

A geographical comparison between the museums of Mexico city and Paris

UNESCO is the United Nations Educational, Scientific and Cultural Organization. It seeks to build peace through international cooperation in Education, the Sciences and Culture.

The Unesco wants to build a new office headquarter, they have little offices around the world but they are looking to build another one as big as the one in Paris. The top city candidate for this is Mexico City.



United Nations
Educational, Scientific and
Cultural Organization

What is our work?

They ask our company to make an study of how the geographical distribution of the museums in Paris and Mexico city to see how similar it is.



The Data

For this project the data we will be using is the geographical coordinates of Paris and Mexico city's museums from the API Foursquare. We choose an emblematic location in the Downtown of each city for Paris the "Louvre Museum" and for Mexico the "Postal Building" and we look for all the museums that exist in a circle area of radius 10000.



.The most important data for

The data look like this:

.For Mexico City

name	categories	address	crossStreet	lat	lng	labeledLatLngs	distance	postalCode	cc	city	state	country	lat	lng	labeledLatLngs	distance	postalCode	cc	city	state	country	formattedAddress	neighborhood	id
Boumaya Museum (Museo Boumaya)	Art Museum	Plaza Carso	Lago Zurich 245	19.440401	-99.204482	[[{"label": "display", "lat": 19.440401, "lng": -99.204482}], [{"label": "display", "lat": 19.440401, "lng": -99.204482}]]	2749	11529	MX	Miguel Hidalgo	Districto Federal	Mexico	19.440401	-99.204482	[[{"label": "display", "lat": 19.440401, "lng": -99.204482}], [{"label": "display", "lat": 19.440401, "lng": -99.204482}]]	2749	11529	MX	Miguel Hidalgo	Districto Federal	Mexico	[Plaza Carso (Lago Zurich 245), 11529 Miguel H...	NaN	4a05d8a0f03bda1435b64aee4
Anthropology Museum of Mexico (Museo Nacional de Historia Natural)	Museum	Av. Paseo de la Reforma s/n	Esc. con Cdad. Mahatma Gandhi	19.425527	-99.185732	[[{"label": "display", "lat": 19.425527, "lng": -99.185732}], [{"label": "display", "lat": 19.425527, "lng": -99.185732}]]	3673	11560	MX	Miguel Hidalgo	Districto Federal	Mexico	19.425527	-99.185732	[[{"label": "display", "lat": 19.425527, "lng": -99.185732}], [{"label": "display", "lat": 19.425527, "lng": -99.185732}]]	3673	11560	MX	Miguel Hidalgo	Districto Federal	Mexico	[Av. Paseo de la Reforma s/n (Esc. con Cdad. M...	NaN	4b0ed3941050d13a202051d8
Museo Tamayo	Museum	Av. Paseo de la Reforma 51	Esc. con Gandhi	19.425555	-99.181823	[[{"label": "display", "lat": 19.425555, "lng": -99.181823}], [{"label": "display", "lat": 19.425555, "lng": -99.181823}]]	3748	11590	MX	Miguel Hidalgo	Districto Federal	Mexico	19.425555	-99.181823	[[{"label": "display", "lat": 19.425555, "lng": -99.181823}], [{"label": "display", "lat": 19.425555, "lng": -99.181823}]]	3748	11590	MX	Miguel Hidalgo	Districto Federal	Mexico	[Av. Paseo de la Reforma 51 (Esc. con Gandhi)...	NaN	4b05b6f00964a520987a22e3
Museo Nacional de Historia (Castillo de Chapul...	History Museum	Bosque de Chapultepec 1a Sección	NaN	19.426403	-99.182072	[[{"label": "display", "lat": 19.426403, "lng": -99.182072}], [{"label": "display", "lat": 19.426403, "lng": -99.182072}]]	4318	11590	MX	Miguel Hidalgo	Districto Federal	Mexico	19.426403	-99.182072	[[{"label": "display", "lat": 19.426403, "lng": -99.182072}], [{"label": "display", "lat": 19.426403, "lng": -99.182072}]]	4318	11590	MX	Miguel Hidalgo	Districto Federal	Mexico	[Bosque de Chapultepec 1a Sección, 11590 Miguel...	NaN	4b05b6f00964a520987a22e3
Museo de Arte Moderno	Art Museum	Paseo de la Reforma	Gandhi	19.422928	-99.179753	[[{"label": "display", "lat": 19.422928, "lng": -99.179753}], [{"label": "display", "lat": 19.422928, "lng": -99.179753}]]	4078	11590	MX	Ciudad de México	Districto Federal	Mexico	19.422928	-99.179753	[[{"label": "display", "lat": 19.422928, "lng": -99.179753}], [{"label": "display", "lat": 19.422928, "lng": -99.179753}]]	4078	11590	MX	Ciudad de México	Districto Federal	Mexico	[Paseo de la Reforma (Gandhi), 11590 Ciudad de...	NaN	4b05b6f00964a520987a22e3

.For Paris

name	categories	address	crossStreet	lat	lng	labeledLatLngs	distance	postalCode	cc	neighborhood	city	crossStreet	lat	lng	labeledLatLngs	distance	postalCode	cc	neighborhood	city	state	country	formattedAddress	id
The Louvre (Musée du Louvre)	Art Museum	Rue de Rivoli	Place du Carrousel	48.860847	2.336440	[[{"label": "display", "lat": 48.860847, "lng": 2.336440}], [{"label": "display", "lat": 48.860847, "lng": 2.336440}]]	212	75001	FR	Le Louvre	Paris	Place du Carrousel	48.860847	2.336440	[[{"label": "display", "lat": 48.860847, "lng": 2.336440}], [{"label": "display", "lat": 48.860847, "lng": 2.336440}]]	212	75001	FR	Le Louvre	Paris	Île-de-France	France	[Rue de Rivoli (Place du Carrousel), 75001 Par...	4a05d8a0f03bda1435b64aee4
Musée du Louvre (Musée du Louvre [1,7])	Museum	Place du Palais Royal	Place Colette	48.862604	2.336558	[[{"label": "display", "lat": 48.862604, "lng": 2.336558}], [{"label": "display", "lat": 48.862604, "lng": 2.336558}]]	224	75001	FR	NaN	Paris	Place Colette	48.862604	2.336558	[[{"label": "display", "lat": 48.862604, "lng": 2.336558}], [{"label": "display", "lat": 48.862604, "lng": 2.336558}]]	224	75001	FR	NaN	Paris	Île-de-France	France	[Place du Palais Royal (Place Colette), 75001 ...	4a05d8a0f03bda1435b64aee4
Orsay Museum (Musée d'Orsay)	Art Museum	1 rue de la Légion d'Honneur	Quai Anatole France	48.859993	2.326387	[[{"label": "display", "lat": 48.859993, "lng": 2.326387}], [{"label": "display", "lat": 48.859993, "lng": 2.326387}]]	949	75007	FR	NaN	Paris	Quai Anatole France	48.859993	2.326387	[[{"label": "display", "lat": 48.859993, "lng": 2.326387}], [{"label": "display", "lat": 48.859993, "lng": 2.326387}]]	949	75007	FR	NaN	Paris	Île-de-France	France	[1 rue de la Légion d'Honneur (Quai Anatole Fr...	4a05d8a0f03bda1435b64aee4
Musée des Arts Décoratifs	Art Museum	107 rue de Rivoli	NaN	48.863077	2.332293	[[{"label": "display", "lat": 48.863077, "lng": 2.332293}], [{"label": "display", "lat": 48.863077, "lng": 2.332293}]]	455	75001	FR	Louvre, Paris	Paris	NaN	48.863077	2.332293	[[{"label": "display", "lat": 48.863077, "lng": 2.332293}], [{"label": "display", "lat": 48.863077, "lng": 2.332293}]]	455	75001	FR	Louvre, Paris	Paris	Île-de-France	France	[107 rue de Rivoli, 75001 Paris, France]	4a05d8a0f03bda1435b64aee4

List of museums:

Mexico City

0	Soumaya Museum (Museo Soumaya)
1	Anthropology Museum of México (Museo Nacional ...
2	Museo Tamayo
3	Museo Nacional de Historia (Castillo de Chapul...
4	Museo de Arte Moderno
5	Museo de Geología
6	Museo Frida Kahlo
7	Museo Nacional de Arte (MUNAL)
8	Museo Nacional de la Cartografía
9	Museo Franz Mayer
10	Museo Mexicano Del Diseño (MUMEDI)
11	Museo de Cera
12	Papalote Museo del Niño
13	Museo Mural de Diego Rivera
14	Museo Casa Carranza
16	Museo de Historia Natural y Cultura Ambiental
17	Museo Jumex
18	Museo de Arte Popular
19	Maná Museo de las Sagradas Escrituras
20	Museo Panteón San Fernando
21	Museo Ripley
22	Templo Mayor (Museo del Templo Mayor)
23	Museo Del Juguete Antiguo
24	Museo del Narcotráfico Mexicano
25	Museo Memoria y Tolerancia
26	Museo Universitario del Chopo
27	Museo Nacional de San Carlos
28	Museo
29	MUTEM Museo del Tequila y el Mezcal

Paris

0	The Louvre (Musée du Louvre)
1	Orsay Museum (Musée d'Orsay)
2	Métro Palais Royal – Musée du Louvre [1,7]
3	Musée des Arts Décoratifs
4	Librairie-Boutique du Musée du Louvre
5	Pavillon de l'Horloge - Musée du Louvre
6	Musée en Herbe
7	Musée du 11 Conti
8	Pompidou Centre – National Museum of Modern Ar...
9	Arrêt Palais Royal – Musée du Louvre [21,48,69...
10	Direction de la production culturelle du Musée...
11	Arrêt Musée du Louvre [27,39,68,69,95,8b]
12	Musée National Eugène-Delacroix
13	Musée de l'Orangerie
14	Café du Musée du Louvre
15	Auditorium du Musée d'Orsay
16	Musée de la Légion d'Honneur
17	Musée du Luxembourg
18	Musée de Cluny - Musée National du Moyen-Âge (...)
19	Place Henry de Montherlant – Parvis du Musée d...
20	Musée des Collections de la Préfecture de Poli...
21	Musée des Arts et Métiers
22	Musée d'Histoire de la Médecine
23	RER Musée d'Orsay [C]
24	Musée d'Art et d'Histoire du Judaïsme
25	Rodin Museum (Musée Rodin)
26	Le Restaurant du Musée d'Orsay
27	The National Residence of the Invalids (Hôtel ...)
28	Musée Grévin
29	Galerie de la Bibliothèque-musée de l'Opéra

Name: name, dtype: object

Geographical Location of each museum.

.Mexico city. The red point corresponds to the “Postal Building” the blue points are the museums on the list.



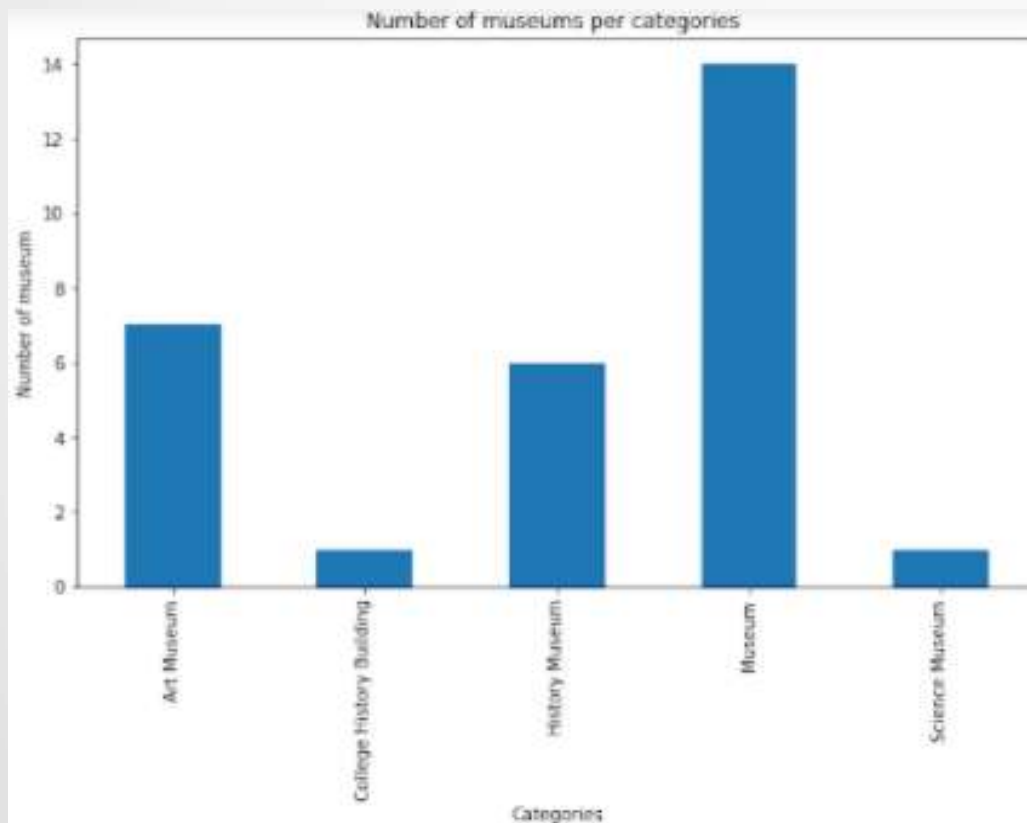
.Paris. The red point corresponds to the “Louvre Museum” the blue points are the museums on the list.



Analysis for Mexico city.

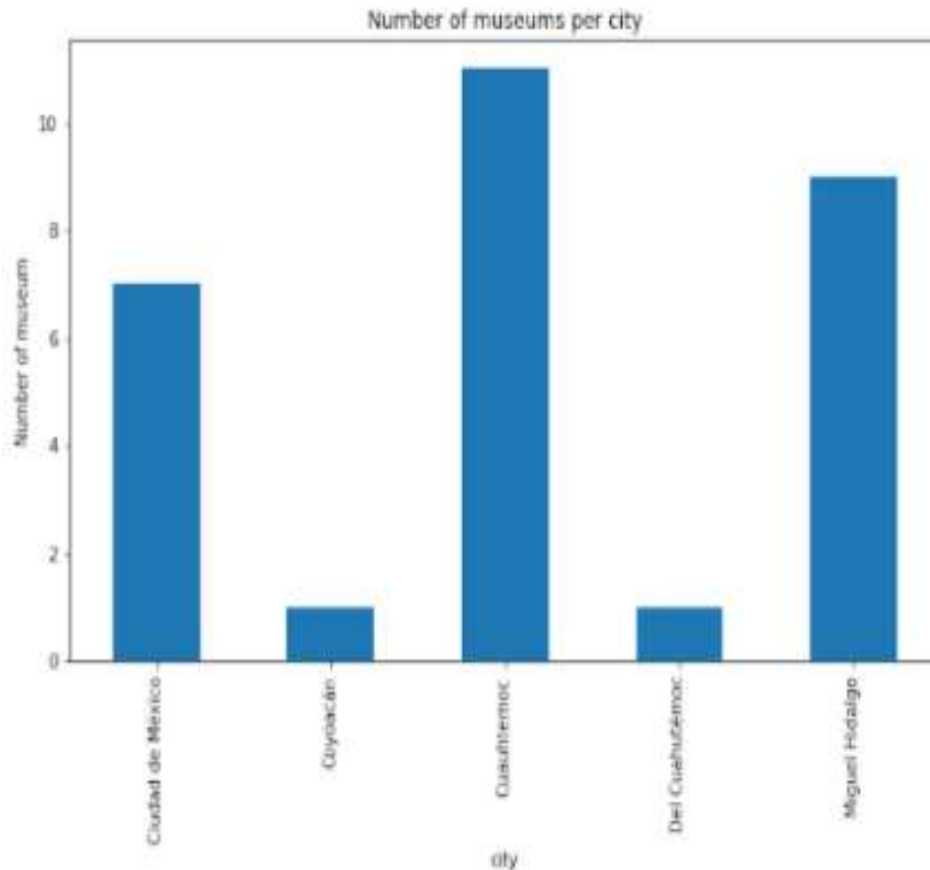
.How many museums are for each category?

The category with most museums is



Analysis for Mexico city.

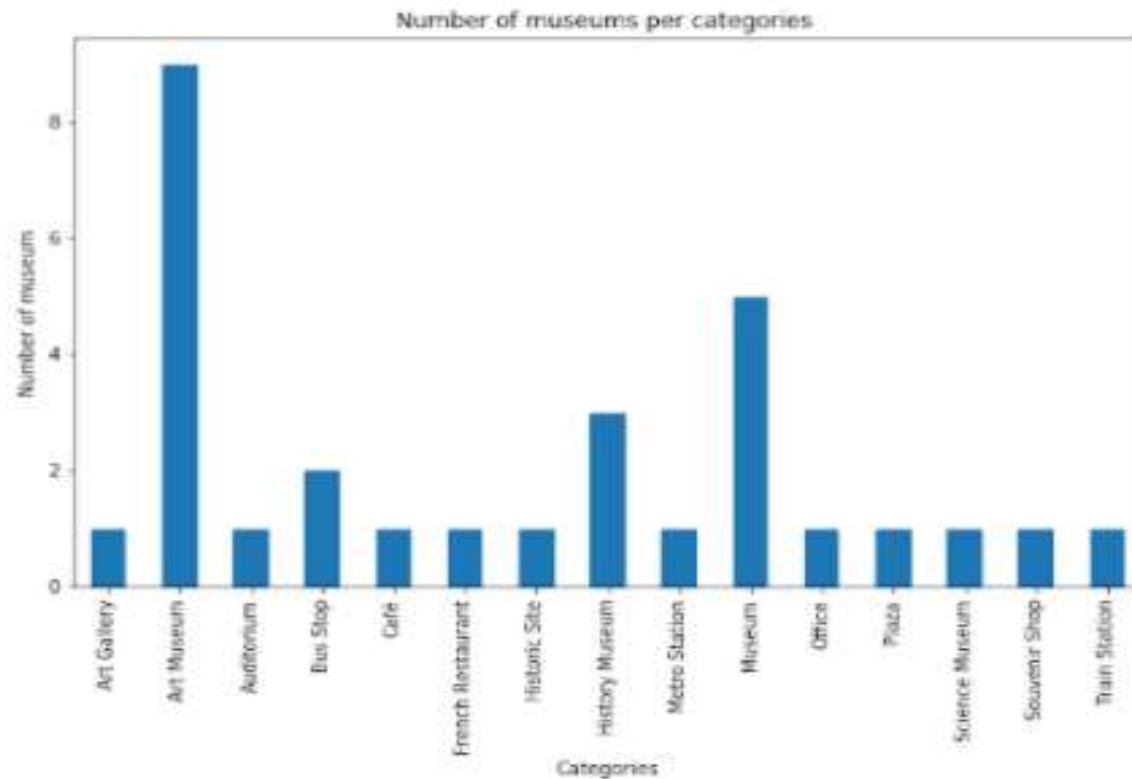
How many museums are for each city?



The city with most museums

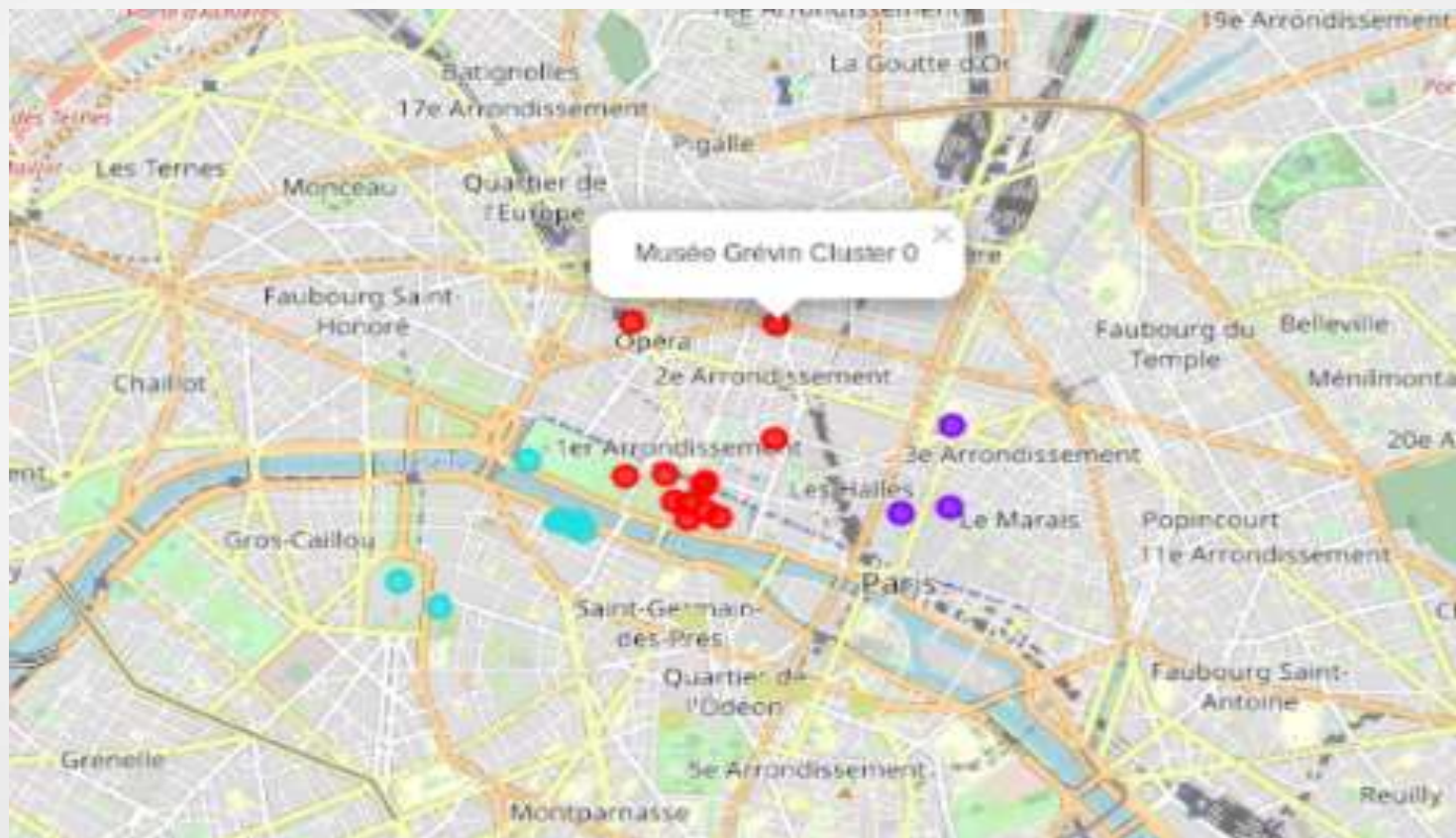
K-clusters in Mexico city

Analysis for Paris



There are 14 categories of museum with the category Art museum

K-clusters Paris



Results

In Paris and Mexico we could form 4 clusters but the museums in Paris were better distributed and the clusters were more clear and organized. In Mexico case we have some museums very far away for the others.

The biggest difference was the number of categories for Mexico there were 5 categories and for Paris are 15.

Conclusions

- *This study alone is not enough to make a decision about building a new Unesco office in Mexico city but it could help .
- *The clusters shows how different and similar the geographical distribution of the museums in Mexico city and Paris; the parisean museums have a more organized distribution and the cluster form much more clear than the mexican's clusters
- *We think that this same study should be done for all the most important t Latin American cities to see wich of them is more similar to Paris.