

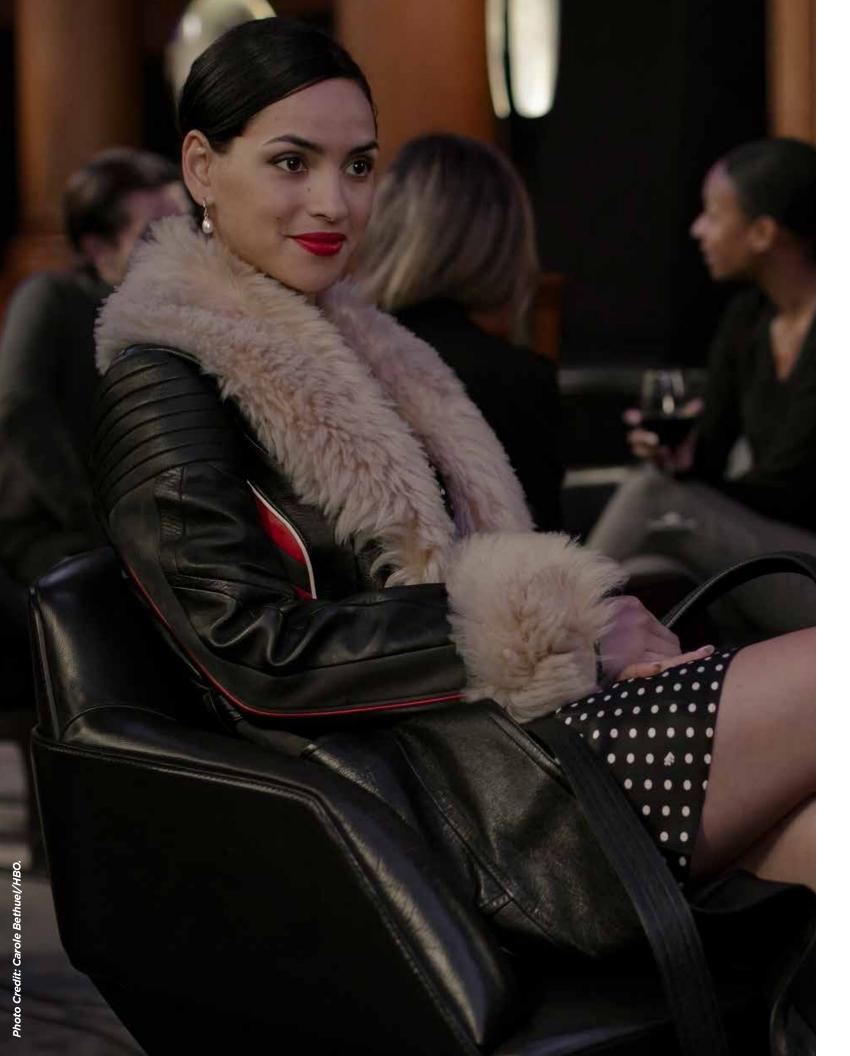


A REPORT FOR THE MOTION PICTURE ASSOCIATION FEBRUARY 2023



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Cover Photo Credit: Carole Bethuel/HBO.



### **EXECUTIVE SUMMARY**

"Irma Vep" is a television miniseries written and directed by Olivier Assayas. The miniseries that aired in 2022 is a remake of the 1996 movie, "Irma Vep", also written and directed by Assayas. The 2022 series revolves around the protagonist's experiences as an American actress in France, and weaves in elements of comedy, drama, and satire.

"Irma Vep" was filmed in 2021 in many regions in France, creating significant economic impacts for French residents and businesses. The 2022 miniseries employed many workers across France, generating considerable economic activity. The show's production also supported activity in a wide range of industries through its procurement, and as those employed by the production itself and in its supply chain spent money in the wider economy.

This study, commissioned by the Motion Picture Association, analyzes the production's total economic impacts in France around the time of filming in 2021. In 2021, production of "Irma Vep" resulted in total spending in France of over €32 million.' Spending on wages and salaries for local production crew and other labor was the main expenditure item, making up 54% of the total expenditure. The remaining €15 million was spent with at least 600 locally based suppliers of goods and services, with Île de France, Hauts de France, and Auvergne Rhône Alpes being the regions that received the largest amounts in business spending.

We calculate that expenditure by **the production of "Irma Vep" stimulated a €42 million contribution to France's GDP in 2021.** We find that for every €1 million that the production's own activities contributed to the economy, its expenditure supported a further €1.5 million along its supply chain and through the payment of wages.

We find that the expenditure undertaken by **the show's production stimulated a total of 2,670 full time and part time jobs in France in 2021.** For every 100 people the production directly employed, its expenditure stimulated another 12 jobs across the country.

€42m

Total contribution to France's GDP supported by "Irma Vep"

2,670

Full time and part time jobs supported across France as a result of "Irma Vep"

#### PRODUCTION EXPENDITURE







600 local businesses supported



2,390 direct full time and part time jobs

### TOTAL IMPACT

\$42.2m
total
contribution to
France's
GDP



2,670
full time and part time jobs stimulated across France

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### 1. INTRODUCTION

"Irma Vep" is a TV miniseries remake of a 1996 film, both of which were written and directed by Olivier Assayas. The story follows an American movie star that moves to France to star in a reproduction of a French silent film, Les Vampires. As her reality parallels her on-screen identity, the protagonist struggles with drawing the distinction between art and life.

While the show aired in 2022, it was filmed and produced in 2021 over 100 days. The TV miniseries employed businesses and individuals across many regions in France, contributing to the broader national economy. Through the production of the show, significant economic impacts were created for French residents and businesses.

Oxford Economics was engaged by the Motion Picture Association to conduct an independent economic impact assessment of the production of the show on France's economy. For the study, Oxford Economics used data from HBO to estimate the economic impacts in France arising from the production of "Irma Vep".



## 2. PRODUCTION SPENDING

When a TV show shoots on location, it brings with it jobs, revenue, and related infrastructure development. Physical productions provide an immediate boost to the local economy, fostering job creation and innovation in other industries across the production supply chain. In 2021, production of "Irma Vep" resulted in total spending in France of just over €32 million.

Spending on wages and salaries for local production crew and other labour was the main expenditure item, making up 54% of the total expenditure (Fig. 1). The remaining €15 million was spent with locally based suppliers of goods and services.

€32m

Direct production expenditure in France

Spending on production crew and qualifying labour was €17 million, while local spending on goods and services was €15 million

Fig. 1: Production spend of "Irma Vep" in France, by type



Source: HBO, Oxford Economics



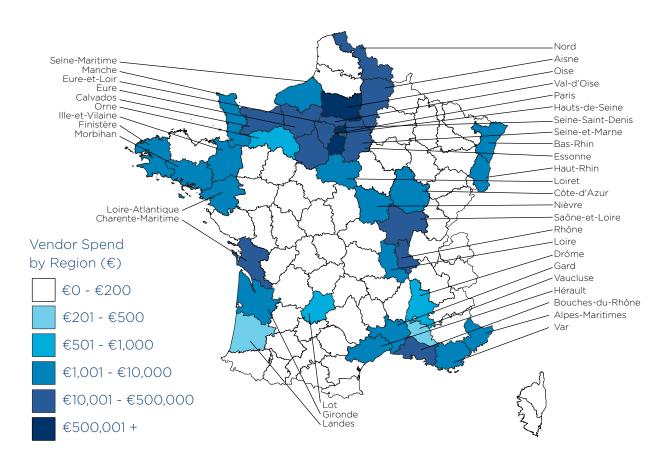






Production spending engaged over 600 businesses from cities in regions across all of France. The region that received the largest amount in business spending was Île de France, followed by Hauts de France and Auvergne Rhône Alpes. A more detailed breakdown of spending at a department level is shown in Fig. 2 below.

Fig. 2: Map of spending with France-based businesses by region



Source: HBO, Oxford Economics

The production of TV shows typically relies on a wide range of goods and services that are required for production, from the procurement of set materials, props, and costumes, to hair and makeup services, transportation, and accommodation for cast members. Production of "Irma Vep" engaged a wide variety of local businesses, out of which the largest spending category involved the rental and leasing industry, representing close to 44% of total spending. This spending included the rental fees associated with using

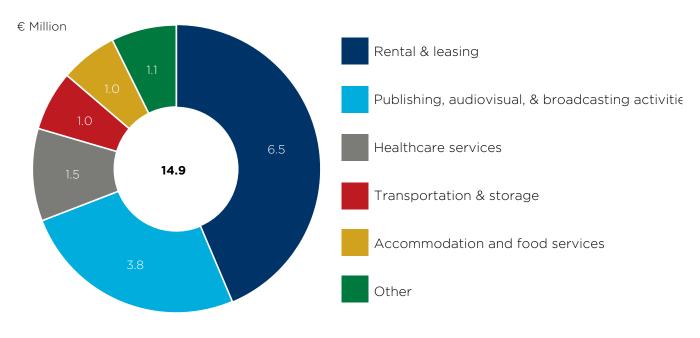
well known local sites, such as the Opéra Comique, the Trésor public, and the Hôtel Plaza Athénée. Rental and leasing fees also went towards furniture, props, lighting, and other production equipment used on set.

The second and third largest categories of spending were publishing, audiovisual, and broadcasting activities (approximately 26% of total spending), and healthcare services (approximately 10% of total spending). While the former includes post-

production services such as special effects, the latter is made up of COVID-19 related services provided by medical centers.

The next largest categories of spending were transportation, accommodation, and food services, but the production also engaged with businesses providing a range of additional services, such as environmental consulting, interior design, and talent management.

Fig. 3: Spend on goods and services with locally based suppliers, by industry



Source: HBO, Oxford Economics

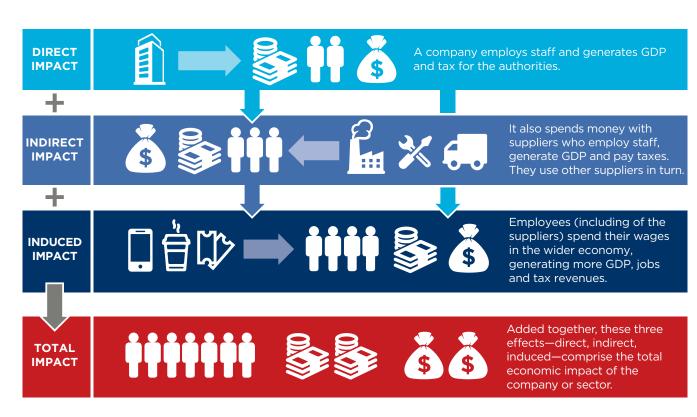
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### 3. ECONOMIC IMPACTS

#### **3.1 CHANNELS OF IMPACT**

The impact of the filming of "Irma Vep" on France's economy is calculated using an economic impact assessment. This involves quantifying the production's economic contribution to France across three channels of expenditure, where the total impact is the sum of the three channels.



Source: Oxford Economics





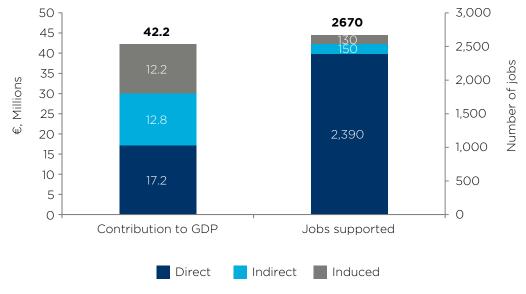
**Total contribution to France's GDP** supported by "Irma Vep"

#### **3.2 TOTAL IMPACT**

Combining all channels of impact, we find that the production of "Irma Vep" supported a €42.2 million contribution to France's GDP in 2021. Some €17.2 million, or 41%, of this was generated by the production itself (direct). The local spending on goods and services supported another €12.8 million along the supply chain (indirect), which represented 30% of the total.<sup>2</sup> The payment of wages by the production studios and the locally based firms in the show's supply chain (induced) stimulated a further €12.2 million contribution to GDP, or 29% of the total (Fig. 4).

For the production of "Irma Vep", for every €1 million in direct GDP generated by the production's own activities, its expenditure supported a further €1.5 million across France.3

Fig. 4: The total GDP and employment contribution supported by the production of "Irma Vep" in France, by channel of impact



Source: Oxford Economics

also had a significant impact on employment in France. In 2021, "Irma Vep" supported a total of 2,670 full time and part time jobs across France. The production itself employed an estimated 2,390 full time and part time workers, or 90% of the total.

by production crews and

employees at the show's

suppliers across the country.

The production of the show

The local spending on goods and services supported another 150 jobs along the supply chain and a further 130 jobs were supported by the spending of wages

In 2021, for every 100 people employed in the production itself, a further 12 jobs were supported across the country through secondary effects.4

According to HBO, the production of "Irma Vep" is estimated to have benefitted from nearly €6.3 million in tax incentives. The incentives provided by the French government are estimated to have produced €6.7 in GDP per Euro of tax incentive received by the production.

The remainder of this section describes the three channels of impact in more detail.

2,670

Full time and part time jobs supported across France as a result of "Irma Vep"

<sup>&</sup>lt;sup>2</sup> While production spending with French vendors totals approximately €15 million, local vendors may spend some part of this with non-French companies, resulting in an estimated local spending impact of €12.8 million.

<sup>&</sup>lt;sup>3</sup> This GDP multiplier effect is calculated by dividing the total impact (€42.2 million) by the direct impact (€17.2 million) and subtracting the result by 1.





#### **3.3 DIRECT IMPACT**

During the production period, the production of "Irma Vep" directly employed an estimated 2,390 full time and part time workers in France.

We estimate that production made a €17.2 million direct contribution to France's GDP in 2021, which came from the payment of employee compensation to locally based staff.5

#### 3.4 INDIRECT IMPACT

The production's positive contribution to France's economy, however, extends past the contribution it makes directly through its own operations. This is related to the purchases of goods and services made from other businesses in order to produce the show. This spending stimulates additional economic activity along the supply chain. This is referred to as the indirect impact.

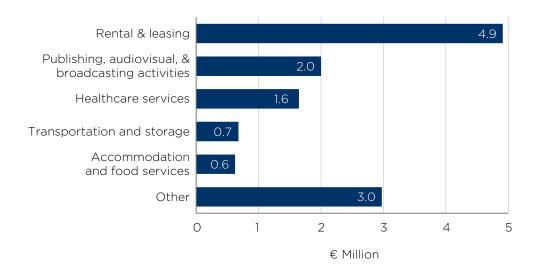
Oxford Economics estimated that the procurement

associated with "Irma Vep" stimulated a €12.8 million contribution to France's GDP along the supply chain.

Over half of this indirect impact was in the rental & leasing, and publishing, audiovisual & broadcasting sectors, where the show's supply chain spending stimulated a GDP contribution of €4.9 million (38%) and €2.0 million (16%), respectively (Fig. 5).

The show's expenditure on inputs of goods and services from locally based suppliers also stimulated 150 full time and part time jobs in the country.

Fig. 5: GDP contribution stimulated by the procurement of goods and services from local suppliers, by sector



Source: Oxford Economics

#### 3.5 INDUCED IMPACT

During the production period, local workers were paid €17.2 million in gross wages and salaries. In addition to this, the people whose jobs are stimulated by the local spending on goods and services are also paid additional wages and salaries.

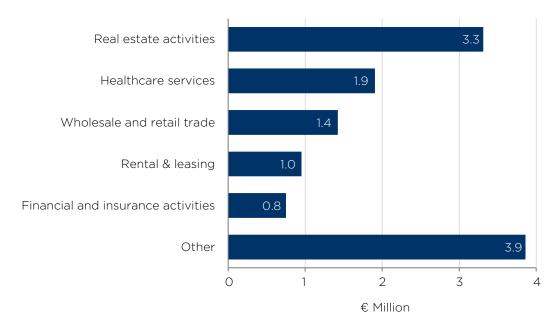
Production crews, and workers employed throughout the of their wages at retail, leisure, and other outlets in France. This stimulates economic activity and

employment at these firms, but also along their supply chains. This is referred to as the show's induced impact.

We estimate the wage-financed spending of local production crews and workers at Francebased suppliers stimulated a €12. 2 million contribution to France's GDP during the production period. Of this figure, the largest contribution of 27% occurred in the real estate sector with a supply chain spend a proportion GDP contribution of €3.3 million.

Additionally, the wagefinanced consumer spending of production crews and workers within the show's supply chain is estimated to have supported 130 jobs across France in 2021.

Fig. 6: GDP contribution stimulated by the payment of wages to locally based workers, by industrial sector



Source: Oxford Economics

<sup>5</sup> The contribution to GDP generated by a company or a project can be calculated as the sum of its surplus (profits) and employee compensation. This approach, known as the income approach, is consistent with the principles of national accounting. For the purposes of this study, we take a conservative approach to this calculation and focus on the employee compensation of local workers, excluding the profits associated with the production in our calculation of direct contribution to France's GDP



### 4. WIDER IMPACTS

In addition to the economic impacts that arise through production spending, television series such as "Irma Vep" can produce impacts that extend beyond the jobs and GDP they support.

#### 4.1 FILM-INDUCED TOURISM

Many well-known locations across France were used as filming sites for "Irma Vep", including hotels, theaters, and other French landmarks. As is the case with other TV or movie distribution of investment productions, when local sites are used for filming locations, visitors and fans of the show often travel from abroad to visit these sites. While challenging to quantify, film-induced tourism has been acknowledged by local businesses and tourist centers as they adapt to an increase in visitors to France. The rise in tourists that are fans of a popular TV series has even led to a restaurant altering its menu to specifically cater to fans of the show.

#### **4.2 BROADER RESOURCE DISTRIBUTION**

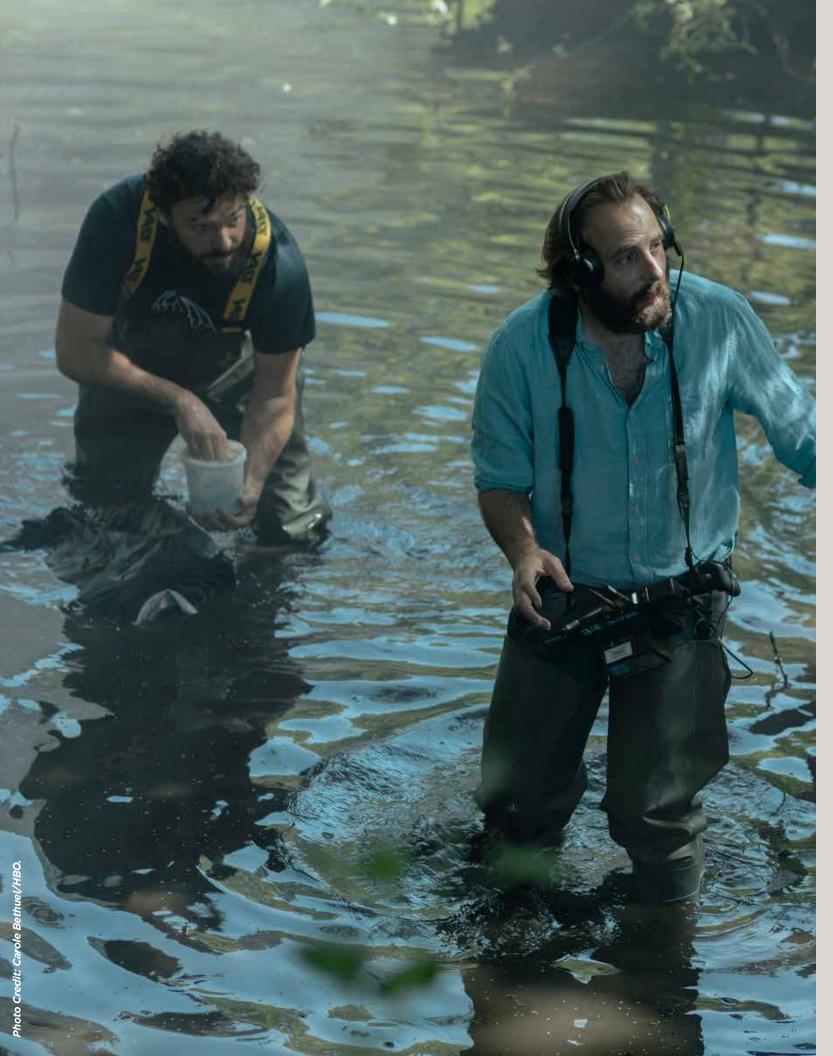
While many film and TV productions tend to focus their resources on specific, wellknown locales, productions that engage businesses on a national scale, such as "Irma Vep", have a larger economic footprint. A decentralized film industry that diverts its attention from metropolitan hubs to smaller towns encourages a broader and wealth, important to growing the economies of less developed areas.<sup>6</sup>

#### 4.3 ENVIRONMENTAL **AWARENESS**

The production of "Irma Vep" engaged the support of an environmental consulting company to reduce its environmental footprint. These consultants were experienced in working with productions to implement practices such as reducing single-use plastic, food waste, and fuel costs, but also in raising awareness around the importance of sustainability, diversity, and inclusion with cast and crew members and external stakeholders. Specifically, environmental consultants encourage responsible approaches that rethink entire production related processes and advocate for locally focused economies.7

<sup>&</sup>lt;sup>6</sup> Balia, Giampietro. "Shooting in the French Regions." Cineuropa, December 5, 2018. https://cineuropa.org/en/newsdetail/354279/.

<sup>7 &</sup>quot;Secoya Eco-Tournage" L'idée Est D'adapter Le Cinéma à La..." CNC. Accessed December 2022. https://www.cnc.fr/cinema/actualites/secoya-





### **APPENDIX: METHODOLOGY**

The impact of the filming of "Irma Vep" on France's economy is calculated using an economic impact assessment. This involves quantifying the production's economic contribution to France across three channels of expenditure. The channels of impact are:

- Direct impact relates to the employment and economic activity generated at the filming locations across France.
- **Indirect impact** captures the economic activity stimulated by the procurement of inputs of goods and services from the locally based supply chain.
- **Induced impact** comprises the wider economic benefits that arise from the payment of wages by the television series, and the firms in its local supply chains, to staff who spend a proportion of this income in local retail, leisure, and other outlets.

The total impact is the sum of the three channels.

This approach enables us to build a picture of the series' overall contribution to France across two key metrics:

- The gross value-added contribution to France's GDP.8
- Employment.

The results are presented on a gross basis. They therefore ignore any displacement of activity from other firms or activities. Nor do they consider what the resources currently used by the show's production, or stimulated by its expenditure, could alternatively produce in their second most productive usage.

Data on the direct impact of "Irma Vep"—including the show's contribution to GDP and jobs created were provided directly by HBO. Direct GDP contribution in France is taken to be equal to local employee compensation.

To estimate the indirect and induced GDP impacts of the show, we used Oxford Economics' proprietary input-output model, constructed using a variety of sources including OECD input-output tables, national account data, and local employment statistics.

A basic domestic IO table gives a snapshot of an economy at a given point in time. The model shows the major spending flows from "final demand" (i.e., consumer spending, government spending, investment, and exports to the rest of the world); intermediate spending patterns (i.e., what each sector buys from every other sector—the supply chain in other words); how much of that spending stays within the regional economy; and the distribution of income between employment income and other income (mainly profits). In essence, an IO table shows who buys what from whom in the economy.

To estimate the indirect impact, we used vendor-level information on the amount spent and type of goods and services purchased from businesses based in the region over the course of the show's production. To calculate the induced impact, we took the wages paid to workers, as provided by HBO, and then allocated those to the sectors where they would have spent those wages in line with the proportions in the regional IO table. We then used those figures to show how many Euros of GDP the show's production supported in the regional economy for every €1 of direct GDP contribution, and how many jobs were stimulated across the region for each 100 people directly employed by the production.

Where GDP is the main indicator of economic activity in France. It is used to measure the rate of growth or decline of the economy, and when it enters a recession.



## **ABOUT OXFORD ECONOMICS**

Oxford Economics was founded in 1981 as a commercial venture with Oxford University's business college to provide economic forecasting and modelling to UK companies and financial institutions expanding abroad. Since then, we have become one of the world's foremost independent global advisory firms, providing reports, forecasts and analytical tools on more than 200 countries, 100 industrial sectors, and 8,000 cities and regions. Our best-in-class global economic and industry models and analytical tools give us an unparalleled ability to forecast external market trends and assess their economic, social and business impact.

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#### February 2023

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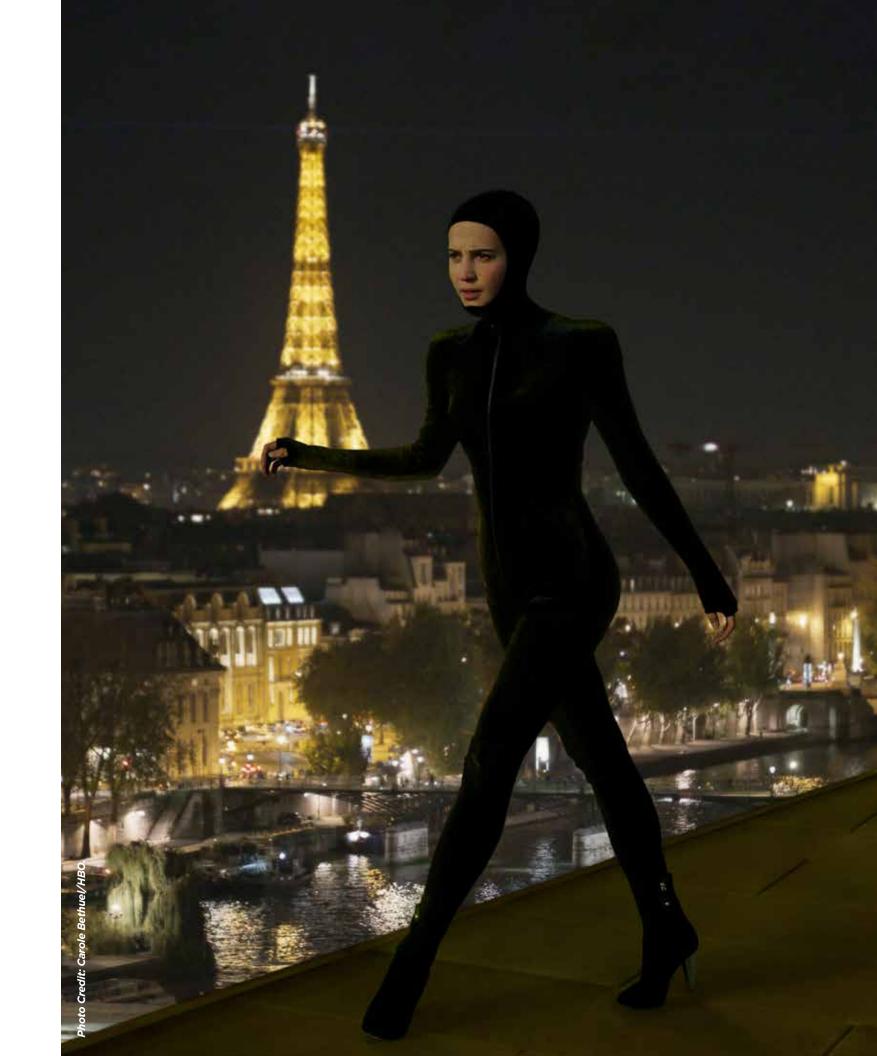
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