.

Cohl was Gaumont's chief trick photography specialist, hired in the summer of 1908. He made animated sequences for Louis **Feuillade**, Roméo **Bosetti**, and others before becoming a director in his own right in 1909. Cohl's *Fantasmagorie* [Metamorphosis] (1908), although short (about two minutes), is a full-fledged animated drawing film, executed with at least 700 drawings on sheets of paper, photographed individually. The subject was a clown character going through fantastic transformations. Cohl directed or

Figure 5 Frame still from Emile Cohl's *Fantasmagorie* (1908).

collaborated on over 70 films at Gaumont between 1908 and 1910, many of them containing animation sequences. He explored many formats, including animated paper cutouts, two-dimensional figures with articulated joints, clay, dolls and puppets, and drawings. In the latter, he developed a distinctive style in which one image metamorphoses into another to create an unexpected or strange juxtaposition, a sort of visual non sequitur.

Cohl's career became peripatetic after 1910. In 1912, his employer **Éclair** transferred him to the Fort Lee, New Jersey, branch, where he stayed for a little less than two years. During this time Cohl began animating a regular series of short films featuring the characters of the popular comic strip, "The Newlyweds." This was the beginning of the cartoonist mode of production. The influence was direct and immediate; dozens of American comic strip artists decided to try their hand at the new technique and find broader audiences for their work. In 1913, the **trade press** began using the term "animated cartoons" for the new film genre.

Because film distribution was international before the 1914 war, the technique of animation spread globally. A few of the many pioneers who might be cited include: Wladyslaw **Starewicz** (aka Ladislas Starevich) in Russia (beginning in 1911); Julius **Pinschewer** in Switzerland (beginning in 1911); and Erik Wasström, in Finland (beginning in 1914).

One of the most renowned American comic strip artists was Winsor **McCay**, an employee of the Hearst newspapers and a friend of Blackton. In 1911, McCay finished a short animated film officially called *Winsor McCay*, but generally known as *Little Nemo* (1911). It was adapted from his weekly comic, "Little Nemo in Slumberland." The film was shown on movie programs, and McCay built a live vaudeville act around it. The medium was drawings on paper, retraced laboriously hundreds of times to create moving images. Unlike Cohl's line-drawing figures, McCay retained the three-dimensional form of the comic strip characters. They exhibited consistent and characteristic quirks of expression and movement that later would be labeled character animation. McCay followed up with two further ink-on-paper works, *The Story of a Mosquito* (1912), and what would become the most widely seen pre-1915 animated film, *Gertie* (aka Gertie the Dinosaur) (1914).

Newspaper magnate William Randolph Hearst was a fan of comic strips and was responsible for publishing some of the American masters of the form, including, besides McCay and McManus, Frederick Burr Opper ("Maud"), George Herriman ("Krazy Kat"), and Rudolph Dirks ("The Katzenjammer Kids"). In 1915, his **newsreel**, the *International Film Service*, began including a weekly cartoon produced under the supervision of future comedy director, Gregory LaCava.

Also in 1915, Edison began releasing the "Animated Grouch Chasers" series drawn by Canadian comic strip pioneer Raoul Barré. In addition to his talents as a graphic artist, Barré was technically proficient. The sheets of drawings were uniformly punched with alignment holes designed to fit precisely over pegs on the drawing board and on the animation stand. This made retracing easier, more accurate and made the photographed drawings much more stable. Barré also organized his studio efficiently to enable his staff to release animated films on a regular basis.

The basic animation procedure, placing a drawing or object before the camera and exposing single frames, was inescapably laborious. Filmmakers like Chomón and Cohl chose media like paper cut-outs and object animation in part because they adhered to pre-cinema traditions (such as the puppet theater and **shadow theater**), but also because they offered production shortcuts. The work remained tedious and demanding, but easier than creating thousands of individual drawings, as McCay, for instance, had done for Gertie.

In 1913, John Randolph Bray, another newspaper comic strip artist, released *An Artist's Dream*. This film used the retraced paper technique but with added labor-saving techniques. Bray elaborated on McCay's "cycling," that is, reusing a set of drawings to create repetitive motion and thus extend screen-time with less retracing. He also prepared the sheets by mechanically reproducing the nonmoving parts of each picture on many pages through the process of etching. Thus only the moving figures in the shot had to be drawn individually on each prepared sheet. Reflecting the vogue of scientific management that was prevalent in pre-World War I America, he also instituted an assembly-line approach to production with specialized divisions of labor. Under contract with **Pathé**

Cinematograph, Bray's studio released Colonel Heeza Liar's African Hunt in January 1914. Following the "Newlyweds" precedent, it was a comic-strip-based series of episodes.

Bray's signal contribution was his patent on a means of making animated drawing films with relative efficiency using transparent sheets of **celluloid** (cellulose nitrate, the same as film stock). Backgrounds and other nonmoving elements were made on opaque cardboard, while anything that was to move was drawn and/or painted on the "cel," as it came to be called. During photography, the cel sequences were laid over the same background one by one. Incorporating prior patents by another animator, Earl Hurd (and possibly Paul Terry as well), resulted in the "Bray-Hurd Process Company." This initiated the industrialized mode of production for animation. Eventually cel **photography** nearly monopolized studio animation and remained the dominant technique until the widespread use of computers.

During the period of 1895 to 1915, animation came to be defined as a style or genre. While the subjects of most of the films on movie programs became increasingly less associated with popular theater (**vaudeville**, the ***féeries* or fairy plays**, children's theater), these traditional subjects remained robust in animated films. The phantasmagorical content of films by Blackton, Chomón, Cohl, and McCay created an aura of the magical and the irrational in animation. The comic strip, which had been a minor influence in standard movie production, came to the fore in animation as a provider of content and character. Thus for many years thereafter, animation was often considered a curious relative of "live" cinema, nonrealistic, flippant, and perhaps more suitable for children, until critics and historians began to appreciate their importance in the panoply of popular cultural sources of early cinema.

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DONALD CRAFTON

Ankerstjerne, Johan

b. 1896; d. 1959

cinematographer, Denmark

Until the spring of 1911, when Ankerstjerne was hired, all films at **Nordisk** had been shot by just one cameraman, Axel Graatkjaer. Thereafter, Ankerstjerne became the close collaborator of the company's leading filmmaker, August **Blom**, and was responsible for the atmospheric images of his masterpiece, *Atlantis* (1913). He left Nordisk in 1915 to shoot the visually stunning *Haevnens Nat* (1916) for Benjamin **Christensen**, for whom he also shot *Häxan* [Witchcraft Through the Ages] (1922) with its elaborate optical effects work.

CASPER TYBJERG

Anschütz, Ottomar

b. 1846; d. 1907

photographer, chronophotographer, inventor, exhibitor, Germany

A respected photographer specialising in capturing movement, rather than a scientist and physiologist like Etienne-Jules **Marey** or Georges **Demenÿ**, Anschütz not only took exceptional series

photographs but also created a disk-based exhibition apparatus that reproduced his images in crisp, life-like motion that were widely used in both Europe and North America in the late 1880s and early 1890s. The key to his ability to achieve richly detailed and natural photographs of movement was his development of the first practical focal-plane shutter, which was incorporated for over a quarter-century in influential hand-held **cameras** manufactured by C. P. Goerz in Berlin.

Born in Lissa (now Leschnow, Poland), Anschütz was the son of a decorative painter who took up **photography** late in life and had him apprenticed to the leading photographers. Taking over the family business in 1868, Anschütz gained a national reputation for his "instantaneous" photographs, especially of military manoeuvres, captured with very short exposures. He caught the attention of Crown Prince Friedrich (later Kaiser Friedrich III); as his reputation grew, he moved to Berlin and began exhibiting across Europe, winning medals for portraits, enlargements, animals in natural settings, and large-scale official ceremonies.

Inspired by Eadweard **Muybridge**, he began taking **chronophotographs** (series photographs) in 1885 with a set of twelve cameras using his own shutters. The next year, he built a second camera specifically designed to make chronophotographs that could be reproduced in a zoetrope or other circular viewing device as brief moving pictures. This camera, which used 24 lenses, shutters, release mechanisms, and glass plates built into three cases, often is mistakenly considered to be 24 separate cameras, but it was a unique construction made as a single unit with sophisticated adjustments to produce "closed" movements: i.e., series photographs where the first and last images were matched so that they could be exhibited in a continuously repeating cycle without apparent interruption.

Having designed the first of several improved zoetropes in 1887, Anschütz built an exhibition apparatus for his chronophotographs later that year, calling it the Schnellseher (sometimes Electrical Tachyscope). Through 1893 Anschütz devised at least eight models of the Schnellseher, all of which operated on this principle: intermittent light from a Geissler tube briefly illuminated each image on a continuously revolving disk as it passed a viewing screen. Early models (1888–1891) were viewed by six to eight people simultaneously; later models were coin-operated automatons for individual peep-show exhibition. At least 160 Schnellsehers were made, most in automaton form, and one brief stage of the **Kinetoscope**'s development at the **Edison** laboratory replicated Anschütz's technology.

The Schnellseher was widely exhibited publicly throughout Europe and North America, and some individual **itinerant exhibitors** kept the apparatus in use until *c*. 1902 in Central and South America. From 1891 on, multiple-apparatus installations in "Schnellseher parlors" were established in Berlin, London, New York, Hamburg, and elsewhere by the Electrical Wonder Company of London, which also exhibited at the Chicago **World's Fair** in 1893, just as the undercapitalised company was in financial decline. 17,000 people saw the Schnellseher at the Frankfurt Electrical Exhibition in 1891; 34,000 people saw it in Berlin in the summer of 1892; a further 10,152 saw ten machines at a fair in Lübeck in 1895; and 56,645 visited an installation at the Italian Exhibition in Hamburg in 1895, a show that ran concurrently with the exhibition of the Edison Kinetoscope in the city.

Few of Anschütz's chronophotographs survive: existing or published images mostly record the galloping horses or walking animals that Anschütz considered would receive favorable comment in comparison with the work of Marey and Muybridge from photographic societies, which they did. Over a hundred series of dancers (1888–1889) intended for teaching dance have disappeared, as has commercial work documenting the German Post Office (1891). Also missing are amusement chronophotographs, which included short comic scenes and **facial expression** sequences; one published image remains from *Skatspieler* [Card Players], showing three men in hats outdoors playing cards around a table; this series and *Einseifen beim Barbier* [Barber Shop Scene], which used elaborate props and timed action to comically illustrate a barber lathering an impatient customer, have close affinities with the earliest films of **Lumière**, Edison, and **Méliès**. The plea of one exhibitor for more exciting series and his comment that changing old pictures for new ones created repeat attendance, is

further evidence that Anschütz's moving picture system, technologically overtaken by the development of films on **celluloid** bands, was an important precursor of cinematic practice and institutional apparatuses. From mid-1893, after the failure of the Electrical Wonder Company nearly bankrupted him, Anschütz abandoned moving picture work and returned to high society still photography and the design of cameras and photographic accessories, establishing a studio and an association to support amateur photography. He died suddenly, of appendicitis, in 1907.

See also: archaeology of cinema

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DEAC ROSSELL

Aquila Films

One of the most commercially oriented Italian film companies, with a unique penchant for stories of sensationalism, crime, and mystery. Aquila was founded as a private company in Turin, on 24 July 1907, by eight partners headed by a small businessman from Turin, Camillo Ottolenghi. His name regularly appeared in the company's early advertisements (Aquila Films Camillo Ottolenghi). Despite its modest size, the company gained international prominence in 1909 when Ottolenghi took part in the Congress of European film producers, in Paris, and publicly committed Aquila to the conference's technical and commercial resolutions.

Initially engaged in the production of all kinds of films, Aquila soon distinguished itself for its sensational **melodramas**, based on violent murders, international espionage, and egregious villains, often set in exotic locales such as India, Russia, and an unspecified "Orient." Its early works, which Italian film critics punctually deemed too commercial and photographically flawed, included *Il bandito nero* [The Black Bandit] (1908) and *L'imperatore* [The Emperor] (1908).

After releasing five titles in 1907 and twenty in 1908, Aquila's production of fiction films increased greatly after 1909, with 55 films released in 1910 and 73 in 1911. In this period Aquila made a name for itself with **comedy**, especially the **comic series** of *Jolicoeur* (1910) and *Pik-Nik* (1911). In 1912 several events occurred. Aquila shifted to producing **multiple/reel feature films**, releasing 27 titles in 1912 and 32 in 1913, and became a public company. One of its original co-founders, lawyer Lino Pugliese, became main shareholder and artistic director. Ottolenghi briefly remained as chief administrator.

Aiming to become the new **Nordisk**, that year the Turinese company launched two new sensational **crime film** series, "Terrore" and "Grand Spectacles Aquila," as well as a Golden series in 1913. After 1914, the company began alternating crime narratives with passionate melodramas of love and death. In these years, Aquila's most notable successes included *Lo Spettro di Jago* [The Vengeance of Jago] (1912), *Fedora* (1913), *La Bibbia* [The Bible] (1913), *Teodora* (1914), and two 1916 films directed by Roberto **Roberti**, *La peccatrice* [The Sinful Woman] and *Tenebre* [Darkness].

Apart from its sensationalist and highly commercial preferences, what helped Aquila compete against other Italian companies was its dense network of international distributors. As early as 1908, Ottolenghi had established commercial alliances with a number of distributors for the British and the French markets, from **Williamson** and **Gaumont** to Charles Heffer and **Raleigh & Robert**. Aquila reached also Spain, Russia and several nations in South America. In the USA, the Turinese company found a partner in the independent circuit of Film Import & Trading Co. The outbreak of **World War I** radically affected Aquila's capacity to sustain production and commercialize its films abroad. As a result, in 1917, AF closed its doors.

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GIORGIO BERTELLINI

Arbuckle, Roscoe ("Fatty")

b. 1887; d. 1933

actor, director, USA

Following a brief career as a **vaudeville illustrated song** performer and several unexceptional appearances in **Selig comedies** during 1909, Arbuckle eventually found success in joining **Keystone** in 1913. Popularly known as "Fatty" to the moviegoing public, Arbuckle appeared most notably alongside Mabel **Normand** in a self-directed **comic series** called *Fatty and Mabel*, often distinguished by Arbuckle's playful and remarkably sophisticated handling of comic narrative. After completing the three-reel *Fatty and Mabel Adrift* (1916), Arbuckle and Normand left California and established a new Keystone unit for their productions in New Jersey. In 1917, Arbuckle was signed by Paramount, where he made two-reel comedies (sometimes partnered with Buster Keaton) and starred in comic features until a notorious scandal in 1921 cost him his career.

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ROB KING

archaeology of cinema/ pre-cinema

According to G.-Michel **Coissac**, in *Histoire du cinématographe* (1925), or Will Day, in "25,000 Years to Trap a Shadow" (an unpublished manuscript from the 1930s), the archaeology of cinema might date back to the Pharaohs, or indeed even to the Magdalenian period. "Writing in movement" may indeed be found, for instance, on Greek vases. Yet the first concrete evidence of animated images or luminous images projected through a natural, optical, or catoptric artifice came with the invention of the *camera obscura*, whose principle had been known since Antiquity. The camera obscura came into existence in the 16th century, notably through the work of Italian inventor Giambattista della Porta, who, in 1589, first presented projected animated color images in a dark room with sound accompaniment. The idea was both simple and subtle: some comedians performed outside a room plunged into darkness and in whose wall a hole had been drilled and a set of lenses had been placed. The images of the comedians were thus projected, by bright sunlight, onto the opposite inner wall, and the representation was accompanied by music and various noises. It was the desire to retain and capture the fugitive images seen inside such a dark room that triggered Nicéphore Niepce's and Louis J. M. Daguerre's **photography** research in the 19th century: the daguerreotype was introduced in 1839.

In 1645, *Ars magna lucis et umbrae*, a treatise written by the German Jesuit, Athanase Kircher, provided early scientists with a summary of optical, catoptric, and dioptric techniques necessary for the projection of luminous images. A Dutch Protestant, Christiaan Huygens, then simplified older processes and, in 1659, invented the "lantern of fright," or **magic lantern**, a box equipped with lenses which made possible the magnified projection of images painted on glass. These images could be animated as well as fixed or still, thanks to the juxtaposition of mobile plates. The magic lantern, one of the most spectacular instruments of entertainment and **education** in the prehistory of cinema, quickly spread throughout the world.

Over the following century the lantern was transformed through the invention of achromatic lenses, the solar microscope, and the megascope. It was now able to project the temporal passage of objects, living animals, human faces, opaque objects, and microscopic preparations. Other "curiosities" swamped collectors' "wonder cabinets": anamorphoses, perspectival views, optical boxes for the viewing of colored engravings with dissolving day-and-night effects. In the latter spectacle, a fundamental notion came into play: the representation of elapsed time within space, which later would become characteristic of **chronophotography** as well as cinematography.

During the 1790s, several slightly unscrupulous physicists revived the notorious past of Huygens's lantern (which in 1659 projected a frightening "Dance of Death" inspired by Hans Holbein) and created a spectacle called the "fantasmagoria." As such spectacles gained in sophistication, they

included projections from behind a **screen** or over a smoke screen, animated and three-dimensional images that grew or shrank in size as the lantern was moved on rails (as in a tracking shot). Noises and magic tricks often accompanied these nerve-racking visions. The fantasmagoria was popular throughout the 19th century, notably thanks to Robert Houdin, and was later transposed into Georges **Méliès**'s work.

Since Antiquity, the phenomenon of the persistence of impressions produced by light on the eye also had been a consistent object of study. Research intensified during the 19th century, led by Michael Faraday and Peter Mark Roget (England), Joseph Plateau (Belgium), Simon Stampfer (Austria), and others. In 1833, as strobe lights (with their obdurating discs) were marketed, they inspired myriads of new scientists. Indeed, stroboscopy and photography were soon combined. In the 1860s, a fresh wave of research sketched out a major principle of cinematography: a light-sensitive plate or strip that could be moved intermittently would halt momentarily in front of a lens as it was uncovered by an obdurating disc (Henry Du Mont, 1861; Louis Ducos du Hauron, 1864).

In 1874, the French astronomer, Pierre J. C. Janssen, exploited this principle and managed to photograph the various phases of the passage of Venus between the Sun and the Earth on a sensitive disc. His "photographic gun" inspired physiologist Etienne-Jules **Marey**, who perfected his own "gun" (1882) after British photographer Eadweard **Muybridge** had obtained the first successive negatives of galloping horses in the United States, in 1878.

Marey was the propagator of a "graphic method" of recording (thanks to electric or pneumatic captors and rotating cylinders) all kinds of human and animal movement as well as that of mobile objects. This graphic method or "chronostylography" was but the first phase of Marey's research, which led, without epistemological rupture, to the photography of movement or "chronophotography."

Marey greatly advanced the analytical and synthetic study of movement. He studied subjects as diverse as the blood stream, breathing processes, muscular effort, acoustics, hydrodynamic and aerodynamic phenomena, insect and bird flight. Compiling thousands of glass plates and some 800

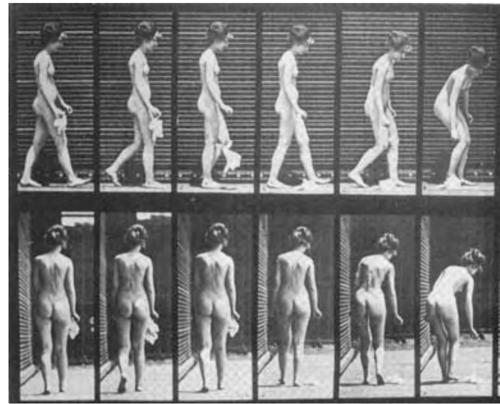

Figure 6 Eadweard Muybridge, *Animal Location*, 1887: plate 202.

chronophotographic films, Marey's legacy is a sort of encyclopedia of movement and forms nobody had seen before. He was the first to slow down and accelerate time, to measure and master space, to "recreate life" through images or machines. An "engineer of life," an atypical scientist, he was able to rally disciples around himself—for instance, Nicolas C. E. François-Franck, Georges **Demenÿ**, Lucien **Bull**, Pierre **Noguès**—and create two important research laboratories: the Station physiologique and the Institut Marey. Marey's glass plate cameras (1882) and **celluloid** strip **cameras** (1889) influenced all those researching cinematography in the 1890s.

Among them were William **Friese-Greene** and Louis **Le Prince** in Great Britain, Albert **Londe**, Hippolyte Sébert, Léon Bouly, and Demenÿ in France, and Ottomar **Anschütz** in Germany, all of whom explored other means of recording movement and produced an uneven quantity of films throughout the 1890s. In 1892, Emile **Reynaud**'s "Théâtre Optique" indicated a new direction of research: the projection, on a large screen, of animated drawings. Some speculated on the next logical step, chronophotographic projection, which Demenÿ and Anschütz both attempted with, respectively, the "Phonoscope" (1892) and the "Electrotachyscope" (1894).

Indeed, in 1894, an industry of moving photographs began to emerge in both the United States and Europe with the marketing of the **Edison**

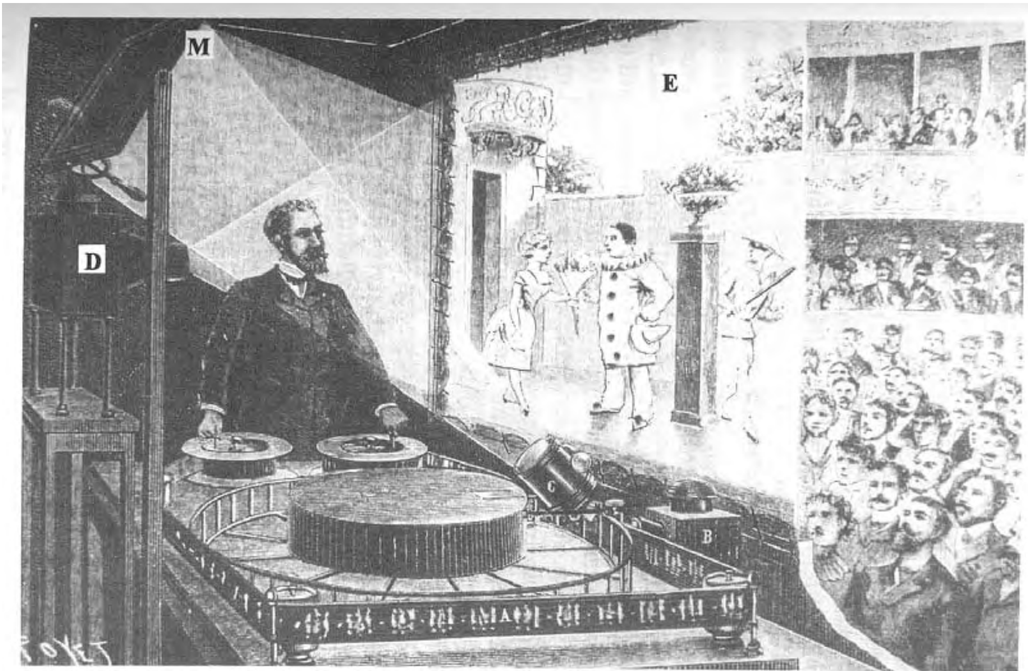

Figure 7 Emile Reynaud's Théâtre Optique, from *La Nature*, 1892.

Kinetoscope, patented in 1891. In Edison's hands, Marey's chronophotography was no longer a purely scientific endeavor: it also became a popular spectacle and generated important revenues. In 1895 Otway and Gray **Latham**, Thomas **Armat** and Francis **Jenkins** (United States), Max **Skladanowsky** (Germany), George William **de Bedts**, Henri **Joly**, and particularly Louis **Lumière** (France) managed to combine satisfactorily the projection (magic lantern) and recording of successive images of movement. Chronophotographic or cinematographic projection then spread quickly around the world, much as did the magic lantern during the 17th century.

During a 1955 filmology conference, Professor Francastel first formulated the idea of a "pre-cinema"; soon after, Paul Léglise published a literary study entitled *Une oeuvre de pré-cinéma: L'Enéide* [A Work of Pre-Cinema: The Aeneid] (1958); more recently, there has been Hermann Hecht's monumental *Pre-Cinema History* (1993). The term now has become common, even if equivalents such as "proto-cinema" and "archeo-cinema" have been proposed. Theoretically, "pre-cinema" refers to the period running from the earliest instances of "writing in movement" down to 1895, when moving picture screenings began in Europe and the United States. This would imply, however, that Marey's chronophotographs (1882–1904) as well as Edison's kinetoscope films (1891–1895) belong to pre-cinema, not cinema, which in turn makes the notion of pre-cinema very problematic, if only from an etymological perspective. "Cinematograph," a word coined by Léon Bouly in 1892 for the reversible camera he had patented, means "writing in movement" in Greek. Yet Marey and Edison had been "writing in movement" with quite some virtuosity since the 1880s. But what if "cinematograph" means "projecting images," as sycophants of the Lumière brothers claim? The mere projection of film images alone hardly encompasses the complexity of cinematographic techniques.

There is a temptation, especially among Lumière defenders, to equate the "birth" of cinema with the invention of the Lumière's machine. All the research and discoveries done before would thus pertain to "pre-cinema." Conversely, the opposite camp nurtures the teleological desire of a cinema

going back to the dawn of time, thereby invalidating the term "pre-cinema" altogether.

This entry has opted for the "archaeology of cinema" (a more technical term first used by Ceram and others in 1966) to designate the early history of cinema as an object of study and research. Whether conceived as a technology, an industry, an amusement, or an art, cinema history is punctuated by complex discoveries and transformations in any number of domains. Among them are numerous experiments in physics and physiology, seemingly unrelated problems derived from such specific sciences as hippology, aerodynamics, and neurology, and thousands of patents registered by an extremely diverse group of individuals. Also included are diverse social practices in the areas of economics, politics, culture, religion, and private life. Even so, this loose conglomeration presents some coherence. This Hecht brilliantly demonstrates in a bibliography of 3,700 articles and books, and that the bibliography is still incomplete strongly suggests the incredible richness of the subject.

Thus, an "archeology of cinema" involves different currents of thought. One, which appeared at least as early as the Renaissance, combines physical science, the study of optics and light, physiology, the practice of magic, **painting** and perspective, the persistence of light impressions, chemistry, acoustics, and mechanics. This was what Charles Patin, a French traveler of the 17th century, called the "trickster art," as its object was to transfigure images through light, to sublimate them through optics, to animate them, even to distort them sometimes. Articulated shadows, **shadow theater**, sets of mirrors, the *camera obscura*, anamorphoses, optical boxes, dioptric paradoxes, magic lanterns, fantasmagoria, stroboscopic discs, zootropic films, magic shows, **dioramas and panoramas** all belong in this current and comprise an immense set of materials in the history of the sciences and arts.

Much later, the history of photography also has its "pre-history" (della Porta) and "inventors" (Niépce, William Henry Fox Talbot). Photography was quickly combined with the most serious applications of stroboscopy and stereoscopy. The first "animators" of the 19th century had as their utopian dream the animation of photography, in three dimensions and in **color**. Marey and other "photographers of movement" of the late 19th century were the leaders of this essential current.

The study of experimental physics and of the physiology of animal and human movement generated another type of research. Physics rooms of the 18th century were rich in extremely sophisticated machines that attempted to re-create human animation artificially. Experimental instruments of the 19th century also re-created phenomena related to visual, auditory, and mental perceptions—for instance, Faraday's wheels, Koenig's revolving mirrors.

Whether in the domain of the "trickster art" or in that of photography and pure scientific study, there existed a dream, one of a demiurge-like nature, whose ambition was not only to observe phenomena invisible to the naked eye, but also (and mainly) to re-create life.

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LAURENT MANNONI

Arche, Alto

b. 1854; d. 1940

scientist, filmmaker, Austria

A professor of chemistry and natural history at the Staatsreal Schule of Vienna, Arche obtained, in 1907, a government subsidy to produce educational

films. He became one of the first to make and use such films as pedagogical tools. The subjects of surviving titles include artisans at work—*Zeugfärberei* [Dyeworks], *Glasbläser* [Glassblowers], and *Hafner an der Drehscheibe* [On the Potter's Wheel]—and gymnastic exercises for students—*Kürturnen der Schüler der k.k. Franz Joseph-Realschule* [Voluntary Exercises of the Pupils from the k.k. Franz Joseph School]. In 1912, he founded the Vienna Club of Cinematography.

See also: scientific films: Europe

PAOLO CANEPPELE

archives

Moving image archives are broadly defined as repositories for the long-term **preservation** of, and permanent **access** to, motion picture artifacts. These two functions are described by other languages with different terms: in French and German, *cinémathèque* and *kinemathek* refer to institutions whose main focus is film exhibition (hence the English term *cinematheque* as synonymous of a screening venue specialized in repertoire programs), while *archive du film* and *filmarchiv* are adopted by entities where preservation is the main priority; on the other hand, the Spanish terms *filmoteca* and *cinemateca* are more or less equivalent (although the latter is used mainly in South America), the Russian *filmoteka* is far more common than *kinoarchiv*, and there is no specific word for it in Japanese. There is some agreement, however, on the difference between "film archives" and "film museums" in relation to the scope of their collections; the aim of an "archive" is to preserve as many films as possible, while "museums" have the mandate to select the most representative examples of cinema as art, technology, or historical document.

Research conducted in 1993 identified 577 public moving image archives operating worldwide. Their number has increased exponentially in the last decade of the 20th century and is likely to grow even further, but not all of them include early films among their holdings. The majority of titles from the beginnings of cinema are held by members of the International Federation of Film Archives (FIAF), an association of non-profit archives and museums established in 1938 and now counting well over one hundred affiliates worldwide. According to a provisional survey made in August 2001, among 83 FIAF institutions, 12,016 fiction films produced between 1893 and 1915 are known to survive in some form; not surprisingly, most of them are from the USA (6,700), France (2,875), Italy (759), the United Kingdom (738), Germany (347) and Denmark (207), leaders in the film industry during its formative years. However imposing, this number represents a modest percentage of the films actually produced (33,664 titles were released in the USA between July 1907 and December 1920, for instance, according to Einar Lauritzen and Gunnar Lundquist), and a tiny fraction of the prints actually struck during the era (from a few for some of the first **Edison** or **American Mutoscope and Biograph** films to several hundreds for a Charlie **Chaplin** comedy of 1915).

The reasons why the survival of an early film is a relatively rare phenomenon can be summarized in two categories. First, almost all films of the period were printed onto nitrate stock, a chemically unstable and extremely fragile carrier whose short life span is affected by temperature and humidity, and by mechanical damage derived from repeated handling and projection. The second reason is of an economic nature: from the beginnings to 1905, film producers and distributors were selling prints to exhibitors, who could project them as many times as they wanted and then dispose of them when they were no longer useful. The destruction of prints after repeated viewings was considered not only inevitable as much as desirable, insofar as their demise would encourage the demand for new subjects. This tendency was further enhanced by the gradual transition to the rental practice, formally agreed upon during a meeting between film producers and manufacturers held in Paris on February 2–4, 1909: at the end of the exploitation period, prints were to be returned to the producer and destroyed.

Other waves of destruction of the early film heritage occurred after 1915. With the increasing success of multiple-reel/feature films, distributors eliminated their remaining copies of early shorts;

silent cinema was deemed unprofitable as a whole after the transition to sound in the late 1920s, and thousands of copies were burned at that time; the final blow came with the introduction of acetate film in February 1951, when nitrate was abandoned altogether because of its flammability and potential danger. As film was not regarded as an art form, only a handful of visionaries fought for its survival as a cultural artifact, from filmmaker Robert William **Paul**, who deposited one of his films to the reluctant curators of the British Museum in 1896, to the Polish writer Boleslaw **Matuszewski** in his pioneering essays “Une Nouvelle source pour l’histoire” and “La Photographie animée” (both 1898). The deposit of copies on paper from nitrate negatives at the Library of Congress began in 1893, but its goal was the legal protection of images from plagiarism and copyright infringement, not conservation as such.

Film archives began to exist as separate entities in the 1910s, with the purpose of keeping a document of notable events and people: the first institutions of this kind are documented in Stavanger (Norway) and Prague (1910), Vienna (1912), Copenhagen (1913), Brussels, Hamburg, Berlin, Madrid, and the Vatican. The word *cinémathèque* was coined in 1913 by a member of the French cabinet, but became a reality in the modern sense of the term only twenty years later at the Svenska Filmfundet of Stockholm (1933). In the 1930s, the corpus of early films known to archivists and historians was reduced to a few dozen titles; after half a century, the list included several thousand titles, and a ground-breaking retrospective of 548 shorts from the period 1900–1906 held in Brighton in 1978, under the auspices of David Francis for the National Film Archive (London), marked the beginning of an international effort toward the rediscovery and scholarly appraisal of early cinema.

Early films are still found all over the world, and acquired by archives, mainly through deposits and donations (purchase of nitrate prints is generally discouraged on the basis of the expenses necessary to restore the films and to maintain them in adequate storage conditions; donors are often encouraged to leave them to the care of the archives in exchange for a copy of the restored film). George Eastman House (Rochester), Library of Congress (Washington D. C.), Museum of Modern Art (New York) have the largest collections of early films in the United States; the Archives du Film (Bois d’Arcy, France), British Film Institute (London), Det Danske Filmmuseum (Copenhagen) and the Nederlands Filmmuseum (Amsterdam) are the main sources in Europe. Historical research for **authentication**, cataloguing, and research purposes is conducted by their teams in collaboration with academics and independent scholars. Most films made before 1916 are in public domain (legislation varies between Europe and North America), and of modest commercial appeal (with the notable exception of some non-fiction films, often used for broadcast documentaries). They are restored and made available in formats as close as possible to the original, often with severe financial constraints (particularly in developing countries) and with the additional challenges of ongoing decomposition of the surviving artifacts, **color** degradation, and increasing pressure from the entertainment industry.

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PAOLO CHERCHI USAI

Argentina

Argentina’s economic and cultural connections with Paris and New York swiftly brought news of moving pictures to Buenos Aires, and film equipment was imported shortly thereafter. Recent scholarship indicates that the **Edison Kinetoscope** was exhibited in the city on September 18, 1894, five months after its appearance in New York, and films by the **Lumière**

company and R. W. **Paul** were exhibited for several months beginning in July 1896. Research by the Fundación Cinemateca Argentina reveals that, in 1896, Federico Figner established an exhibition venue with one or more Vitascopes, Kinetoscopes, and X-rays machines in downtown Buenos Aires. It also credits Figner with first exhibiting Argentine views filmed by José Steimberg in early November 1896, predating by one year the activity of Eugenio **Py**, usually credited as the first to present local views.

Several photographic supply stores imported film equipment and material and became involved in the moving picture business. One owner, Gregorio Ortuño, opened the Salon Nacional, the first moving picture theater in Buenos Aires, in 1900. As owner of Casa Lepage, Enrique Lepage (an immigrant from Belgium) employed two very important figures in early Argentine cinema, Py and Max **Glücksmann**. Py became a major cameramen, especially known for filming ***actualités***. Although active as early as 1897, he is best remembered for filming the Brazilian president-elect in *El viaje del Doctor Campos Salles a Buenos Aires* [The Visit of Doctor Campos Salles to Buenos Aires] (1900). Py also worked for Casa Lepage on synchronizing **phonographs** and moving pictures and created thirty-two ***phonoscènes*** between 1907 and 1911. By contrast, Glücksmann, became a leading producer and distributor and, after purchasing Casa Lepage in 1908, a well-known theater owner.

Others became involved in different kinds of filmmaking. Dr. Alejandro Posadas is credited with filming two surgical operations, possibly in 1899 and 1900. Eugenio Cardini, an amateur photographer, used a **Cinématographe Lumière** to film *Escenas callejeras* [Street Scenes] (1900), considered a precursor of fiction films. Mario **Gallo** made the country's first long fiction film, *La revolución de Mayo* [The May Revolution] (1909) as well as *El fusilamiento de Dorrego* [The Execution of Dorrego] (1910), for the centenary celebrations of Argentine independence.

During the 1910s, foreign distributors made available packages of French, Italian and American films (and **serials**), with the latter finally dominating exhibition by the end of **World War I**. The first Argentine **multiple-reel/feature film** to be considered a major box office success was *La nobleza gaucha* [Gaucho Nobility] (1915), although *Amalia* (1914) and *Juan sin ropa* [Juan without Clothes] (1919) also were notable. Glücksmann, Gallo, and Federico Valle all established weekly **newsreels** by the end of the decade (the exact dates are still disputed), which continued into the 1920s. Valle also was responsible for producing Quirino Cristiani's *El apóstol* [The Apostol] (1917), considered the country's first feature **animation** film.

Throughout the early period, film exhibition received significant coverage in the national press and in cultural magazines. Only later did a **trade press** appear, with *La película* (1917) and *Imparcial Film* (1919).

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KATHLEEN NEWMAN

Armat, Thomas

b. 1866; d. 1948

inventor, USA

A railway mechanic and bookkeeper, Armat went into partnership with C. Francis **Jenkins** in late 1894 to develop a moving picture projection apparatus used for public demonstrations beginning in September 1895. Buying out Jenkins, Armat sold an improved beater-mechanism **projector** to **Raff & Gammon**, who persuaded

Thomas **Edison** to lend his name to their machine, which was exhibited on 23 April 1896 as the Edison Vitascope. Armat defended his intellectual rights in this machine for the next twelve years, eventually joining the **Motion Picture Patents Company**. He was given a special Academy Award in 1947.

DEAC ROSSELL

Arnaud, Etienne

b. 1879; d. 1955

filmmaker, scriptwriter, France, USA

Arnaud began his career as a director and scriptwriter for **Gaumont** in late 1905. Active with the company until 1911, he made more than 230 films, from *phonoscènes* and comic **chase films** such as *La course aux potirons* [The Pumpkin Chase] (1908) to melodramas and **trick films** such as *Le Korrigan* [The Breton Goblin] (1908). From 1912 to 1914, he served as artistic director at **Éclair**'s American studios in Fort Lee (New Jersey). After his return to France at the outbreak of **World War I**, Arnaud was unable to regain his former stature in the French film industry.

LAURENT LE FORESTIER

Arquillière, Alexandre

b. 1870; d. 1953

actor, France

Arquillière was an important actor at André Antoine's Théâtre Libre, where he collaborated with Firmin Gémier and also authored several plays. Although his first film appearances included **SCAGL**'s *L'Assommoir* (1909), it was at **Éclair** that he became an early film **star** as the master criminal in Victorin **Jasset**'s *Zigomar* series (1911–1913). There, realism blended with fantastic trick effects—i.e., "fantastic realism"—to highlight Zigomar's deceptive machinations. Arquillière also played another mysterious bandit in Jasset's *Tom Butler* (1912). His later career included several powerful psychological roles, among them the crude husband in Germaine Dulac's *La Souriante Madame Beudet* [The Smiling Madame Beudet] (1923) and the gardener in Julien Duvivier's *La Fin du jour* [Day's End] (1939).

MARINA DAHLQUIST

Asia Film Co.

The first production company in China founded by the Russian-American showman Benjamin Polaski in 1909. Before leaving Shanghai in 1912, Polaski sold his assets to two American expatriates, who, in collaboration with the Xinmin theater group led by **Zheng Zhengqiu** and **Zhang Shichuang**, formed a joint venture. Its productions included a number of ***actualités***, short **comedies**, and a feature-length fiction film, *Nanfu nanqi* [A Couple in Trouble] (1913), a parody of arranged marriage written by Zheng and directed by Zhang. In 1914, the company ceased operation due to a shortage of film stock in the wake of the **World War I**.

ZHEN ZHANG

Atelier Apollo

Atelier Apollo was established in 1889 by K. E. Ståhlberg (1861–1919), a visionary pioneer of **photography** and cinematography in Finland. Having bought **Pathé-Frères** equipment on his Paris honeymoon in 1896, he started a touring moving picture show. In 1904, he established a cinema in Helsinki called *Maailman Ympäri* [Round the World] and proceeded to build a **cinema chain**. In 1906, he became the country's first film producer, with a total of 110 shorts by 1913—half the entire national production. He also produced the first Finnish fiction film, *Salaviinanpolttajat* [The Moonshiners] (1907), and built Finland's first film laboratory in the same year. Atelier Apollo was always known for its high standards of photography and for employing talent

like Frans Engström, Hjalmar Hårdh, and Oscar Lindelöf.

ANTTI ALANEN

Aubert, Etablissements L.

In 1909, Louis **Aubert** bought Cousture et Carré, a small company in Paris which purchased and then sold and rented films on a very limited scale. By the end of the year, he had become the exclusive agent for an Italian company, Vesuvio Films. For some time, he provided rental services for a number of foreign producers such as Crick & Martin, **Hepworth**, Roma, Unitas, Victoria, and **Hispano Films**. In 1910, Aubert gained a significant advantage over his competition when he became the exclusive representative of **Nordisk Films**, the Danish company which had released several successful **multiple reel films**, including *The White Slave Trade*.

In August 1911, Aubert turned his enterprise into a public limited company (société anonyme), the Compagnie Générale du Cinématographe. With a capital of 500,000 francs and activities in distribution and exhibition, the company remained under Aubert's tight control—he received 4,000 of the original 5,000 100-franc shares, in exchange for a number of assets, and purchased 415 of the 1,000 shares open to subscription. Within a year the company's capital doubled, and its name was changed, in February 1914, to Etablissements L. Aubert.

One of Aubert's masterstrokes, in 1911, was to obtain an exclusive concession from the prestigious Italian company **Cines** for the sale of its films in France, Belgium and the Netherlands. Cines was to bring the genre of the peplum or toga film to its highest level of success, notably in Enrico **Guazzoni**'s *Quo Vadis?* (1913). Over the four months prior to its release, Aubert repeatedly promoted the film in professional journals, so that its presentation at the Gaumont-Palace proved a major event.

The Compagnie Générale du Cinématographe also distributed, sometimes in conjunction with other companies, important films from a variety of foreign and domestic producers and negotiated exclusive rights for those that seemed most promising at the box office. Such was the case with Mario **Caserini**'s *The Last Days of Pompei* (1913), a 2,000-meter film produced by **Ambrosio**, an Italian company represented in Paris by Charles Helfer. From 1912 on, the Compagnie also owned exclusive rental rights for Georges **Lordier**'s Grands Films Populaires, several of which met with public success: for instance, *Tire au flanc* [The Layabout], *Le Bossu* [The Hunchback], and *Les Cinq sous de Lavarède* [Lavarède's Five Sous].

As early as October 1910, Aubert sought to complement his activities in the rental business by purchasing the Cinéma-Théâtre Voltaire (a neighborhood theater in Paris), one of the assets exchanged for shares in the Compagnie Générale du Cinématographe. He developed a network of such theaters, owning five at the time **World War I** war broke out. In May 1915, in partnership with Serge **Sandberg**, he opened the Cinéma des Nouveautés-Aubert Palace, a **palace cinema** located in the Grands Boulevards.

Late in 1913, Aubert also decided to venture into production. He had a studio built in Joinville-le-Pont near Paris, and the first production, *Fille-Mère* [An Unmarried Mother], sought to emulate *The White Slave Trade*. The scenario was written by Arthur Bernède who, during the war, would write the scenario and serialized story for Louis **Feuillade**'s *Judex*. *Fille-Mère* was released early in 1914 and also was exhibited in some theaters under the more explicit title, *L'Abandonnée* [The Abandoned Woman].

In the 1920s, Etablissements L. Aubert developed an extended network of "Aubert-Palace" theaters, remained very active in the rental and distribution business, and engaged in many European co-productions. By 1929, when Louis Aubert sold his business to Franco-Films, it was ranked third among French film companies.

See also: distribution: Europe

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JEAN-JACQUES MEUSY

Aubert, Louis

b. 1878; d. 1944

exhibitor, distributor and renter, producer, France

The son of a big civil engineering contractor in western France, Félix Hippolyte Louis Aubert received his high school education in Paris before taking up an internship abroad to prepare himself for a career in agriculture. He was attracted to the burgeoning film industry, however, and, in 1909, acquired a small business in Paris specializing in selling and renting films. The following year, he ventured into exhibition and, by the time of **World War I**, owned several neighborhood theaters. Yet he owed his swift rise to prominence to his rental business. He managed to sign contracts with large (mostly foreign) companies and distributed several very successful films, including *Quo Vadis?*. In 1912, he became the president of the renters' branch of the newly created Chambre Syndicale Française de la Cinématographie et des Industries qui s'y rattachent (French Trade Association of Cinematography and Related Industries). Late in 1913, he built a studio in Joinville-le-Pont near Paris, and moved into film production. In May 1915, he opened the first of what would become a circuit of luxury Aubert-Palaces in Paris.

An authoritarian figure, Aubert described his business in these oft-quoted lines: "Two drawers, one for receipts, the other for expenses . . . It's all very simple . . . I am a tradesman, that's all!" In 1929, at the height of his success, he sold his company to Franco-Film, in order to pursue a career in politics as an "independent radical" and was a representative for the Vendée region from 1932 to 1942.

JEAN-JACQUES MEUSY

Figure 8 Louis Aubert, from a palace cinema program, 1913. (Courtesy of Jean-Jacques Meusy.)

audiences: research issues and projects

Speculations about the composition, function, and responses of early motion-picture audiences have produced some of the liveliest, most extended, and productive debates in cinema studies. In a nutshell, the tendency in early cinema studies (hereinafter ECS) has been away from concentrating on the producers, exhibitors and the films themselves as agents of influence and management of consumers, and toward emphasizing viewers, communities of viewers, and the historical junctures of film practice. The crucial issues concerning audiences in ECS have been: identifying spectators and audiences and the exhibition context; assessing what reliable evidence is available, how generalizable is it, and how should it be interpreted; determining the composition of audiences; conjecturing about the relationship between the form and content of films and their social effects; examining societal constraints on audiences; and trying to learn about audience behaviors before, during and after shows.

Inquiries into the patterns of cinema exhibition and the identity and behavior of attendees were among the first research programs of early film scholarship when academic interest in the subject escalated in the 1970s. At the same time, film

studies in general was beginning to include the end-use as part of the "cinema system." Evaluating semiotics, structuralism, neo-Marxism, psychological, feminism, Russian formalism and other "isms," ECS absorbed some of these theoretical discourses, but also qualified and reacted against them. Fundamentally, ECS began to doubt that one way of explaining the films of 1893–1915 could ever be adequate.

The development of ECS played out against a heady and rapidly evolving theoretical background. Many theories centered around the idea that film texts stipulated an ideal spectator, not only optically with respect to mise en scène, point of view and so on, but also ideologically. Films, following Roland Barthes, were palimpsests that analysts like Christian Metz and Noël Burch could read to recover residues of meaning and the mechanisms by which films implied or constructed subjectivity. Textual approaches ranged from looking at films as linguistic communication systems, as equivalent to psychological processes, and as vivid demonstrations of the mechanisms of patriarchal determination, especially in the case of the movies' seemingly omnipresent "male" gaze. The ideas of Louis Althusser, Walter Benjamin, Antonio Gramsci, Raymond Williams, and Pierre Bourdieu, to name a few social theorists, motivated authors who focused on how social hierarchies affected or determined **spectatorship**. The spectator—a word used in the special sense of connoting this idealized hypothetical viewer—was a function of the film text, not a person. One beneficial aspect of reconstituting an implied audience from film texts was that researchers developed critical techniques and a vocabulary for closely analyzing films.

Exhibition site research in the 1970s sparked interest in early cinema outside of a pre-existing circle of specialists. Did the patterns of **nickelodeon** exhibition in Boston and Manhattan indicate that film thrived with lower-class audiences, the prevailing view for the previous decades, or did exhibitors target middle-class audiences from the start? (For a concise summary of the controversy, which went on for nearly a decade, see Stokes, 2–8.) As theories evolved in the 1980s, ECS scholars tended to conceptualize audiences as less unitary and passive, and admitted more discretionary behavior. Formal properties were not innate in films, but existed in viewer recognition and use. Increasingly, ECS borrowed concepts from contemporary movements in history, sociology and communication theory, which valorized the political power of non-mainstream groups. The application of cultural studies has taken audience analysis outside the walls of theaters to include fan response, the development and circulation of movie discourses (e.g., **star** vs. picture personality), and the behavior of viewers after the show as they pursued other social practices.

The actual experiences of "real people" watching a film can never be known, but researchers have been locating data about sites of exhibition, demographics of specific neighborhoods, and patterns of film distribution that enable us to infer the circumstances of movie-going. Among the sources that have been used are theater handbills, **newspaper** accounts and advertisements, social services files, insurance company documents, business directories, fire district maps, census figures, municipal tax records, city ordinances, immigration statistics, police reports, travel narratives, **postcards** and photographs, memoirs and the occasional oral history. Historical materialist approaches augment such documentation with interpretations about how individuals would have derived meanings from the films being documented, with the larger goal of situating movie-going in the context of other social practices and institutions.

Unfortunately, the documents that would provide clues about early cinema audiences are mostly lost or never existed. Extant reviews, memoirs, censorship files and so on may be tainted by their authors' elite status as members of the dominant social groups. Much evidence is contradictory. Estimates of the number of nickelodeons in New York City in 1908, for instance, have been given variously as from a little more than 300 to nearly 1000.

In ECS of the 1970s the "bourgeoisification" thesis emerged as a way to explain the apparent radical change in the movies' clientele from plebeian to middle class. After the novelty among the predominantly working class consumers of films wore off around 1902–1903, producers and exhibitors struggled to attract more respectable audiences to their showings. Presumably the

ameliorated **program format** would entice affluent patrons, women and children into the nickelodeons and movie houses and help immigrants assimilate American culture through the movies. As a corollary, the new audience of sophisticated literate viewers who were accustomed to **legitimate theater** conventions were better equipped to understand the complicated narrative structures that filmmakers like Louis **Feuillade** and D. W. **Griffith** were developing around 1908–1909.

The bourgeoisification thesis has been challenged on numerous fronts. Subsequent research on exhibition may not support the postulated "upward" direction from low- to highbrow venues. Rather, it could be that the trend was toward greater diversity during the nickelodeon era as new groups of consumers joined the mixture of movie-goers without necessarily displacing established groups. Even if viewership was upwardly mobile in dynamic urban melting pots of American cities, the case might be different in rural America where the composition of audiences was more or less homogeneous. Recent research further problematizes bourgeoisification; Richard Abel argues, for instance, that the "vacuum" during 1903–1906 was only in American production. Meanwhile, the audience for films continued to expand, but viewers around the world—including those in the USA—saw mostly French exports. It was only around 1909 that US trade journals began calling for more "Americanness" in subject matter. Finally, the apparent meaning of a film for us today or the meaning intended by producers back then may not have matched the meaning produced by individual groups of viewers, who were free to filter content through idiosyncrasies and local customs. Producers and exhibitors may have anticipated that immigrant audiences would profit from the "assimilative," "democratic" and "bourgeois" messages delivered in their films, but this might not have been the case. Actual audiences had opportunities to recall and reassert their national identities in **travelogues**, imported films, **musical accompaniment** and in vocal interaction with the screen. In the post-nickelodeon period, however, as the control of the program tilted toward the producers and distributors intent on consolidating regional markets and building **palace theaters**, there was undoubtedly less reflection of local tastes and interests in programs.

Issues related to audiences also include controlling the content of films, delineating the location of screenings, and disciplining attendees. Most countries implemented state censorship of cinema early on. In the USA, despite many efforts, there was no national censorship of the movies. Instead, censoring was local, sporadic, and enforced by assorted agents, including city and state boards of review and a 1909 **National Board of Censorship**, established with the complicity of the **Motion Picture Patents Company** (MPPC).

Another issue pits exhibitors against their audiences. Because of the inherent risks to health, property, and fear of incurring the displeasure of civic authorities, managers employed strategies for managing customers. But was this an ethnically tinged conflict or an ordinary business practice? One interpretation is that, while the atmosphere in a nickelodeon may have been raucous, it was not necessarily disorderly. The deportment of audiences in a nickelodeon probably differed little from the audience in the neighboring **vaudeville** theater. The "continuous performance" policy of American theaters, without definite show times, entr'actes or intermissions, may have made the audiences seem more tumultuous and distracted than they really were. Another point of contention is that cultural antagonism between exhibitor and audience may have varied widely depending on whether the owners of the show were of the same background as their customers.

Early cinema studies of the 1970s and 1980s had theorized audiences based on exhibition studies of big American cities. Later researchers expanded to locales such as Chicago, Atlanta and Milwaukee.

Figure 9 Drawing from *Cleveland Leader*, 11 May 1911.

Figure 10 Wladyslaw T. Benda, "The Line at the Ticket Office"—illustration for Mary Heaton Vorse, "Some Moving Picture Audiences," *Outlook*, 24 June 1911.

Special cases, such as theaters in blue-collar towns and the segregated South have also been studied, as well as small town audiences in New England, Kentucky and the Midwest. It has been found that American filmgoers developed indigenous patterns of attendance and preferences in film subjects inflected by local religious, labor, and cultural practices.

The motives for attending cinema, the nature of the pleasures attained there, the ambiance of the theater, the discussions that followed the screening and the lasting effects are among the most elusive aspects of studying the first film viewers. One component of the phenomenology of cinema, sound, has been neglected until recently in studies of early audiences. The spoken commentaries by on-stage **lecturers** was a widespread pre-nickelodeon practice in the USA, and remained common into the sound era in Canada and European regions with a mixed linguistic culture. Musical accompaniment of silent films had important implications for audience expectations, for the appreciation of film as an aesthetic experience, for its relationship to narrative form, and for audience participation. Efforts to record sound synchronously while recording the pictures, and accompanying films with recorded **synchronized sound**, date from the earliest days of cinematography.

Prior to the intensification of research into early cinema that began in the 1970s, film audiences were portrayed in broad strokes according to assumptions of class, ethnicity, and perceived sophistication. Current studies parse the original audiences much more finely. Although "The Audience" is chimerical as a critical concept as well as an historical entity, investigations of spectators as subjects in the film system, research into viewing patterns, demographics, and the historical and cultural milieu of specific groups, and the social practices that led to the development of a relatively unified mass audiences are crucially important features of early cinema scholarship. This eclectic and interdisciplinary approach ultimately reveals much about the significance of the films themselves.

While ECS has highlighted audience formation and response in scholarship, the geographical focus has been predominantly American. There have been significant studies of viewers of Quebeçois, British, French, German, Russian and Chinese cinemas, but a truly international assessment of early film audiences has yet to be initiated.

See also: law and the cinema: regulating exhibition; migration/immigration: USA

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DONALD CRATTON

audiences: surveys and debates

Late in 1905, in the USA and Germany, and shortly thereafter in other Western countries, the spread of moving picture theaters enabled audiences who had not previously frequented commercial entertainments to attend the new "cheap amusement" on a regular basis. City recreation surveys conducted in the 1910s emphasized the sheer size of this audience: an estimated 900,000 people a week visited moving picture shows in New York City in 1910; weekly attendance in Kansas City, Missouri, surpassed the city's total population in 1912; a total of 100,229 spectators in a single day attended the movies in Cincinnati in 1913, more than one-fourth of the city's population; a total of 21 million cinema tickets were sold in Great Britain in 1917. Working-class groups often were identified as central to the audience, closely aligned in the USA with immigrant groups. Hence a 1910 New York City survey estimated that 72% of the audience was working class, 25% "clerical," and 3% "leisured"; a 1912 survey of 2400 movie-goers in Mannheim, a mid-size industrial city in Germany, found that the audience comprised mainly blue-collar and lower-status, white-collar workers. Women also frequently were singled out as core components of the new urban audience, and surveys suggested they formed the largest group in, for example, Mannheim, Cincinnati, Waltham (an industrial city on the outskirts of Boston), San Francisco (in neighborhood theaters but not downtown, where men dominated), and a significant percentage elsewhere. Children, too, were seen to be important to the audience, comprising, for example, 25% in New York City in 1910; indeed, the general consensus was that children and young adults ranging in age from 15 to 25 constituted the bulk of the movie audience (estimates ranged from two-thirds to three-quarters). Still, the surveys and anecdotal evidence indicated that there was audience diversity between regions as well as among locations within cities, and subsequent scholarship has emphasized important differences between rural, small town, and urban audiences.

Simple enumeration, however, was only one aspect of the surveys. Equally important, often providing the motivation for elite groups to undertake research on audiences, were questions about what drew people to cinemas, what experiences they had there, and what the possible effects of movie-going might be. Investigators initially expressed concerns about the deleterious effects of movies and movie-going both on the morality of audiences, particularly on children and women (besides adult immigrant and working-class groups), and on public order. Here survey information often was connected to anecdotal evidence about the psychological effects of movies. One of the first sustained considerations of the seemingly intense pleasures of movie-going, informed in part by anxieties about such effects, was Harvard psychologist Hugo **Munsterberg**'s *The Photoplay: A Psychological Study* (1916). Using perceptual psychology to describe the hold moving pictures had on audiences, Munsterberg inaugurated a concern to describe the pleasure and desire

underpinning movie-going that was central to later work on **spectatorship**; but he also warned that the effects of this for both individuals and society as a whole could be grave. Other commentators alternatively suggested that cinema could provide the space for emotional sustenance and communal gathering. Sociologist Emilie **Altenloh**, for example, investigated early audiences in Mannheim. Whereas reform and psychology-influenced writing generally treated the audience as a troublesome phenomenon of mass society, Altenloh categorized audience members, their consumption patterns, and their film preferences according to a range of social and demographic characteristics and tried to understand their experiences in the spirit of ethnographic research. Working-class groups, women, adolescents, and children were drawn to moving pictures, Altenloh suggested, as a space for experiences and forms of communality that were largely excluded from other public arenas in the modern world. Cinema, for Altenloh, appealed to those seeking to escape the monotony of new forms of industrial labor and to relax from the demands of everyday modern life. Leftist commentators and historians in the 1920s and 1930s replicated this sense of cinema's social function for the supposedly working-class audiences who attended **nickelodeons** in the USA, implicitly following Altenloh's suggestion that cinema could be seen as a democratic and progressive alternative public space. In negotiating the contradictory experiences associated with modernity, so this argument contended, working-class and immigrant audiences shaped the American cinema as an institution.

Later debates were central to the sustained scholarship on early cinema that flourished in the 1970s. Here, the working-class basis of nickelodeon and other cheap moving picture show audiences became a starting point for, on the one hand, theoretical reflections on audiences and spectatorship from a psychological perspective or, on the other, historical accounts of the role cinema played in the everyday life of audiences from the perspective of social history. Noël Burch's influential work on the relation between films and audiences in early cinema, later gathered together in *Life to Those Shadows* (1990), was informed by prevalent theoretical accounts of spectatorship. **Classical Hollywood cinema** worked to bind and realign audiences with dominant ideological norms, he argued, but other textual formations of cinema—notably the avant-garde—could challenge that. Linked by Burch (and later others) to the avant-garde, early cinema was read now as a cinema inextricably enmeshed with working-class audiences and their desires, until the emergence of narrative norms around 1907–1909 began to realign cinema with bourgeois norms and (implicitly in Burch) middle-class audiences.

Later scholars have argued, however, that it was regulatory concerns about audiences, coinciding with the rise of palace cinemas in many countries in the 1910s, driven by entrepreneurs seeking an affluent and stable middle-class audience (whose national or regional circuits tended to eliminate local differences), that curtailed cinema's role as an alternative public space. Here, Miriam Hansen's work was crucial. Linking the traditions of work on spectatorship and social history via traditions of German theorizing on the public sphere, Hansen argued that early cinema in Germany and the USA functioned in part as an alternative public sphere in terms both of physical and psychic space, but that regulatory and commercial imperatives to attract a middle-class audience delimited the communal experiences of audiences, in effect de-realizing and privatizing theater/public space and aligning spectators with dominant positions of ideology. Very different traditions of scholarship effectively combined then to propose that only during the nickelodeon period could working-class, immigrant, and women audiences seek a physical and psychic space apart from hegemonic norms because a variety of factors—narrative, national cinema markets, movie palaces, regulation—brought middle-class audiences into cinemas and effectively "tamed" the former's radical potential.

Various revisions to this account have been proposed, linked both to specific arguments about the nickelodeon audience and to the broader imperative to extend research beyond the urban nickelodeon in order to better account for the diversity of audiences in the early period and the growth of cinema as a mass medium. Here, Robert C. Allen's claim that middle-class audiences were more prevalent in the nickelodeon audience in New York City than scholars had hitherto allowed was crucial. Locating the city's nickelodeons by

using a number of empirical sources—business directories, insurance maps, trade journals—Allen concluded that most were located either in busy commercial or theatrical areas or in what he characterized as middle-class neighborhoods. His claims did not go uncontested. Robert Sklar questioned some of Allen's sources and contended that his arguments downplayed the important role of working-class and immigrant groups in shaping American cinema. Later, Ben Singer revisited the question of nickelodeons in Manhattan and argued that there were more working-class nickelodeons than Allen's resource materials allowed and that the neighborhoods characterized as middle-class were more likely working-class. Singer's work in turn prompted a flurry of responses, including one from Allen himself calling for, among other things, further analysis of the types of shows on offer to better delineate audiences within the city. Equally important, as Allen and Singer effectively agreed, was further attention to theorizing the historical formation of class distinctions in the USA. Lower middle-class groups made up of low-paid white-collar workers arguably were extremely important components of the audience; moreover, their class affiliation was uncertain, for, depending on circumstances, they may have understood their interests to lie with either working-class or middle-class groups.

Leaving aside the focus on urban nickelodeon audiences and on class, scholars increasingly have sought to account for the audience in various countries before the establishment of cheap cinemas and beyond urban areas, asking: where were moving pictures seen prior to the nickelodeon? How regular were such shows, and who was the audience for them? When, where, and how did non-urban audiences have access to the movies? Were the movies the same in similar exhibition sites? Were they the same kinds of audiences? In short, were there regional and/or national differences in moviegoing, and how can we account for those?

Vaudeville and other types of variety entertainment were frequently the first place movies were shown relatively regularly, attracting middle-class audiences in the USA and Germany. Lower-middle-class audiences were important for slightly cheaper variety theater entertainment, notably the so-called family vaudeville that emerged in the USA around 1903, mixing moving pictures together with a few live acts and costing less than high-class vaudeville but more than later nickelodeons. Yet such venues were principally an urban phenomenon. Outside of major urban areas, audiences often saw moving pictures initially by way of **itinerant exhibitors** as part of a traveling show, sometimes in combination with **fairs**, festivals, and markets that attracted a broad spectrum of people. Likewise, showmen traveling independently or managing small companies attracted broad audiences, partly because their shows were pitched to appeal to middle-class and/or religious audiences—often in multi-media presentations that included moving pictures, slides, and a lecture—and partly simply because rural and small town dwellers were likely to attend shows in the absence of much other commercial entertainment. Other traveling showmen relied more exclusively on moving pictures, prefiguring the establishment of nickelodeons everywhere. Of the estimated ten thousand nickelodeons in the USA in 1910, seven thousand were located outside big cities.

Even so, some groups had less access to moving picture shows than others and significant regional variations can be discerned in audience attendance. Dispersed and often poor rural populations, like those in the southern and western USA, did not have regular access to moving pictures. Conservative religious groups often chose not to attend. Women and children often had their attendance curtailed as a result of both social customs and economic strictures. Often black audiences were denied access to moving pictures in the rural areas of the south or in small towns in the USA; otherwise, they were restricted to segregated areas in most theaters. Even so, black-only theaters emerged—numbering perhaps 200 in 1913— often featuring prominent black performers live and so enabling black audiences to contest the norms embodied in the dominant white films. Here scholars have emphasized both how audiences can contest dominant norms and how reception and experience are framed in important ways by the conditions of presentation.

Linked to the concern to map the diversity of exhibition contexts, then, is the effort to rethink reception in relation both to individual films and in the broad terms that Allen has described as the

confrontation of the semiotic and the social. Here, scholarship draws on traditions of social history and British cultural studies to investigate further how audiences engaged actively with the cinema and how the historical and social positioning of audiences, their cultural repertoires, and the broad intertextual framework surrounding particular texts influenced reception in various ways. Work on black audiences, women audiences, and fan culture has been especially important, again linking the study of audiences with broad questions about resistance and hegemony.

Perhaps no sweeping characterization of the early cinema audience is possible; social composition varied within towns and cities, between different regions and rural and urban spaces, and no doubt also between different countries. Still, local studies of audiences will continue to increase our knowledge of this diversity. Like previous studies, this future work will need to make use of, as well as interrogate, varied data in order to reconstitute a historical audience that left only scattered and incomplete traces of itself. No doubt the task of identifying that audience and the experiences it had at the cinema will continue to be important to scholars, drawn to the task by the belief that a crucial part of cinema's significance depends on the meaning and pleasure that audiences took from their movie-going.

Figure 11 Luisen-Kino, Berlin, *c.* 1910.

See also: law and the cinema: regulating exhibition; migrations/immigration; racial segregation: USA

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LEE GRIEVESON

Auler, William

b. 1865, Rio de Janeiro; d. 1927, Rio de Janeiro

exhibitor, producer, Brazil

A major figure of the Brazilian *bela época*, Auler provided furnishings for the earliest exhibition venues in Rio de Janeiro. In 1907, he created

Williams & Cia. and opened his own theater, Grande Cinematógrafo Rio Branco. Imitating the practice of synchronizing films and phonograph recordings, Auler substituted singers behind the screen and created the ***filme cantante*** genre. He also made **crime films** popular and, later, developed other national genres like the musical review film. Alberto Moreira's *Paz e amor* [Peace and Love] (1910), a wily satire of Rio's social and political elites, was wildly successful, filling his 700-seat theater to capacity for more than 1000 screenings. However, shortly thereafter, Auler abandoned production to return to his furniture businesses.

ANA M. LÓPEZ

Aurora Cinema

Much like J. F. **Madan**'s Elphinstone Bioscope Company, Aurora Bioscope was founded by a theater owner, Anadi Nath Bose. Buying used **projectors**, Bose first added moving pictures to the variety programs in his tent shows and Manmohan Theatre in Calcutta. In 1911, the company was renamed Aurora Cinema when it became a partnership firm, but it remained primarily an exhibition concern until winning a contract in 1917 to make short films for the army during **World War I**. In 1921, Aurora released its first feature, *Ratnakar*, directed by Surendra Narayan Roy; but the company's forte was **newsreels**, especially a popular news review compilation called *Aurora Tidbits*.

SURESH CHABRIA

Australasian Films

In March 1911, Amalgamated Pictures was formed by the merger of **Johnson and Gibson** with J. & N. Tait. In November 1912, the interests of T. J. **West**, Cozens **Spencer** and Amalgamated Pictures were merged, joined in January 1913 by J. D. Williams and **Pathé** (Australia). The new company had an exhibition branch (Union Theatres) and a distribution branch (Australasian Films), but no interest in feature film production, although it retained Spencer's Rushcutter's Bay studio, and distributed a weekly **newsreel**. Known familiarly (but not affectionately) as "The Combine," this remained the most powerful Australian-based film company of the silent period.

INA BERTRAND

Australia

Australia may have been geographically distant from the main centers of film production, but it was integrated into the international market early, through entrepreneurial exhibitors and distributors. Indigenous production also began early, with non-fiction films at first, followed by fiction films, and features developing earlier than in many other countries.

Peepshow **kinetoscopes** appeared in Sydney on 20 November 1894, and projected moving pictures arrived with **magician** Carl Hertz, who, after a private preview, presented a season at Melbourne Opera House beginning on 22 August 1895. Early attempts to present programs devoted exclusively to moving pictures in Brisbane, Sydney and Melbourne in September and October 1895, however, were short-lived. Until 1906, moving pictures were more commonly presented as supplements to a theatrical presentation or as one of several acts in **vaudeville**, or in an outdoor entertainment venue such as Ye Olde Englishe Fayre in Perth. Showmen were soon traveling through the suburbs and country areas by horse-drawn vehicle (in the 1920s, by automobile) or train, presenting moving pictures in Town Halls and Mechanics Institutes or in open air "picture gardens." In the cities, they were screened in legitimate **theaters** and in premises converted from skating rinks and dancehalls, before the first permanent cinemas appeared around 1909, followed in 1916 by the first sustained building boom. Australia had no exact equivalent of the American **nickelodeon**: but the local cinema or picture garden was soon a favorite family entertainment venue.

The films to supply these venues came mainly from Great Britain, or from Europe (particularly France) via Britain. Nonfiction films were popular, particularly **news event films** on major events such as the death of Queen Victoria or the Boer War, presented by touring companies as a full evening's entertainment.

Local film production was early and innovative, but never challenged the imported product in quantity. The first Australian production was *Passengers Alighting from the Paddle Steamer ''Brighton'' at Manly* (October 25, 1896), made by **Lumiere** representative Marius Sestier. The earliest film to survive in an archive is footage of the 1896 Melbourne Cup carnival. There were short-lived film production ventures in both Sydney and Melbourne before the turn of the century, and the earliest Government film production had the Queensland government contracting Frederick Charles Wills, in October 1898, to make thirty one-minute **advertising films** for distribution in Great Britain. Most government film was produced on contract by companies such as **Pathe (Australia)** or the **Salvation Army** Limelight Department, which made some of Australia's first long films: *Inauguration of the Commonwealth*, *Visit to Australia of the American Fleet*, and a series of royal visits (all 1900–1901).

Beginning in 1897, the Salvation Army's evangelical program added moving pictures to their lantern lectures, culminating in Commandant Booth's ambitious multi-media presentations, consisting of lecture, lantern slides, motion pictures, live music and audience participation. The most famous of these was *Soldiers of the Cross* (1901), telling the story of the early Christian church and including thirteen one-minute films (most produced in Melbourne using Salvation Army premises and personnel).

Multiple-reel films were common in Australia before other parts of the world, largely as a result of the huge success of *The Story of the Kelly Gang* (1906), an action adventure about bushranger and anti-establishment hero Ned Kelly, who had been hanged in 1880. This three-reel, 40-minute feature was screened with actors providing dialogue behind the screen and **sound effects** simulating galloping horses, gun shots, and crowd noises. Other feature-length films followed in 1907 and 1908, then in growing numbers until, in 1911, Australia produced at least twenty films of more than 3000 feet in length, most of them fiction.

The producers of *The Story of the Kelly Gang* (**Johnson and Gibson** and J. & N. Tait) joined to form Amalgamated Pictures and employed W. J. **Lincoln** as director. Their St. Kilda studio was the best in Melbourne (after the closure of the Salvation Army studio in 1910), and when Amalgamated joined **Australasian Films**, the Lincoln-Cass company took over the studio lease.

In Sydney, several theatrical companies (including George Marlow, and E. I. Cole's Bohemian Company) produced films of their stage repertoire, and specialist film companies were also formed (such as Australian Life Biograph and Southern Cross Motion Pictures). Cozens **Spencer** embarked on an ambitious production program in 1910. His *The Fatal Wedding* (1911) was the first feature film of the talented team of Raymond **Longford** (director), Lottie Lyell (Australia's first movie star), and Arthur Higgins (cinematographer brother of Ernest **Higgins**). Spencer opened Sydney's best studio in Rushcutter's Bay in 1912, which was retained by Australasian Films for lease to other producers.

In this flowering of fiction film, two genres predominated: the theatrical melodrama, such as *Called Back* (1911) and the outdoor action or bushranger film, including much of the output of John **Gavin** and Alfred **Rolfe**. Non-fiction films, however, continued to be popular. Professor Walter Baldwin Spencer filmed anthropological expeditions in 1901, and again in 1910–11. The first commonwealth government cinematographer, in 1911, was James Pinkerton Campbell, replaced in 1913 by Bert Ive, who held the position until his death in 1939. Francis Birtles pioneered the outback expeditionary film, a **Gaumont** production recording his 1911 bicycle journey from Sydney to Darwin; on later expeditions he did his own filming.

Australia's first **newsreel** was *Pathe's Animated Gazette* (the Australian edition), in November 1910, followed by several others, some of which eventually were amalgamated into *Australasian Gazette* produced by Australasian Films from 1916 until the introduction of sound in 1929. Pioneer animator Harry Julius contributed cartoons to *Australasian Gazette* during **World War I**.

Up to the formation of Australasian Films in 1912, this was a vibrant and innovative industry, integrated into the international film community through entrepreneurs such as T. J. **West**, Cozens Spencer and J. D. Williams, but retaining its local flavor through the production of non-fiction films and fiction films on national themes. After Australasian's decision not to produce feature films, and then the arrival of distribution agencies for major Hollywood studios, local producers became embattled, leading eventually to bitter exchanges before the 1927–1928 Royal Commission into the Moving Picture Industry. Australian feature film production did not again reach the assurance of that early period until the 1970s.

See also: *actualités*; animation; biblical films; ethnographic films; expedition/exploration films; melodrama, sensational

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INA BERTRAND

Austro-Hungary

The development of Austro-Hungarian cinema initially was slow. Some years passed from the first official projection of the **Cinématographe Lumière** in the capital of Vienna, on March 27, 1896, until the establishment of sustained film production. The vast expanse of the Empire's territory, which included modern-day parts of Poland, the Czech Republic, Slovakia, Hungary, Bosnia, and Northern Italy and a diverse ethnic mix of peoples means that it is particularly difficult to create a unified picture. Accordingly, this entry focuses principally on the areas of the Empire in which German was spoken.

The first attempts at filming in the Habsburg territories were made by **Lumière** cameramen. An example is the brief film sequence shot by Charles Moisson, entitled *Entrée du cinématographe* (June 1896), in which the building which first housed Viennese projections is featured. However, an act of legislation, perhaps the first relating to the cinema promulgated by the Empire and one of the first in Europe, soon outlawed the work of the French company in Austrian territories. The prohibition was ordered because Lumière cameramen, having projected films many times in 1896–1897, left the imperial territory without having paid the taxes which they owed.

From 1897, cinematographic activity passed to entrepreneurs who shot film and travelled from cities to small towns and into the countryside, showing the marvels of moving pictures. Aside from metropolitan areas, the first cinemas were opened in the far-flung corners of the Empire in 1907–1910. In its first stages of development, however, cinema mainly was diffused through **itinerant exhibitors** who travelled with their projectors from city to city, from fair to fair.

The first of these entrepreneurs came from the tradition of busking showmen, circus people, traveling salesmen, and funambulists who for centuries had wandered through Europe. A character who neatly summarizes this tradition and its multiple forms of pre-cinematic showmanship is Louis Geni (born in 1856). After a long career as an illusionist and owner of a panopticon and a museum collection of nature's curiosities, he became an important itinerant exhibitor in the Austro-Hungarian Empire and ended up as owner of a moving picture theater.

Until 1898, moving picture projections often were advertised as "technical experiments" produced by the cameraman. This term indicates how they were initially conceived of as demonstrations of the new technology which reproduced movement. It was sufficient for the image to move and the content of the film was secondary. Only subsequently, once the novelty had worn off, did it

become necessary to depict something which had intrinsic artistic value.

In this initial period, moving pictures had no fixed venue and, in urban areas, were projected in the halls of hotels, beer halls, or **music halls**. From 1901 on, an important change occurred with the development of mobile projection booths. Initially booths measured 12 × 8 meters, but within a few years they had reached much larger proportions of up to 20 × 8 or even 30 × 12 meters. The booths could be erected and dismantled at every stop on an exhibition circuit. The pavilion, equipment, and owner's family and workers moved from location to location, often associated with **fairs**, in carriages or by train. Their growing success meant that the booths were replaced by circular pavilions, similar to the big-tops of the circus, which could seat from 1,000 to 2,000 people. Indeed, the first Austrian films were made by pavilion owners so that they themselves could increase their repertoire of films.

The first company to make films continuously was founded in Budapest in 1898 by Moritz Ungerleider and Josef Neumann. Named Projectograph-Filmgesellschaft, the company produced nonfiction films beginning in 1905. The company then earned its reputation by renting its films and soon achieved a dominant position in Hungary.

In Vienna, the first company to produce films continuously was **Saturn**, founded between 1905 and 1906. Its exclusive product was erotic films, advertised in the pages of the German **trade press**. The first Austrian magazines devoted to moving pictures were *Die Kinematographische Rundschau* and *Anzeiger für die gesamte Kinematographen-Industrie*, beginning in 1907, and *Österreichischer Komet*, beginning the following year.

In 1906, also in Vienna, Josef Halbritter began making nonfiction films. One year later, thanks to the efforts of Professor Alto **Arche**, moving pictures began to serve educational purposes. This interest became so strong in Austria that, in 1912, a magazine called *Kastalia* appeared, with the aim of promoting the educational value of moving pictures in the schools and wider society.

The major pioneers of Austrian cinema were Gustav Anton Kolm, his wife Louise Veltée **Kolm**, and photographer Jakob Julius Fleck. After four years of making short films, in 1910, thanks to the financial assistance of Louise's father, owner of the Viennese Panopticum, the three partners founded the Erste österreichische Kinofilms-Industrie AG. At the beginning of 1911, the company was renamed Österreichische-ungarische Kinoindustrie. On 15 October 1911, economic difficulties and management disputes doomed the venture. However, within a few months, the three founded another company, **Wiener Kunstfilm**. The output of this company was prodigious, especially given the constraints under which it operated; by December 1912, the company had released more then ten films, including dramas, **comedies**, and documentaries.

At the same time, Count "Sascha" **Kolowrat-Krakowsky** was making his first cinematographic experiments in the castle of Gross-Meierhöfen in Bohemia. Having relocated to a studio in 1912, he began releasing films through his company, Sascha-Filmfabrik.

In the period between 1912 and 1913, other film companies were set up in Vienna, including Vindobona-Film (founded by the writer Felix Dörmann), Kallos-Film-Industrie Gesellschaft, Jupiter-Film Gesellschaft, Hida-Film, Emel-Film-Gesellschaft Lutze & Co., Dramagraph-Film, Halbritter Film, and Wiener Spezialfilmfabrik.

In all, approximately 350 films were made in Austria from the time of cinema's inception up until 1918, with more than 200 nonfiction films produced by 1914.

A separate sector of filmmaking was involved in **advertising**. The idea of using moving pictures for commercial ends was well established in the first decade of the 20th century, but the first company to specialize in making such films did not appear in Austria until 1913, when Adam Julius founded Erstes österreichische konzessionierte Reklamefilm-Institut. The company's aim was to produce **advertising films** for distribution in Austria and abroad. This innovative enterprise did not manage to gain a firm footing, however, and folded within less than a year. Another, more successful advertising film company, Handels- und Industrie-Film-Gesellschaft, also emerged slightly later that year, founded by the Viennese businessmen, Josef Fuchs, Paul Schönwalder, and Friedrich Landau.