ABSTRACT: Within the US motion picture industry, Hollywood is a (big) tree that hides the forest. Indeed, in this industry, besides this powerful and dominating industrial cluster, there are other—though minor—clusters, particularly in New York and San Francisco. The paper focuses on the latter and argues that the development of the film industry in the San Francisco Bay Area relies on specific regional assets: (1) a unique urban context and experience, (2) a unique alternative culture, and (3) a world-class technological cluster. The paper starts by briefly describing the path dependency of the film industry in the Bay Area, and how the city of San Francisco has started (in the 1980s) to implement a dedicated policy aimed at promoting the development of this industry. In this context, the paper explores the way that the San Francisco Bay Area became an attractive place for filmmakers and the fact that the 1970s marked the beginning of a new regime of film
shootings. The paper then describes how, since then, the Bay Area asserted itself as a place for film production, and that has resulted in a multisite and smoothly expanding industrial cluster with a quite dynamic local labor market. Finally, the paper questions the mechanics of the film industry cluster in the Bay Area, its connections with Hollywood, and its impacts on the global influence of San Francisco.

Keywords: Film Industry. San Francisco Bay. Regional Assets.

RESUMO: Dentro da indústria cinematográfica dos EUA, Hollywood é uma (grande) árvore que esconde a floresta. Com efeito, neste setor, além deste poderoso e dominante cluster industrial, existem outros, embora menores, especialmente em Nova York e San Francisco. O artigo centra-se neste último e argumenta que o desenvolvimento da indústria cinematográfica na área da Baía de San Francisco conta com ativos regionais específicos: (1) um contexto e uma experiência urbanos únicos, (2) uma cultura alternativa única e (3) um cluster tecnológico de classe mundial. O artigo começa por descrever brevemente a dependência do caminho da indústria cinematográfica na área da Baía de São Francisco e como a cidade começou (na década de 1980) a implementar uma política dedicada à promoção do desenvolvimento dessa indústria. Nesse contexto, o artigo explora o fato de que a área da Baía de São Francisco se foi convertendo num lugar atraente para os cineastas e como a década de 1970 marcou definitivamente o início de um novo regime de filmagens. O artigo descreve como a área da Baía, desde a década de 1970, também se afirmou como um local para a produção de filmes, e que, como corolário, acolhe hoje em dia um cluster industrial em gradual expansão e “multisite”, bem como um mercado de trabalho local bastante dinâmico. Finalmente, o artigo questiona a mecânica do cluster da indústria cinematográfica na área da Baía de São Francisco, as suas conexões com Hollywood e os seus impactos na influência global de São Francisco.


RESUMEN: En la industria cinematográfica estadounidense, Hollywood es un árbol (grande) que esconde el bosque. De hecho, en este sector, más allá de este poderoso y dominante cluster industrial, hay otros, aunque más pequeños, especialmente en Nueva York y en San Francisco. El artículo se centra en esto último y argumenta que el desarrollo de la industria cinematográfica en la zona de la bahía de San Francisco tiene activos regionales específicos: 1) un contexto y una experiencia urbanos únicos, 2) una cultura alternativa única y 3) un cluster tecnológico de nivel mundial. El artículo comienza describiendo brevemente la dependencia del camino de la industria cinematográfica en el área de la bahía de San Francisco y cómo la ciudad comenzó (en la década de 1980) a aplicar una política dedicada a promover el desarrollo de esta industria. En este contexto, el artículo explora el hecho de que dicha área se ha convertido en un lugar atractivo para los cineastas y cómo los años 1970 marcaron definitivamente el comienzo de un nuevo régimen de filmación. El artículo describe cómo el área de la Bahía, desde la década de 1970, también se ha establecido como un lugar para la producción de películas y que, como corolario, ahora alberga un cluster industrial de expansión gradual y “multisitio”, así como un mercado laboral local muy...
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Frédéric Leriche | Regional Assets, Industrial Growth, Global Reach: the case study of the Film Industry in the San Francisco Bay area

dinámico. Por último, el artículo cuestiona la mecánica del cluster de la industria cinematográfica en la Bahía de San Francisco, sus conexiones con Hollywood y sus impactos en la influencia global de San Francisco.


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For a century now, Hollywood has dominated the US film industry (Scott and Leriche 2008), and, as a cornerstone of the US “soft power” (Nye 2009), has spread over the world US cultural-products and images (Mingant 2009). Meanwhile, in the US, despite Hollywood (the biggest concentration of capital and labor in this industry), other places have witnessed the growth of (smaller) industrial clusters, contributing to the US global influence. This is particularly the case with New York and San Francisco, two metropolises which are associated with renowned filmmakers such as Martin Scorsese, Woody Allen or Spike Lee in New York (Lippy 2000), Francis Ford Coppola, George Lucas or Clint Eastwood in San Francisco. Surprisingly, the latter has drawn very little attention amongst social scientists. Hence, though the San Francisco Bay Area is renowned for its high tech industry, i.e. Silicon Valley, in this paper, we would like to discuss the case of the Bay Area in regards to its multifaceted relations with the motion picture industry. We argue here that, even though the film industry in the Bay Area is connected in different ways to the “neighboring” Hollywood cluster (in terms of capitalistic, industrial, technical, labor, commercial, and market links), this industry has been able to rise and grow thanks to specific regional assets that led to the development of a relatively independent (in terms of industrial organization and capitalistic status) and original (in terms of aesthetic production and creativity) industrial cluster.

At this starting point, since it is a key concept of our argument, we need to define what we mean by “specific regional assets”, and how they take shape in the Bay Area. As opposed to generic regional assets—or generic resources—, which are basic resources available in many different

1 “San Francisco” refers here to the city-county of San Francisco, located at the center of the metropolis, with a population of roughly 800,000, while the “San Francisco Bay Area”—or simply the “Bay Area”—refers to the whole metropolitan area, which comprises nine counties: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma, with a population of more than 7 million.

2 There is indeed a relative geographic proximity between Los Angeles (Hollywood) and San Francisco, which are distant of less than 400 miles (600 kilometers); it is a six hours drive, or one hour flight.
points in the economic space (briefly defined here as a firm or an industry related by the division of labor) or in the geographic space (a concrete place), specific regional assets—or specific resources—are original and non-interchangeable resources, inherited from nature, social life, or history (like a landscape or a landmark), or endogenously built through time by a productive entity evolving in the economic space or in the geographic space (Storper and Walker 1989; Colletis and Pecqueur 1996; Gumuchian and Pecqueur 2007). Specific regional assets in San Francisco are of three kinds: (1) a unique high standard metropolitan context and experience—promoted worldwide by cinema, literature, and other media, like advertising, or by the tourist industry—embedded in cherished natural and artificial landscapes, and iconic landmarks (like the Golden Gate Bridge) (Walker 2007); (2) a unique culture, since San Francisco is a place that has historically fostered “alternative” and disruptive ways of thinking and living, compared to the Mainstream America, such as environmentalist movements, Beatniks and Hippies, LGBT prominent communities (Leriche and Rubin 2011; Celnik 2012); and (3) a leading-edge technological cluster, dominating the world communication technologies and multimedia industries, and historically connected with motion picture techniques (Kenney 2000; Walker 2018).

The three types of inherited and socially built resources identified here give San Francisco’s cinematographic production an idiosyncratic aesthetic and narrative dimension. American Zoetrope, one of the major firms located in San Francisco, provides a significant testimony of an explicitly proclaimed specificity of San Francisco’s film industry: “American Zoetrope has constantly embraced the creative possibilities of technology, and is known for orchestrating alternative approaches to filmmaking and challenging stale Hollywood standards”\(^3\). Hence, the purpose of this paper is to show that, thanks to these specific regional assets, the Bay Area is, despite the continuing reassertion of Hollywood’s dominance\(^4\), “California’s Alternative Film Capital” (Stein 1984, 30). In other words, we argue that the Bay Area cannot be considered as a simple satellite production center, and that, despite symbiotic relations with Hollywood, on the contrary, like many other film industry clusters, such as Vancouver (Coe 2001) or Soho in London (Chapain and Stachowiak 2017), the Bay Area’s film cluster has been able to exist by itself, to partially get out of Hollywood’s sphere of influence, and even to regularly shake up Hollywood’s industrial and commercial routines.

\(^3\) Source: https://www.zoetrope.com/american-zoetrope/ (06/22/2020).

\(^4\) The most striking examples of the domination of Hollywood over San Francisco’s film industry probably occurred when Disney Corporation bought Pixar (in 2006) and Lucasfilm (in 2012).
From “Picture in Motion” to “Motion Picture” in San Francisco: first historical steps, and detour developments

The purpose of this section is to briefly describe the path dependency of the film industry in San Francisco, and how it is related to the global reputation of the Bay Area. It shows that San Francisco has played a pioneering role in the industry, though it rapidly fell in Hollywood’s shadow after the mid-1910s, and that, nonetheless, a local film industry reemerged in the 1970s and 1980s, meeting and melting with high tech industries in the 1980s and 1990s. It also shows that, since the 1980s, taking advantage of these industrial dynamics, San Francisco local authorities have actively backed the development of the industry, thanks to a dedicated policy aimed at promoting economic growth.

Path creation, and path development: a brief historical overview

San Francisco and the Bay Area have played a key-role in the development of the basic techniques of the “picture in motion”. In this regards, Solnit (2010) highlights that, thanks to Eadweard Muybridge, who was an innovative photographer, San Francisco was indeed a pioneer in the film industry. As Solnit puts it:

Photographer Eadweard Muybridge laid the foundation for a new technology of moving pictures that would evolve into cinema as we know it. (…) In that period [1855-1881], Muybridge sped up photography, which hitherto could produce those images the film business calls “stills” but so far had been able to capture only the slow world and the world stopped for the camera. Muybridge made photography fast; he was the fastest camera in the West, the first photographer who could capture horses and men in motion. He shot them in series that could be projected onto a big screen, projected in quick sequences that simulated life. Thus began the road to cinema. It was as though the ice of frozen photographic time had broken free into a river of images. (Solnit 2010, 23 and 26).

Thereafter, in the silent film era, the small town of Niles—latter incorporated in the city of Fremont—became an important place of the film industry, though for a short period of time. Indeed in 1915, the Essanay Studios hired Charlie Chaplin to work in Niles, where he shot five films in three months (including his famous The Tramp) (Barack 1998). Other filmmakers came to Niles, and, in the end, tens of films were shot there in the 1910s and 1920s, particularly “Cowboy films”. Anyway, despite such promising débuts, the Bay Area, like New York (which was the dominating cluster in the cinema industry until the mid-1910s), has not been able to benefit from this first mover advantage. Indeed, between 1915 and 1920, and particularly thanks to David W. Griffith’s movie The Birth of a Nation (1915), Hollywood made a spectacular breakthrough in the

5 Fremont is located in Alameda County.
industry, overshadowing all other production locations, leading to their stagnation or decline (Scott 2005).

Nonetheless, after Hollywood’s breakthrough, San Francisco continued to grow in its own way, growing as an industrial city, becoming a leading center in industrial innovation (Walker 1996), and exploring new technological horizons (signal treatment, radio communication, and electronics) (Sturgeon 2000). Although all along this period San Francisco was not directly involved in the film industry strictly speaking, some of these innovations have contributed to the improvement of techniques required in the motion picture industries. Some examples are the invention of vacuum tube (in 1907), television (in 1927), and sound techniques like Dolby (in 1965) and THX (in 1983)—developments rooted in regional technology. Hollywood took advantage of the Bay Area innovation capacities. In 1939, for instance, Walt Disney Studios bought specialized tubes to Hewlett-Packard, at that time a new firm located in Palo Alto (Santa Clara County); such tubes were necessary equipment to develop sophisticated sound techniques for the film Fantasia (released in 1940)\(^6\). In other words, the rise and growth of Silicon Valley—in Santa Clara County—spared little room for the development of relations between technology and industry on the one hand, aesthetic creativity and (visual) arts on the other.

Furthermore, relations between capital and technologic innovation, on the one side, and culture and artistic creativity, on the other, led in the 1970s and 1980s to the development of new ideas, new projects, and new firms, involved in the film industry (notably, as we shall see below, American Zoetrope, Lucasfilm, and Pixar). The development of specific skills in computer generated images—thanks to local technology professional networks embedded in Silicon Valley—reinforced the growth of a very distinct sort of motion picture industry, in which visual effects play a key-role, including animated films. This movement was strengthened in the 1990s by the rise of the internet and multimedia industry in San Francisco, which set the scene for the rise of a new sort of firms, exploring firstly the video on demand (VOD) market, before exploring secondly the production of films. In this regards, the Netflix Company definitely played a pioneering and disruptive role. The commercial success of these leading firms laid the foundation for the development of a dynamic industrial cluster. But, before developing this point, we need to emphasize that local governments, and particularly the city of San Francisco, aware of the

\(^6\) Another example is the Ampex Company, which “stole” the German patent for tape recording at the end of World War II; created in 1944 and located in San Carlos (Santa Clara County), Ampex built recorders massively used in film, radio and television industries of Southern California (and elsewhere).
opportunities offered by the development of the film industry, took several initiatives aiming at backing the growth of the industry.

The rise of a dedicated public policy: urban (re)development and industrial growth

In the 1980s and 1990s, the economic context was marked by the rise of a new industrial paradigm, featured by the development of so-called “creative cities” (Landry and Bianchini 1995), by the development of a new “creative class” (Florida 2002), or, more accurately and in broader theoretical terms, by the development of a “cognitive-cultural capitalism” (Scott 2008). In this context, San Francisco, like many other cities, regions, and countries around the world, engaged a public policy aiming at promoting the development of a local cultural and cognitive economy (Leriche and Rubin 2012). The film industry is one of the major aspects of this local economic development strategy. This led to the creation, in 1988, of the San Francisco Film Commission, which aims both at attracting film shootings and at helping regional producers to implement their projects:

The San Francisco Film Commission works to develop, recognize and promote film activities in San Francisco. We work to promote the San Francisco Bay Area as a film destination while also working with the local film community to support local projects with significant ties to San Francisco.7

To back the development of the film industry, the city of San Francisco has constantly promoted both its comparative advantages (generic regional assets) and competitive advantages (specific regional assets), through a set of various tax incentives, dedicated services to interact with filmmakers (the San Francisco Film Commission and its extension, Film San Francisco), and an urban development policy aiming at providing specific facilities to filmmakers. This policy has proven to be successful, since the number of films shot in San Francisco has considerably increased since the 1970s (figure 1 below). In 2007, the ICF report emphasized the success of this policy, in terms of direct, indirect, and induced economic impact (employment, firms, and local taxes)8. Moreover, by worldly broadcasting images, the film industry advertises the city of San Francisco and the Bay Area, and consequently has a major impact on the global reputation and fame of the city, hence on its influence and, conversely, on its attraction (particularly on migrants, investors and tourists).

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7 Source: https://filmsf.org/film-commission (06/22/2020).
8 This report was ordered by the San Francisco Film Commission.
Besides, urban redevelopment, engaged in the 1990s, plays a crucial role in this public policy. In the early 1990s, both global historic context and local geographic context have impacted San Francisco’s land market, hence the economic development strategy of the city of San Francisco, and, as a corollary, the locational structure of the industry. The end of the Cold war, indeed, offered land and real estate opportunities in the Bay Area, and, particularly, in San Francisco. Two military bases (Treasure Island and The Presidio) have shot down, and have then been reintegrated in the civilian urban fabric, i.e. in the speculative processes of the real estate industry. Treasure Island is a landfill island, developed for the 1939 international fair (Golden Gate International Exposition). Though it has then been a military base, during a long period of time (between 1941 and 1991), Treasure Island has welcomed some film shootings in the late 1980s (for movies like Indiana Jones or Copycat). The global geopolitical context led to the retrocession of the island to the city in 1997. After quite controversial negotiations, a redevelopment project was finally approved in 2011, and this zone is since then being converted, and is the site of new urban developments, including offices, commercial spaces, hotels, and housing (Walker, 2017). But, the most important change is related to The Presidio, a formerly military base (between 1848 and 1994), which has been the setting of the 1988 eponym film. After complex negotiations, The Presidio was retroceded to the city of San Francisco, opening new development perspectives (Booth Wiley 2000). In 2005, Lucasfilm, which facilities had spread out over several locations within Marin County, decided to move some of its major services to the Presidio, where a dedicated new building—the Letterman Digital Arts Center—nowadays welcomes tech services like computer generated images and online communication (Industrial Light & Magic, LucasArts, and Lucas OnLine). This relocation from Marin County to San Francisco (referred to here as the “Lucasfilm effect”) was an opportunity to concentrate different services at the same place, potentially allowing the decreasing of the cost of internal transactions. It also dramatically impacted the locational structure of firms and employment in the Bay Area (table 2 below), since roughly 1500 workers were involved in this relocation process.

Regional assets and film shootings: San Francisco, an attractive place for filmmakers

San Francisco has always been an attractive place for film shootings, and also for actors, filmmakers and producers, to live and work. Different regional assets, both generic and—

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9 This spatial spread out is common in the case of a rapidly expanding firm; indeed, initial facilities can rapidly be overwhelmed by the success of the firm and, in this situation by the “physical expansion” of the firm.
moreover—specific ones, are used as inputs, shaping a quite distinctive—compared to Hollywood’s products—aesthetics of such films. At the same time, many of these films have contributed to the worldwide broadcasting of iconic images of the city of San Francisco and of the Bay Area, contributing to the promotion of the fame of the whole metropolitan area, and hence to its influence and its attractiveness.

**Shootings: a growing number of films**

After Hollywood’s breakthrough, San Francisco became a place for shooting films and TV series (like *The Streets of San Francisco*, 1972-1977). Indeed, San Francisco, as a “unique” and distinct city in the US, has attracted many film shootings, and still does—even more and more (figure 1). Furthermore, and this is a crucial point, like Hollywood did in the 1910s with Cecil B. DeMille, David W. Griffith, and Thomas H. Ince, San Francisco has attracted—particularly in the late 1960s and early 1970s—many major filmmakers. Some of them (notably Francis Ford Coppola and George Lucas) decided to make their living—and to work and create their own studio—in the Bay Area, setting the ground for the development of a local—production—film industry. As Film San Francisco puts it, “The first moving image was captured in Northern California and since then San Francisco has been a magnet for filmmakers such as Alfred Hitchcock, Clint Eastwood, Chris Columbus, Francis Ford Coppola, Philipp Kaufman, and George Lucas”[^10].

Echoing the general development of the industry, the number of films (and TV series) mainly or partly shot in San Francisco has spectacularly increased, from two in the 1920s to more than sixty in the last three decades[^11]. In this regards, the 1970s definitely marked the beginning of a new regime of film shootings.

[^11]: The list provided by filmsf.org does not mention the silent era films of the 1910s and 1920s shot in Niles, nor the animated films released by Pixar since the mid-1990s. Likewise, this list does not mention, surprisingly, *Barbary Coast* (1935), which we have included here. Exact numbers are: 2 in the 1920s (actually, the first film mentioned in this list was shot in 1923); 5 in the 1930s (including *Barbary Coast*); 6 in the 1940s; 10 in the 1950s; 16 in the 1960s; 25 in the 1970s; 47 in the 1980s; 64 in the 1990s; 63 in the 2000s; 49 on the period 2010-2016. Total: 287 films and TV series.
San Francisco’s regional assets and the aesthetics of films

Table 1 provides a selected and non-exhaustive, but illustrative, list of twenty-six films partly (or, for some of them, mainly) shot in San Francisco or the Bay Area for outside scenes, in which different aspects of the city (natural and urban landscapes, local history and culture, social and economic lives) are used as inputs. Refining Pleven’s distinction (2013) between “ville prétexte”, i.e. films in which the city plays a marginal role in the scenario (and is used for its clichés images), and “ville texte”, i.e. films in which the city plays a central role in the story (and influences action and characters), we suggest to distinguish four ways the Bay Area’s regional assets are used: universal, background, ingredient, purpose. We acknowledge that this categorization partly relies on aesthetic considerations that are not measurable, that the limits between such categories are fuzzy, and even that the relevance of such categories is subject to debates. Still, we believe this helps to understand the way the Bay Area’s regional assets are designed and economically used by the film industry.

<table>
<thead>
<tr>
<th>Title</th>
<th>Film Maker</th>
<th>Released (year)</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barbary Coast</td>
<td>Howard Hawks</td>
<td>1935</td>
<td>Purpose</td>
</tr>
<tr>
<td>San Francisco</td>
<td>W.S Van Dyke</td>
<td>1936</td>
<td>Purpose</td>
</tr>
<tr>
<td>The Lady from Shanghai</td>
<td>Orson Welles</td>
<td>1947</td>
<td>Background</td>
</tr>
<tr>
<td>Dark Passage</td>
<td>Delmer Daves</td>
<td>1947</td>
<td>Ingredient</td>
</tr>
<tr>
<td>Vertigo</td>
<td>Alfred Hitchcock</td>
<td>1958</td>
<td>Ingredient</td>
</tr>
<tr>
<td>Bullitt</td>
<td>Peter Yates</td>
<td>1968</td>
<td>Ingredient</td>
</tr>
<tr>
<td>Take the Money and Run</td>
<td>Woody Allen</td>
<td>1969</td>
<td>Background</td>
</tr>
</tbody>
</table>

12 Such debates belong to humanities and social sciences, like Cultural Studies or Film Studies / Film Theory, for instance. It is beyond the ambition of this geographic paper to develop this point and to enter in these debates.
**Fig. 2:** “Films mainly or partly shot in San Francisco (non-exhaustive selection)”, https://filmsf.org/sf-filmography

First, for some of these films, based on a scenario that we will here consider as universal, the shooting could take place in any other city, and the value-added of a shooting located in San Francisco remains marginal; this is the case with *Copycat* (1995) for instance. Second, in some films, San Francisco’s landscapes or features are chiefly backgrounds, as in *The Conversation* (1974), *Basic Instinct* (1992), or *Blue Jasmine* (2013). In this case, the scenario is not deeply embedded in San Francisco’s culture, history, social or economic life. Aspects of the city are used as inputs that provide a distinctive aesthetic dimension to the scenario. In other words, though the scenario of such films could take place elsewhere, the specific natural and urban landscapes of San Francisco are commercially interesting inputs that give a positive dimension to the film. Third, in some films, different features of the city itself—and of the Bay Area—are used as ingredients that play a key-role in the narrative line of the story. This is the case with the *Planet of the Apes* franchise (2011, 2014, 2017), dystopic science-fiction movies picturing a dark future generated by the combination of
greedy capitalism and tech culture of Silicon Valley. The city of San Francisco can then become—sometimes uncomfortably—overwhelming, as in the movie *Dark Passage* (1947). As Peirano (2012) puts it:

> Dark Passage represents a new step of the film noir: the accession of the city to the rank of a personage marks the period of maturity of this genre, forthcoming other films in which San Francisco plays a major role, like *Vertigo* (1958) and *Bullitt* (1968)\(^\text{13}\).

Fourth, sometimes, the “unique” local history, social life, and culture are the very reasons of a scenario, and even the issue and purpose of the film itself. This is the case with, for instance, *San Francisco* (1936), *Dirty Harry* (1971), *Escape from Alcatraz* (1979), or *Harvey Milk* (2008), which echo several iconic aspects of San Francisco’s natural and cultural features. The film *The Towering Inferno* (1974), a disaster movie which denounces real estate speculation and cynical capitalism, referring to the early 1970s debate about the manhattanization of downtown San Francisco (Brugman and Sletteland 1971), is another clear example of this category.

The first category suggested here is composed of films that are sort of Hollywood runaway productions, or, conversely, films locally produced, which could have been shot elsewhere. In this case, San Francisco has to directly compete with other shooting locations, like Vancouver (Scott and Pope 2007), and the cost of generic regional assets is the main factor leading to the choice of the shooting place. This is the case with the film *THX 1138*, directed by George Lucas and produced by American Zoetrope and Warner Bros, that was supposed to be shot in Japan, but, facing a lack of funds, that was finally shot in the Bay Area and Los Angeles\(^\text{14}\). But a few films can really be considered as belonging to this category. For the numerous films belonging to the second, third, and fourth categories, the locational factors of the shooting process are clearly based on San Francisco’s specific regional assets. In other words, natural and urban landscapes, local history, and local alternative and tech cultures become crucial inputs integrated in the final products. As in the case of Hollywood’s film industry, using Los Angeles icons and symbols to fill its film production with specific urban images (Christopherson and Storper 1986), different facets of San Francisco’s patrimony (landscapes, symbolic neighborhoods and places, architectural icons, cultural features, historical events, and historic characters) are injected in these films, contributing to the shaping of the quite distinctive—and sometimes unique—aesthetic dimension of the films shot in the Bay Area.

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\(^{\text{13}}\) “*Dark Passage représente une nouvelle étape dans le film noir : l’accession de la ville au rang de personnage marque les années de maturité du genre, tout en annonçant d’autres films dans lesquels San Francisco joue un rôle majeur, comme *Vertigo* (1958) et *Bullitt* (1968)*”; translation FL.

\(^{\text{14}}\) Source: https://filmsf.org/sf-filmography (07/10/2020). The film was a commercial failure, and Francis Ford Coppola actually lost money (Pollock 1983).
Regional assets and film production: growth of the cinema industry in the San Francisco Bay Area

Meanwhile, and most importantly here, the Bay Area has become a production site for films, chiefly thanks to the success of three important local firms: American Zoetrope, Lucasfilm, and Pixar, a “short list” that Netflix has recently caught up with. In this regards, a different set of specific regional assets is required, leading to the production of original films. These regional assets can be categorized in a more classical way: capital, in the form of a production system made of leading firms, and many kinds of specialized subcontractors and suppliers, and labor, in the form of artistic creativity and technologic skills. As a result, the film industrial cluster of the Bay Area is organized at two different geographic scales: a regional cluster, and three “local” clusters, anchored to the leading firms mentioned above.

Locational structure of the industry

Many firms—of all sizes and specializations—are involved in the industry, at different stages of the production process. The number of these firms has slightly increased between 2003, 2011, and 2018 (from 606 to 620, and 699; +12.7% in the last census period)\textsuperscript{15}. The recent accelerating increase of the number of firms corroborates the growth of the local labor market (see below), and definitely confirms the idea that the Bay Area’s film industry is expanding.

The micro-geography of the film industry in the Bay Area, shown in table 2, underlines a logical correlation between firms and employment. In other words, the locational pattern of the industry in the Bay Area, expressed by the locational structure of the firms, is attuned to the locational structure of employment, forming three major local clusters. Each of these local clusters is spread over two proximate counties. The first local cluster is made up of Marin County and San Francisco, whose developments are clearly connected, and is remarkably stable (at 283 and 284 firms) from 2003 to 2011; but, thereafter, the number of firms increased to 315 firms (+10.9% between 2011 and 2018). The crossover between these two counties is the result of the relocation of some production facilities of the Lucasfilm Company, from Marin County to San Francisco in 2005 (the “Lucasfilm effect” mentioned above). This first local cluster represents 45.1% of all Bay Area firms in 2018, and is, by far, the most important one. Alameda and Contra Costa counties together are home to the second local cluster, which was stable between 2003 and 2011 (with 154

\textsuperscript{15} The stability in the number of firms—and employment—between 2003 and 2011 is likely explained, fundamentally, by the economic context of this census period, marked by the Great Recession (2008-2010).
and 156 firms), but then showed a remarkable increase in the number of firms, rising to 202 in 2018 (+31.2%). This local cluster makes up 28.9% of the Bay Area firms in 2018. Finally, San Mateo and Santa Clara counties house a third local cluster, displaying the same development pattern (123 firms in 2003, 126 in 2011, but 139 in 2018, hence +10.3% in the last census period). This local cluster accounts for 19.9% of the Bay Area firms in 2018.

<table>
<thead>
<tr>
<th>County</th>
<th>1990</th>
<th>2003</th>
<th>2011</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>E</td>
<td>F</td>
<td>E/F</td>
<td>E</td>
</tr>
<tr>
<td>Alameda</td>
<td>1385</td>
<td>1729</td>
<td>105</td>
<td>16.5</td>
</tr>
<tr>
<td>Contra Costa</td>
<td>513</td>
<td>1313</td>
<td>49</td>
<td>26.8</td>
</tr>
<tr>
<td>Marin</td>
<td>525</td>
<td>2240</td>
<td>92</td>
<td>24.3</td>
</tr>
<tr>
<td>Napa</td>
<td>60</td>
<td>65( est.)</td>
<td>7</td>
<td>9.3 (est.)</td>
</tr>
<tr>
<td>San Francisco</td>
<td>2213</td>
<td>1771</td>
<td>191</td>
<td>9.3</td>
</tr>
<tr>
<td>San Mateo</td>
<td>845</td>
<td>716</td>
<td>50</td>
<td>14.3</td>
</tr>
<tr>
<td>Santa Clara</td>
<td>1765</td>
<td>1836</td>
<td>73</td>
<td>25.2</td>
</tr>
<tr>
<td>Solano</td>
<td>354 (est.)</td>
<td>284</td>
<td>7</td>
<td>40.6</td>
</tr>
<tr>
<td>Sonoma</td>
<td>194</td>
<td>485</td>
<td>32</td>
<td>15.2</td>
</tr>
<tr>
<td>Total</td>
<td>7854 (est.)</td>
<td>10439 (est.)</td>
<td>606 (est.)</td>
<td>17.2 (est.)</td>
</tr>
</tbody>
</table>


42
Geography of the local labor market

Despite statistical bias (particularly the lack of accuracy of data for San Mateo County in 2011\textsuperscript{16}), table 2 shows that employment in the film industry in the Bay Area has regularly increased between 1990 and 2018, though showing a slight decrease between 2001 and 2004 (ICF 2007). The number of employees in the industry rose from about 7900 in 1990, to 10400 in 2003 and 2011, and 12700 in 2018 (+21.5% in the last census period, 2011-2018).

The micro-locational pattern of the film industry in the Bay Area again displays a structure made of three major employment loci (or clusters) (figure 2). Displaying an impressive employment crossover, the two counties of Marin and San Francisco represent the most important locus (2738 jobs in 1990, increasing to 4542 in 2018)\textsuperscript{17}. In the last census period (2011-2018), employment has hardly increased (+1.4%). Nevertheless, the relative weight of this locus in the Bay Area is quite stable (34.9% of all jobs of the Bay Area’s film industry, in 1990, and 35.8% in 2018). The employment shift between these two counties dramatically impacted the average size of firms, with Marin dropping from 24.3 to 9.6 employees per firm between 2003 and 2011, while San Francisco, conversely, increased from 9.3 to 17.3 (this tendency is confirmed in 2018). Alameda and Contra Costa counties represent the second most important locus in size, and the most dynamic one. Indeed, the growth of employment in these two counties (from 1898 jobs in 1990, to 4498 in 2018) has been amazingly high in the last census period (2011-2018), at +64.9%, particularly thanks to Contra Costa County (+291.8%), contrasting with Alameda County (-11.7%). This growth likely relies on the tremendous success of the Pixar Company, located in Emeryville (North of Alameda County). As a result, the relative weight of this locus in the Bay Area has increased (from 25.1% of all jobs of the Bay Area’s film industry, in 1990, to 35.4% in 2018). A third—smaller yet promising—locus is found in the counties of San Mateo and Santa Clara. In the long run employment has increased rather smoothly (from 2610 jobs in 1990 to 2826 jobs in 2018), and the relative weight of this locus in the Bay Area has actually declined (from 33.2% in 1990 to 22.3% in 2018). Nonetheless, employment in this locus displayed a noticeable increase in the last census period (2011-2018), at +21.8%, essentially thanks to Santa Clara County (1590 jobs in 2011, and 2080 jobs in 2018; +30.8%). The recent and fast growth of employment in this locus is likely related

\textsuperscript{16} In 2011 indeed, the Census Bureau provides proxies of employment (1000-2499); we have here suggested estimations to complete table 2.

\textsuperscript{17} Employment in Marin County has dropped between 2003 and 2011, from 2240 to 760 (and has continued to decline since then, at 507 in 2018), while in San Francisco, conversely, employment has increased on the same period 2003-2011, from 1771 to 3718 (and has continued to increase at 4035 in 2018).
to the commercial success of the Netflix Company, located in Los Gatos (Santa Clara County, the heart of Silicon Valley). This third locus is hence likely to continue its expansion.

San Francisco’s film cluster(s): innovation, disruption, global reach

Compared to Hollywood (with roughly 120,000 workers), the film industry in the Bay Area is much smaller. The purpose of this section is to briefly discuss the path dependency of the three film industry local clusters of the Bay Area, showing that a few related firms have played a leading role, and that San Francisco’s film industry, though symbiotically connected to Hollywood, is likely to maintain some forms of creative independence and strategic autonomy, and to shine over the world by itself, thanks to its regionally specific assets.

Genealogy of the film clusters in San Francisco

The geographic and functional proximity of the firms involved in the film industry in the Bay Area—in the form of three local clusters—deserves some comments and explanations. To be sure, identifying and measuring inter-firms connections and co-operations would require in-depth research that is beyond the scope of this paper. Nevertheless, such connections are clearly

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**Fig. 4:** Frédéric Leriche; Cécile Michoudet (Adobe Illustrator®), “Employment in the film industry, San Francisco Bay Area: geographic concentrations (2018), and growth (2011-2018), per county,” Based on Census Bureau - County Business Patterns (2018)
suggested by previous research (ICF 2007), and are highlighted by prominent actors in the industry, particularly regarding the connections between creative firms and tech firms.\(^{18}\)

Moreover, an analysis of the three leading firms in each cluster, i.e. American Zoetrope, Lucasfilm, and Pixar, illustrates three key facts about the Bay Area’s film industry. First, the path creation (Garud and Karnøe 2001)—or the “planting of the seed”—of the film industry in San Francisco was the result of a “rejection” of the Hollywood studio system. Second, the development paths of these three companies are closely intertwined with each other. Third, the commercial success of these firms, from the 1970s to the 2000s, gave a strong impetus to the Bay Area to become an alternative film production center to Hollywood.

When Francis Ford Coppola and George Lucas created their own company, American Zoetrope, in 1969 and located it in San Francisco, their purpose was to distance themselves from the Hollywood studios, which they found creatively stultifying. American Zoetrope, which is a relatively small firm but of a high reputation, played a key-role in the rise of the industry in San Francisco as the pioneering studio in the metropolitan area. Nevertheless, and quite paradoxically, Hollywood and the Bay Area were still strongly connected. In this regards, we need to emphasize the impact of Francis Ford Coppola’s trilogy *The Godfather*\(^{19}\), which marked a shift in US cinematographic production, as a commercial and artistic landmark of American *film d’auteur*. Furthermore, Lewis (2009) argues that thanks to its commercial success, to its creative influence on filmmakers, and to its effects on the renewing of the gangster film genre, *The Godfather* saved Paramount and—probably pushing his point a bit too far—saved Hollywood. Conversely, this film allowed Francis Ford Coppola to fund his future *film d’auteur* projects, like *The Conversation* (1974) for instance.

Leaving American Zoetrope in 1971, George Lucas created Lucasfilm, whose tremendous growth—thanks to the worldwide commercial success of the sagas *Indiana Jones* and *Star Wars*—played then a determinant role in the development of San Francisco’s film industry in the 1970s and 1980s. Lucasfilm was a pioneer in computer-enhanced film making, particularly in the *Star Wars* saga, and in a new generation of fantasy blockbusters. Lucasfilm is still a major employer of the industry in the Bay Area, despite having been purchased by Disney Corporation in 2012 upon the retirement of George Lucas.

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\(^{18}\) Source: https://www.zoetrope.com/american-zoetrope/ (06/22/2020).

Over the East Bay, in Emeryville (Alameda County), Pixar has been a powerhouse in animated films since the 1990s. Pixar is related to Lucasfilm, since it was founded in 1986 by Steve Jobs, who purchased the Graphics Group, a service of the Lucas Computer Division (an affiliate of Lucasfilm) dedicated to software vision effects, from George Lucas. Pixar revolutionized animated filmmaking with its computer generated images, leading to several imitators in Hollywood and around the world\(^{20}\). In this sense, Pixar has become the clearest symbol of the association between artistic creativity and technologic innovation embedded in Silicon Valley. Pixar was bought up by Disney Corporation in 2006, but still operates relatively independently.

In the 2000s, another new and innovative firm, Netflix, emerged in the Bay Area. Its development has proven to be disruptive for the relations between the film industry—as a creative industry—and high tech, and for the relations between the Bay Area and Hollywood. Netflix was founded in 1997 as a DVD rental company, and located in Los Gatos. The company subsequently took advantage of the rise of the multimedia industries in the Bay Area (Zook 2001; Epstein 2005). In 2007, it successfully switched to the expanding and lucrative VOD market and became the leading streaming system for the next decade. Then, in 2013, Netflix started producing films and TV series, and even distributing for other producers. After Netflix, other companies, belonging both to the tech industry (Apple and Amazon) or the creative industries (Disney Studios), have developed their own VOD platforms and have moved back to Hollywood to buy up studios for production. In other words, thanks to Netflix, the Bay Area proved to be innovative, disruptive, and able to benefit from the first mover advantage, and, in fine, to challenge Hollywood.

**San Francisco’s film cluster development: a framework**

As many researchers have demonstrated, the design of complex technological products and of cultural products requires geographic proximity (Scott, 1988; Power and Scott 2004; Boschma 2005; Scott and Leriche 2005; Talbot 2010; Torre and Talbot 2019). Nevertheless, geographic proximity does not necessarily imply functional proximity, and, as a consequence, efficiency of the production process. In other words, co-location does not mean co-operation, and performance and effectiveness of any production system, or of any economic space, require *ad hoc* institutions, political order and local collective governance.

For decades now, the factors leading to success and regional growth have attracted the attention of many researchers in social sciences, particularly in economic geography. The purpose of this paper is not to go back to the scientific debates and to the huge bibliography that has resulted, but to suggest a framework aiming at highlighting the foundations of regional development, and to confront it with the empirical case of the Bay Area’s film cluster. According Scott (2002), regional development relies on five key foundations, related to geographic agglomeration, which stimulates positive externalities and increasing returns effects: (1) a complex of various kinds of firms, connected by traded and untraded relations; (2) a local labor market comprising complementary specialized categories of workers; (3) collective structures of training, learning, and innovation; (4) institutional infrastructures, both public and private; (5) physical infrastructures and planning policies. The combining of these five foundations fosters the Bay Area’s film cluster. Nonetheless, our view is that more is required than the analysis of inter and intra-firms interactions and local labor markets. This case study indeed shows the importance of being embedded in specific regional assets that inspire and nourish the cluster, even as a new growth center (here, the Bay Area’s film industry) remains deeply connected to the primary one (Hollywood) and to the rest of the world through different types of relations (capitalistic, industrial, technical, labor, commercial, and market links).

Concluding remarks

The development and the peculiarities of the Bay Area’s film industry have been influenced by regional assets that are available in the city of San Francisco and in the Bay Area: an amazing geographic context, a unique progressive culture, and a local technology expertise. The example of San Francisco’s film cluster corroborates Sarita, Chapain and Comunian’s (2017)—amongst others—hypothesis about the importance of place in understanding cultural industries dynamics. As they express it:

this literature [about the economic geography of the creative industries] discusses how creative workers and industries are embedded within place in terms of inspiration, cultural framework,

21 On this debate, see for instance Benko and Lipietz (1992), Storper (1997), and Scott (2006), amongst many others.
22 This includes, in the case of the film industry, which is a major segment of cultural industries, artists, creative and innovative workers. As demonstrated by Markusen and King (2003), art and artistic creativity are at the center of the cultural economy system.
23 Like, for example in San Francisco, the School of Digital Filmmaking (created in 2005).
24 Amongst such institutional infrastructures, we can mention the yearly programming of 48 film festivals in the Bay Area, like the Noir City Film Festival, the San Francisco International Gay & Lesbian Film Festival, the Wine Country Film Festival, the United Nations Association Film Festival, the Bicycle Film Festival, French Cinema Now. Source: https://filmsf.org/film-commission (06/22/2020).
Balancing between competition and cooperation, the relations between the Bay Area and Hollywood are complex, multi-faceted, and symbiotic. One the one side, these two clusters have always been closely linked, yet the foundations of the Bay Area’s film industry rely on a certain rebellion against the domination of Hollywood, even as the latter has reasserted its control with the buyouts by Disney Corporation. But, on the other side, thanks to its specific regional assets, the Bay Area’s film industry remains different, innovative, and displays some forms of rebounding capacities, which, in the end, allow the Bay Area’s film cluster to preserve a relative industrial and aesthetic independence.

Furthermore, from Zoetrope to Netflix, the Bay Area’s film industrial complex has demonstrated its ability to take disruptive aesthetic, technologic, industrial, and commercial initiatives. The development of the four leading companies in the Bay Area have, one after the other, disrupted the routines of Hollywood producers and changed the entire film industry. This is an exceptional record for a secondary industrial center. Storper and Walker (1989) suggested that such innovation could generate new growth center and also that the latter might replace the original primary industrial center. In this case, however, that has not happened and Hollywood clearly remains the leading production center, partly thanks to the adoption and absorption of the Bay Area’s innovations and innovators. In other words, despite the capitalistic, financial, industrial, and commercial domination of the industry by Hollywood, the Bay Area’s film industry has been able to take advantage of its regional assets to move forward on its own path, allowing the Bay Area to reinforce its global image and influence. To put it in a metaphorical way, within the “forest” of the US motion picture industry, Hollywood indeed is a big “tree”. But, behind this tree, there are smaller ones, of different species, rooted in different soils, and giving different fruits, though these trees might be interconnected by different types of lianas, in both directions.

Bibliographic references


Torre, André and Damien Talbot. “Questionner la proximité”, Mondes sociaux, (2019); [online] https://sms.hypotheses.org/19070


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