



THE BATTLE OF NEIGHBORHOODS IN TOKYO

JIAHE YU



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FACE

新宿最大
面積30m
ハイアB1

Pet Casino

LUXOR Bar

エジプト料理とその其他
RESTAURANT

COPABOWL

メンズサウナ

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WORLD GOLF BARS

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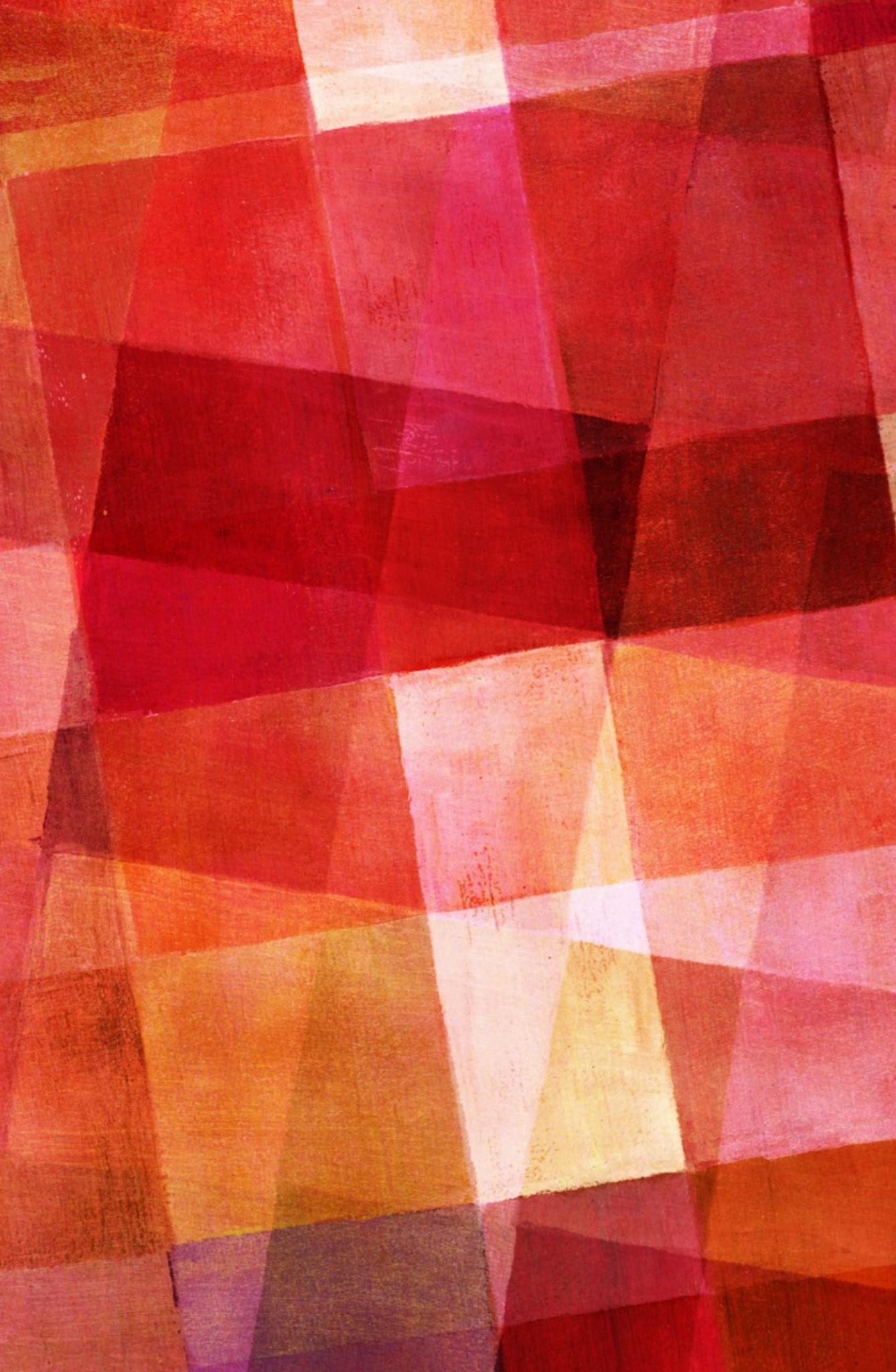
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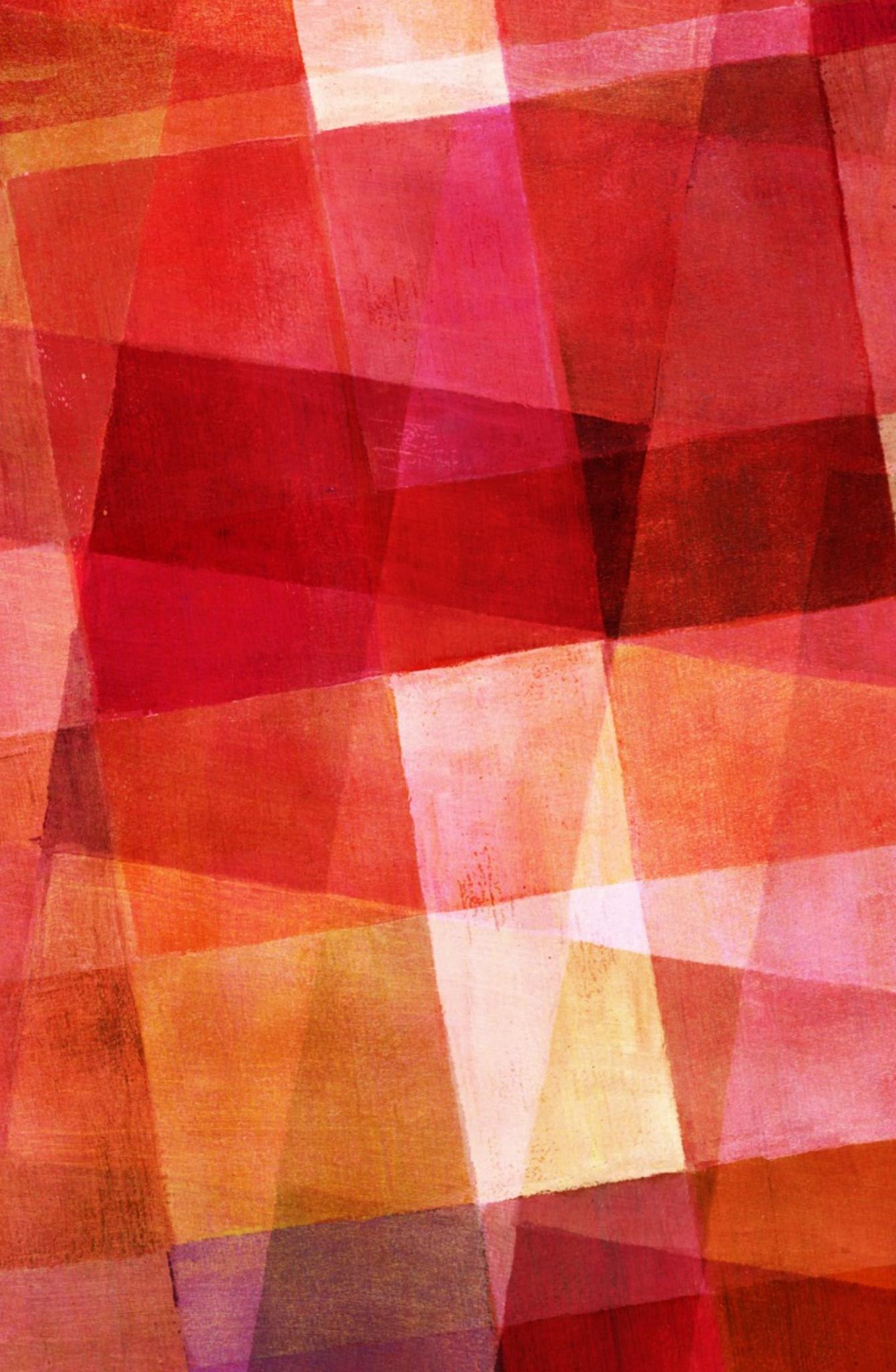




NEIGHBORHOODS IN TOKYO

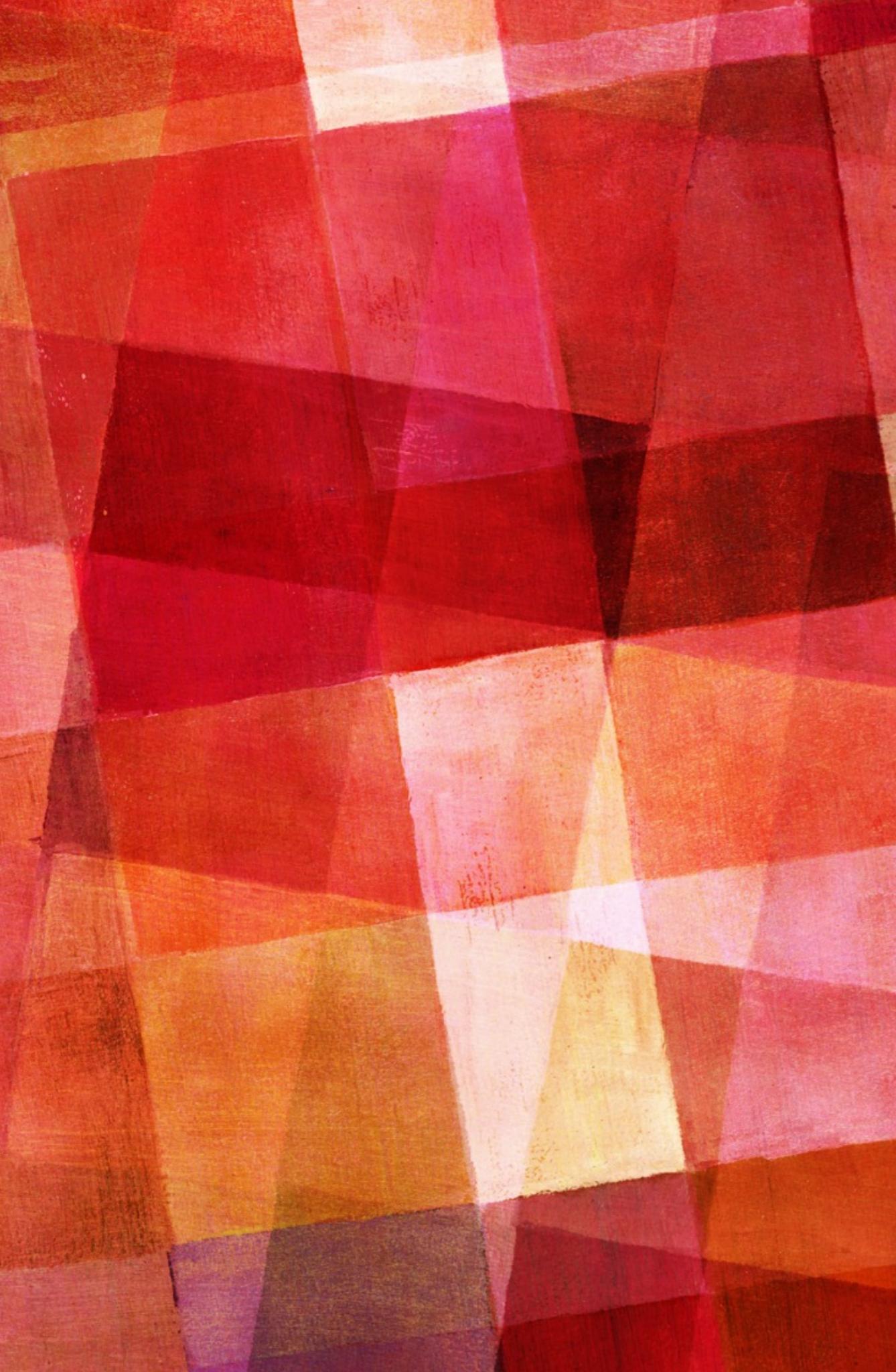
- The Greater Tokyo Area contains 23 special wards, 26 cities, 5 towns, and 8 villages
- In Japan, a ward/city/town/village as an administrative unit of a metropolis is closely equivalent to a London borough or a New York borough
- Under each borough in Tokyo there are many neighborhoods: 1456 neighborhoods in total!





SEGMENTING & CLUSTERING NEIGHBORHOODS

- target audience: apartment rental agencies
- goal: help the apartment rental agencies in Tokyo identify the neighborhoods that match the needs of customers



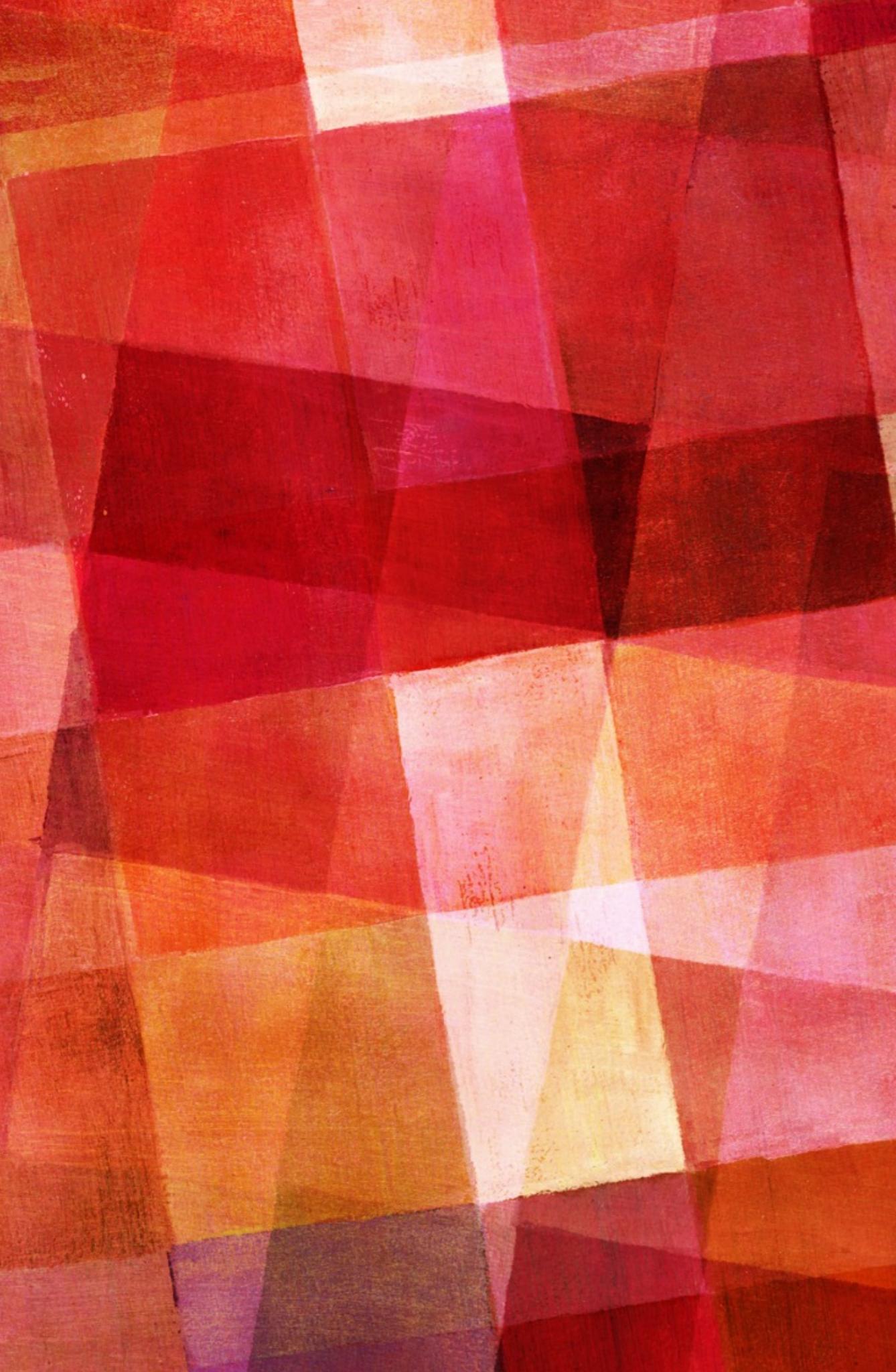
DATA

- step 1 - scrape webpage of Tokyo neighborhood data:
<http://japanzipcodes.blogspot.com/2013/07/the-complete-zip-codes-of-tokyo-japan.html>
- step 2 - obtain the latitude and longitude coordinates using python packages
- step 3 - access Foursquare location data to obtain venue information of Tokyo neighborhoods



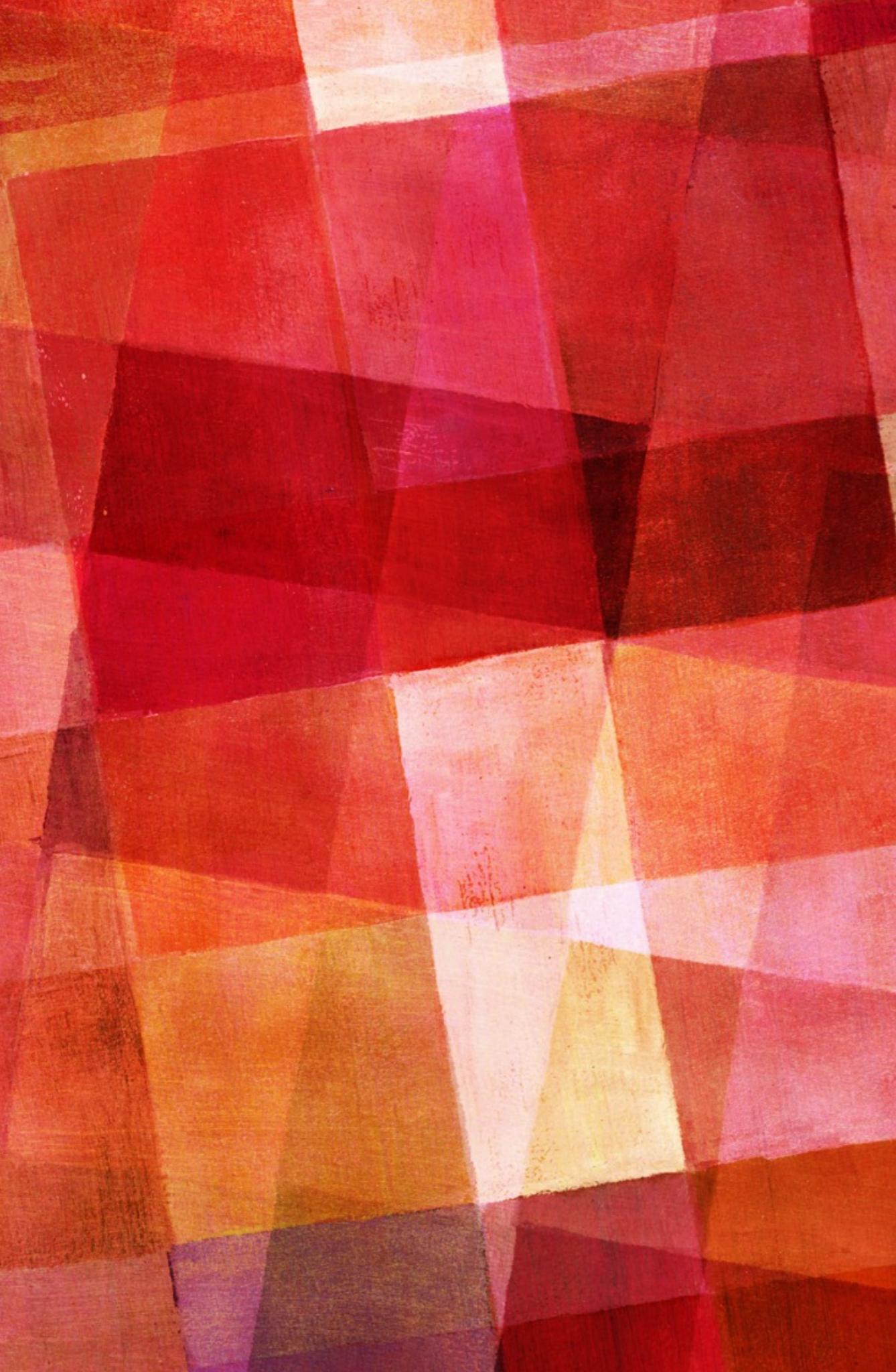
METHODOLOGY

- exploratory data analysis
- k-means clustering analysis:
an unsupervised machine
learning algorithm



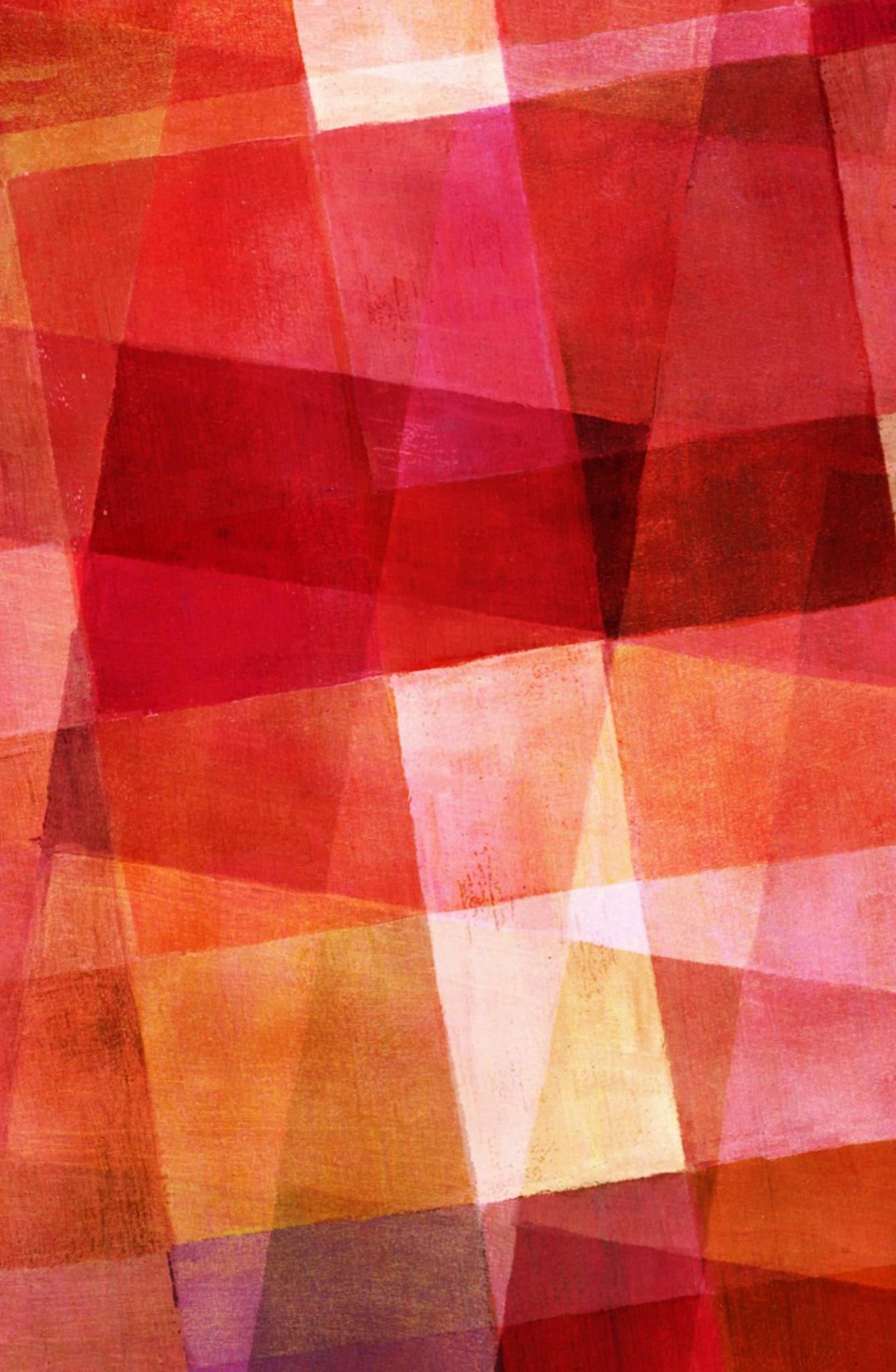
RESULTS AND DISCUSSIONS

- The neighborhoods in Tokyo were segmented into 10 clusters



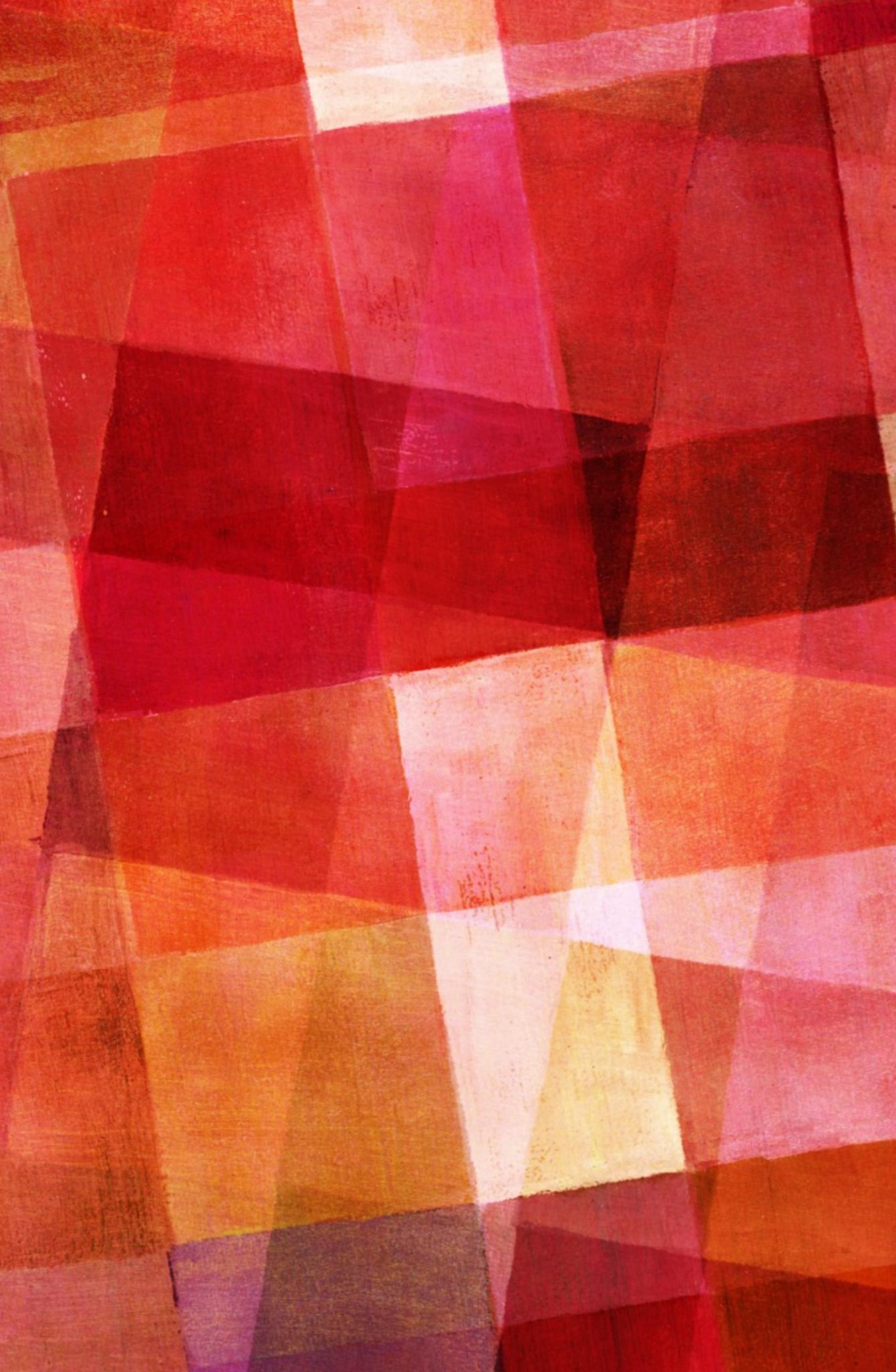
CLUSTER 1

- The neighborhoods in this cluster are a good choice for people who especially like bakery and Donburi restaurants.
- People who like to live near convenience stores will also like this cluster.
- Examples of neighborhoods: Harakomiya in Akiruno, None in Akiruno, Yamazaki in Machida



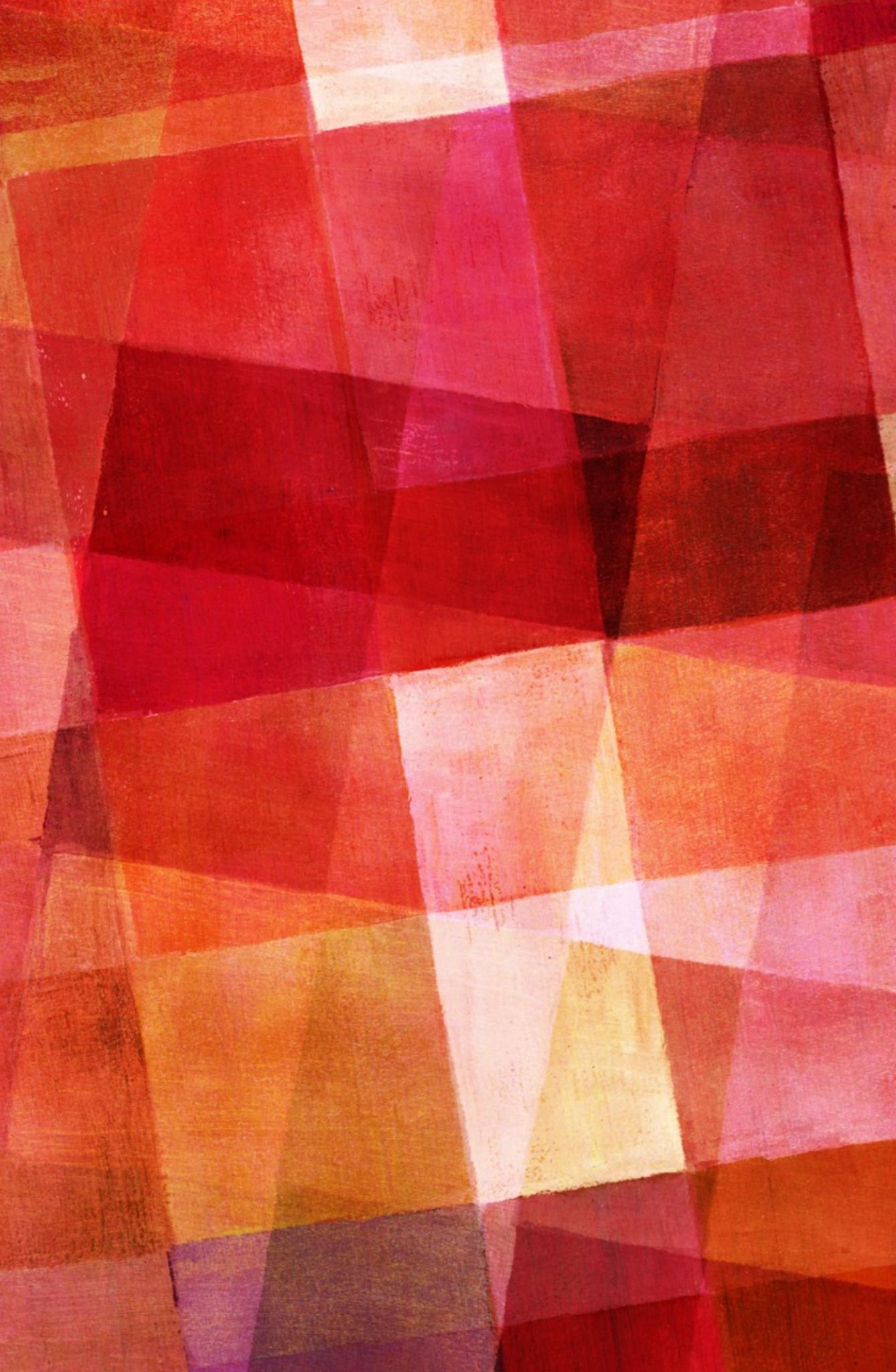
CLUSTER 2

- The neighborhoods in the second cluster will be loved by people who enjoy Japanese food, including Ramen, Sushi, Sake, Okonomiyaki, and others.
- People who like to live near convenience stores will also like this cluster.
- Examples of neighborhoods: neighborhoods in Adachiku, Tama, Toshimaku



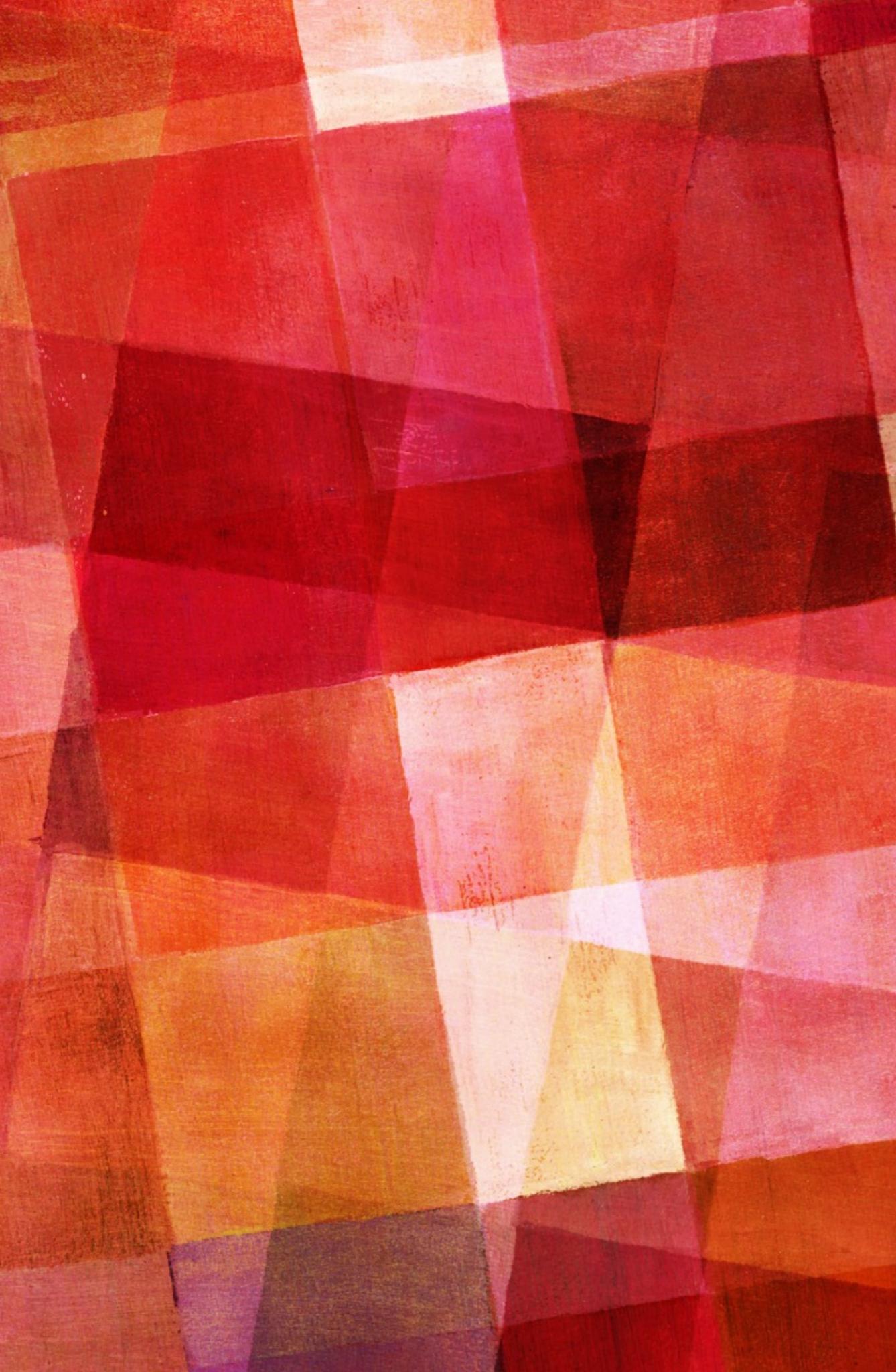
CLUSTER 3

- The neighborhoods in the third cluster are suitable for people who like cooking by themselves since there are many supermarkets and grocery stores nearby.
- Example of neighborhoods: neighborhoods in Akiruno, Sumidaku



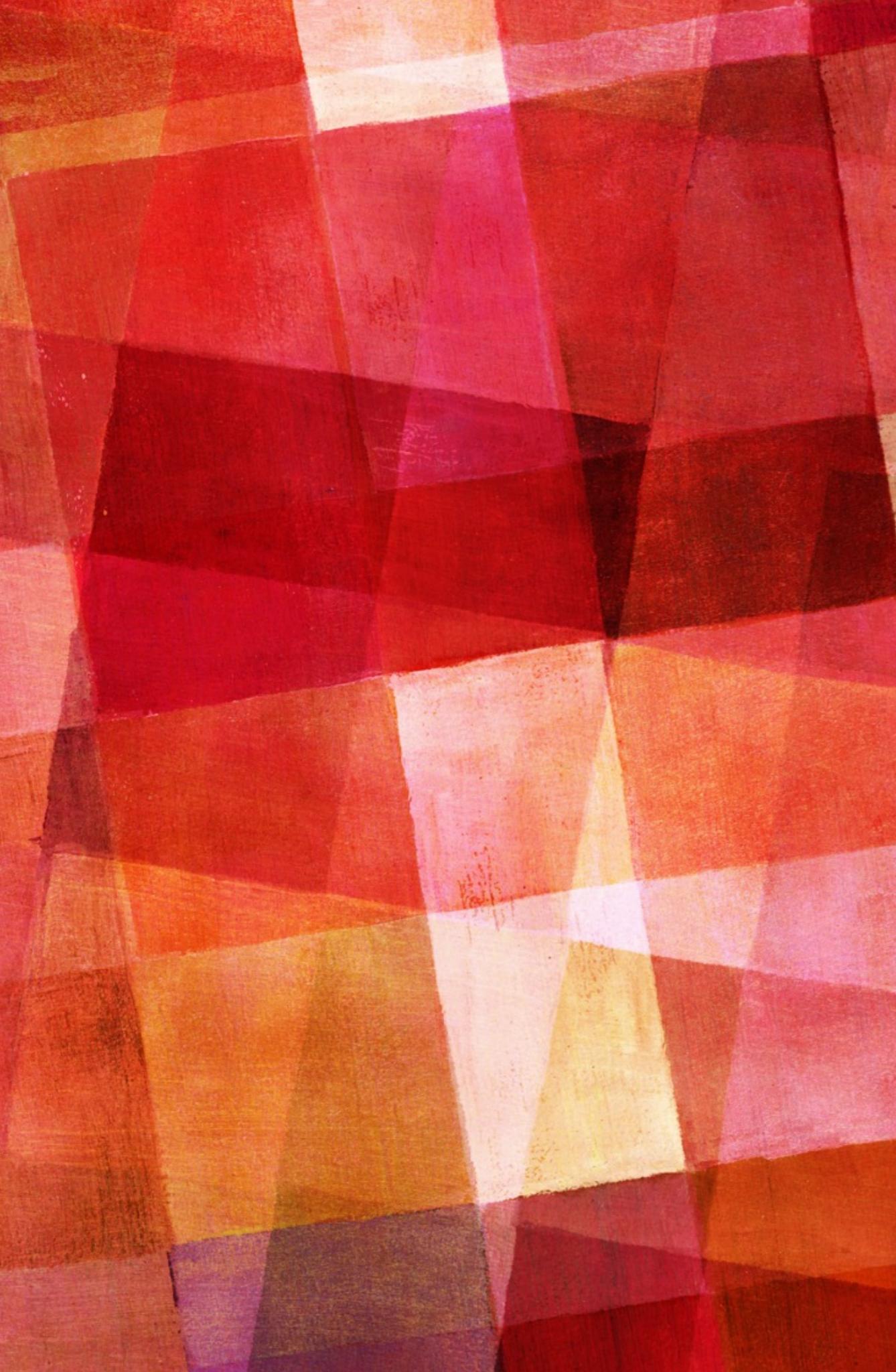
CLUSTER 4

- The neighborhoods in the fourth cluster are perfect for people who love beach, zoo, farmers market and fish market.
- Example: neighborhoods in Chuoku



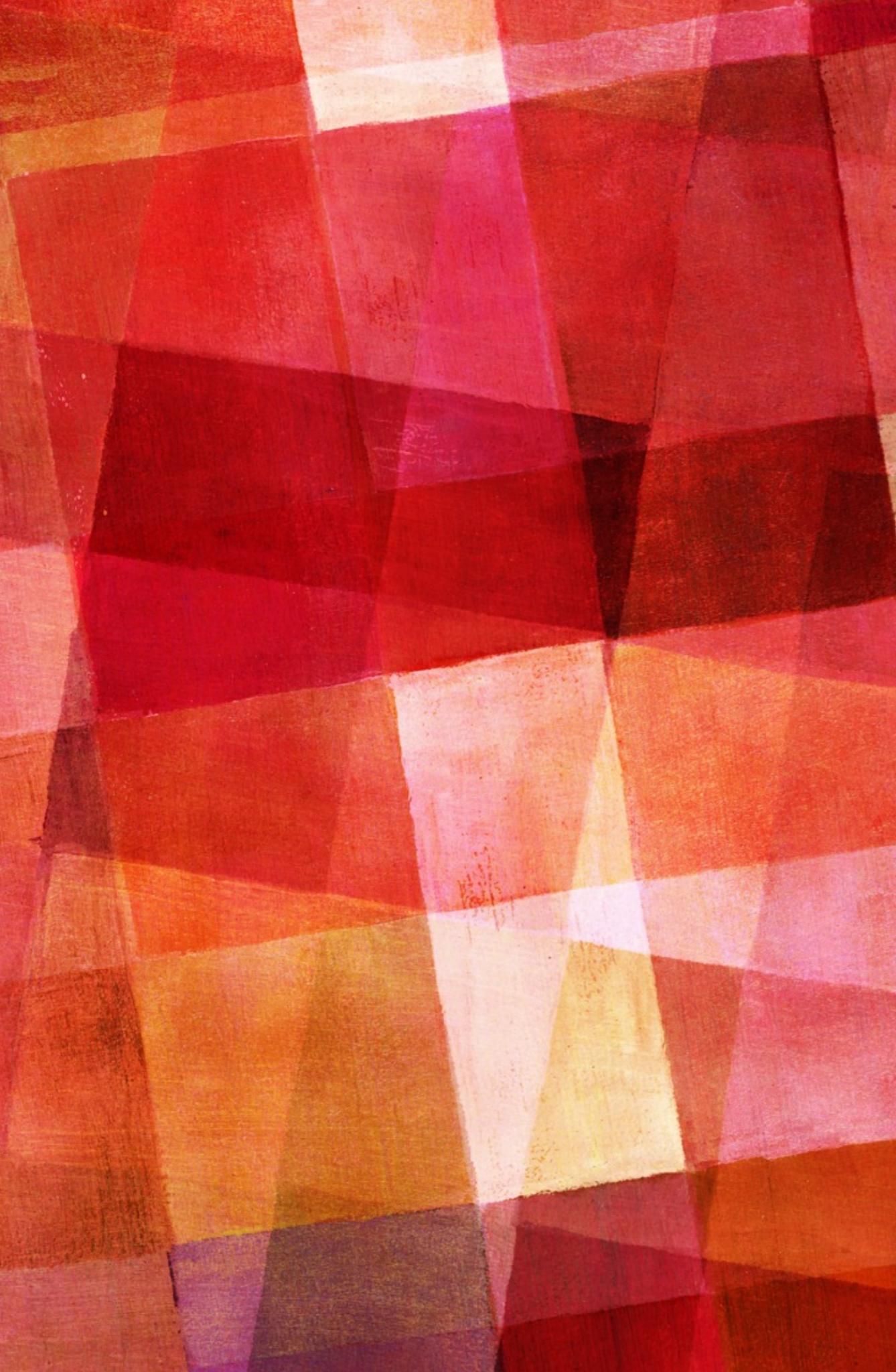
CLUSTER 5

- The fifth cluster is a good fit for these groups of people:
- 1) people who like and use electronics frequently
- 2) coffee lovers since there are many cafes and coffee stores
- 3) people who enjoy different kinds of cuisines such as Italian and French.
- Examples: Mejirodai in Bunkyo, lidabashi in Chiyodaku, Kuramae in Taitoku



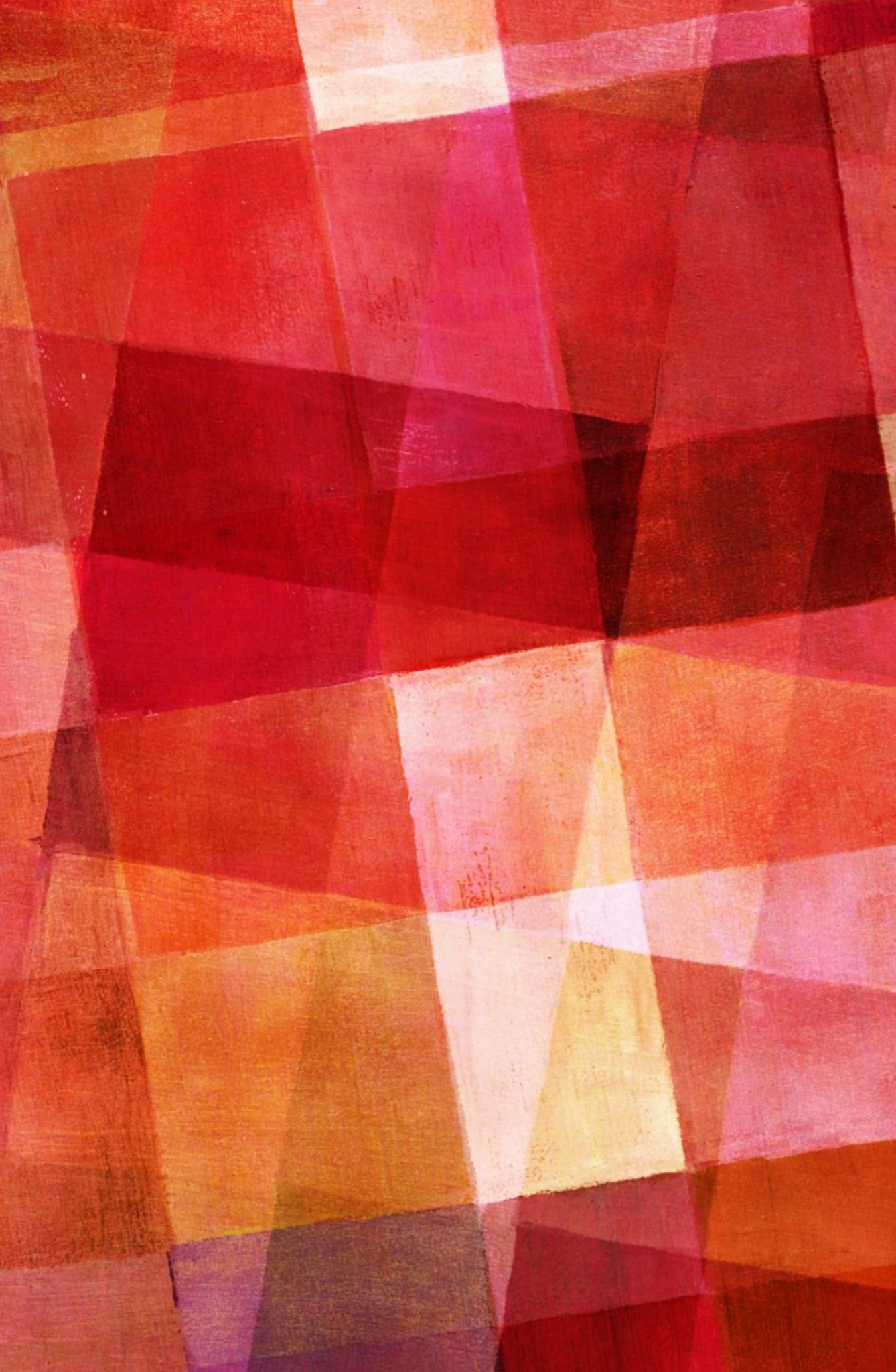
CLUSTER 6

- The following groups of people can be recommended with the neighborhoods in the sixth cluster:
- 1) People who take bus a lot
- 2) people who like Korean and Chinese food
- 3) people who like parks, museums, or art galleries
- Example: neighborhoods in Chofu, Edogawaku, Musashimurayama



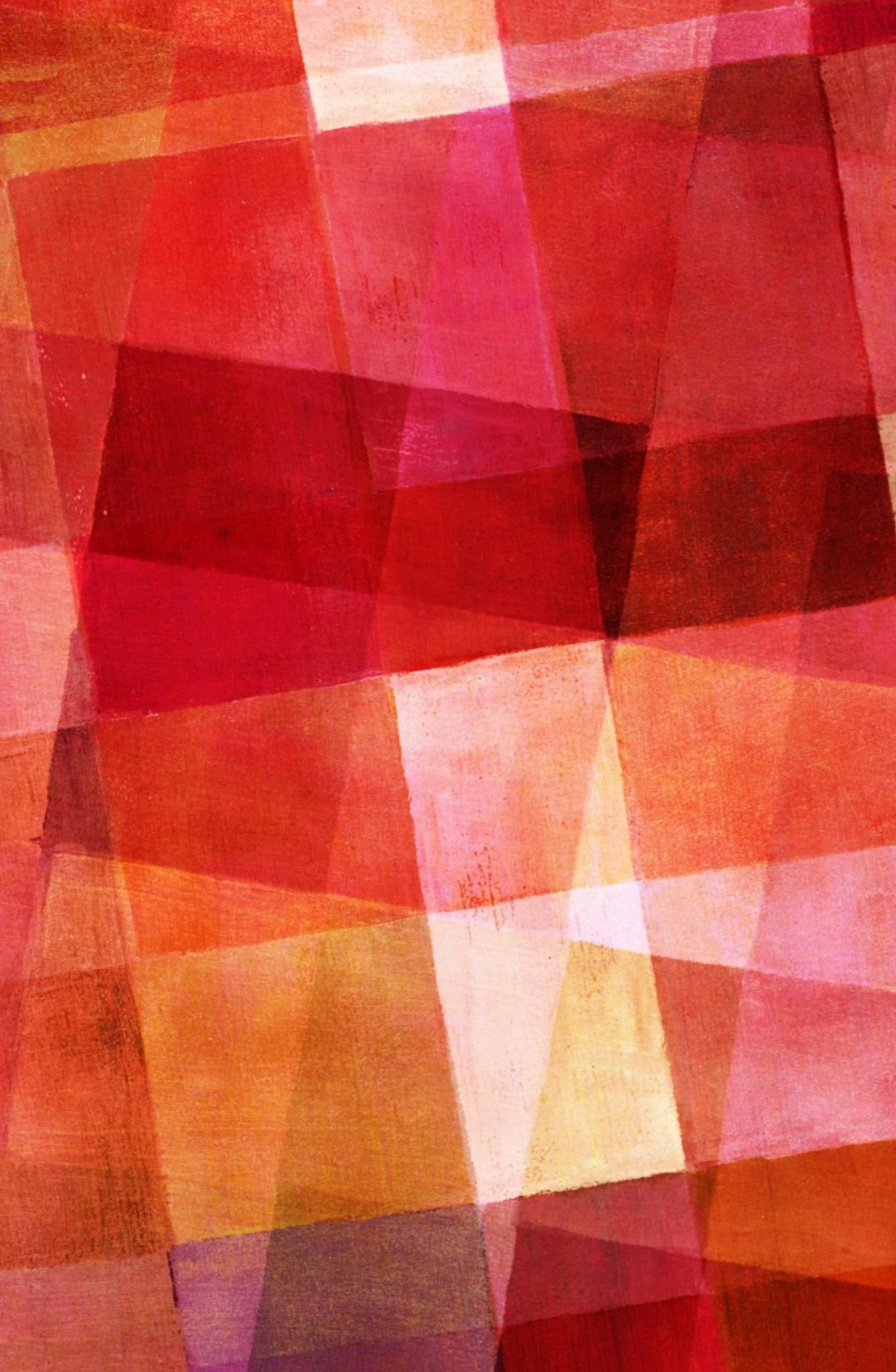
CLUSTER 7

- Cluster 7 is for people who want to live near everything and wish to live close to public transportation.
- Example: neighborhoods in Adachiku, Setagayaku, Shinjukuku, Suginamiku



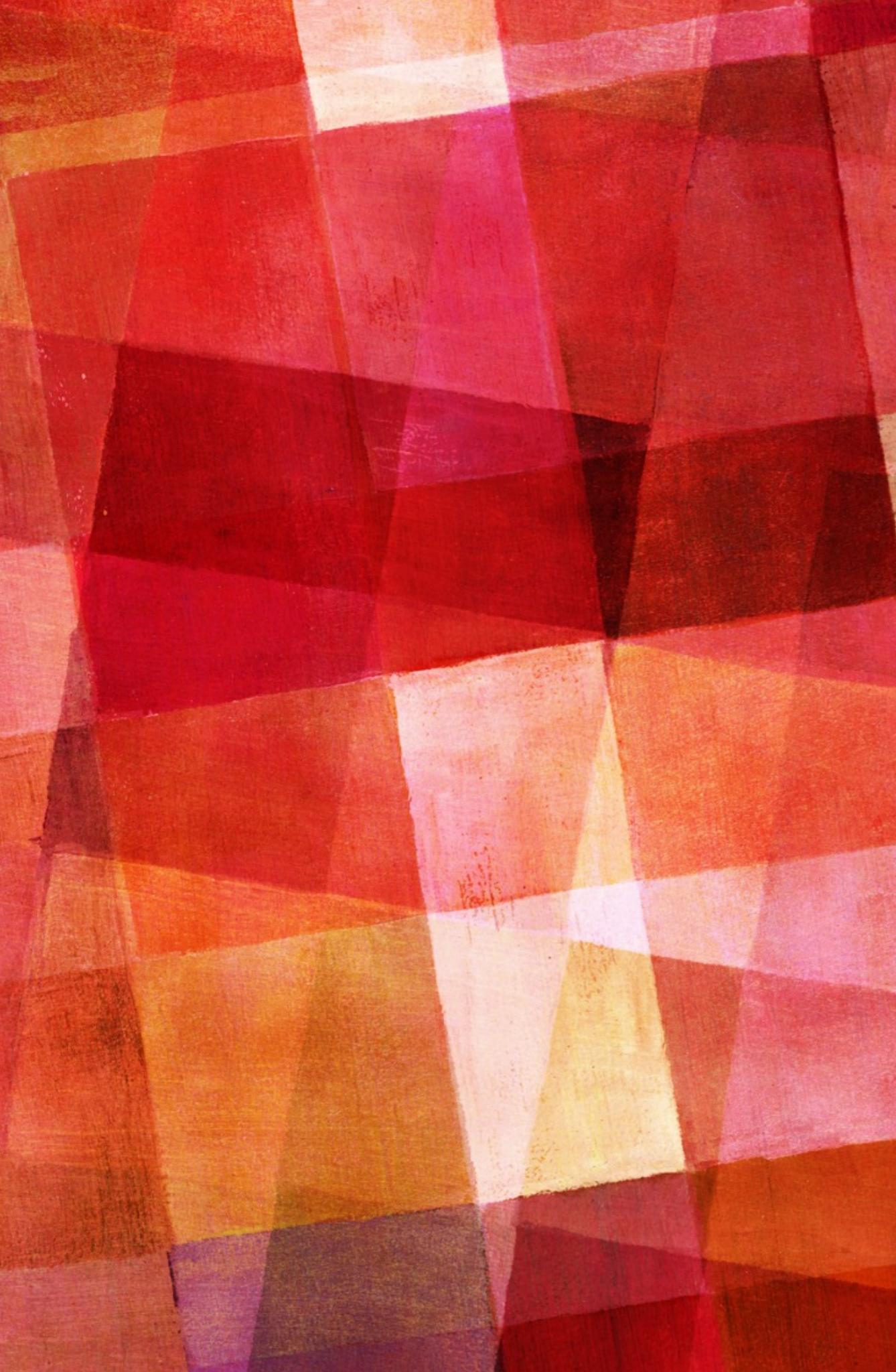
CLUSTER 8

- Sports lovers will like the neighborhoods in the eighth cluster since there are many parks, gold courts, and gyms in those neighborhoods.
- Example: Kitanodai in Hachioji, Arai in Hino, Unane in Setagayaku



CLUSTER 9

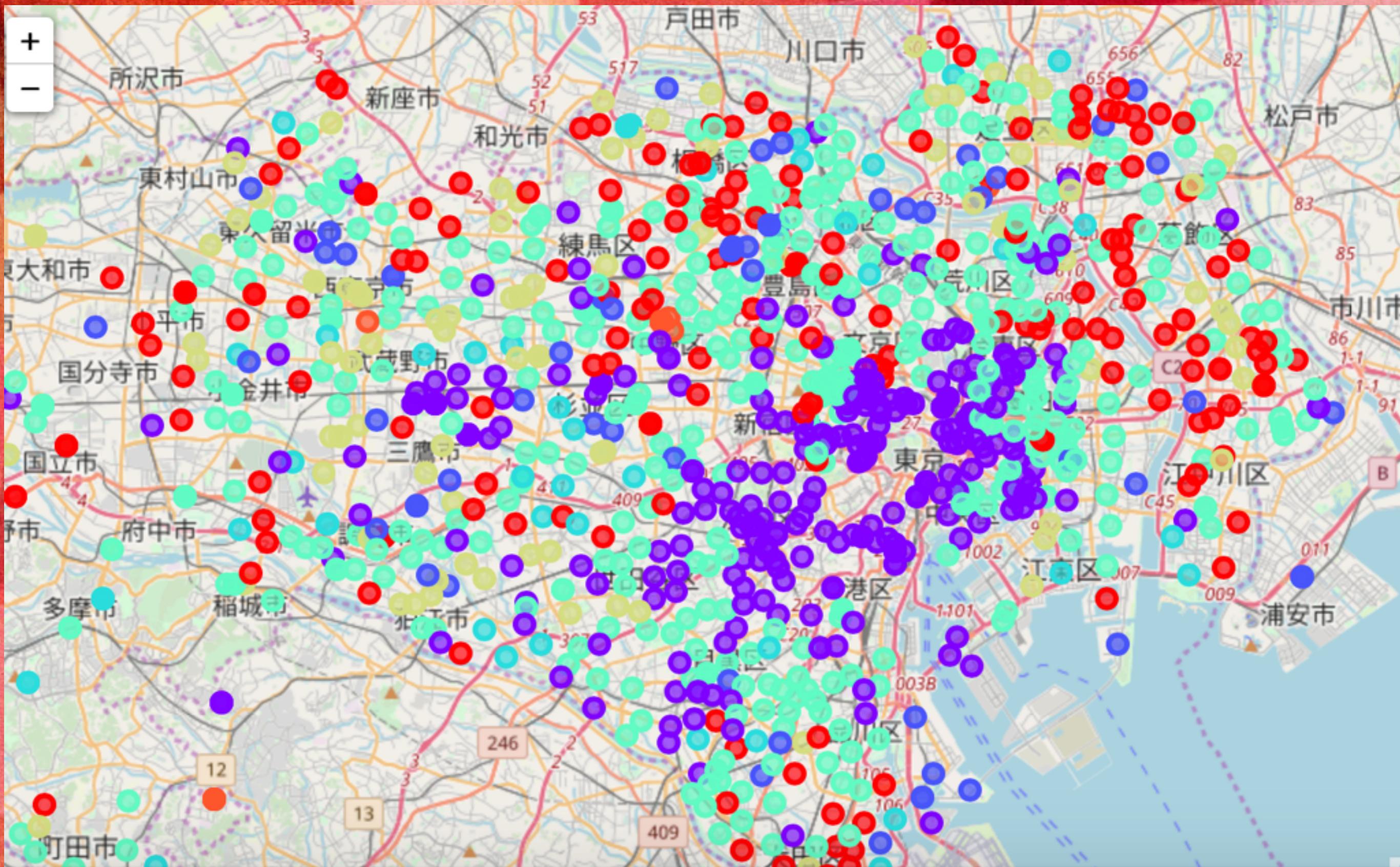
- People who have kids can be recommended with neighborhoods in the ninth cluster. There are many kids stores, playgrounds, supermarkets in those neighborhoods.
- Example: Tokura in Akiruno, Jogawaracho in Akishima



CLUSTER 10

- Neighborhoods in the last cluster are perfect for golf players, and people who enjoy nature and suburban life.
- Example: Uenodai in Akiruno, Yokosawa in Akiruno

VISUALIZATIONS OF THE CLUSTERS OF NEIGHBORHOODS



THANK YOU!