

## SQL Project - Jalen Claytor

### Questions

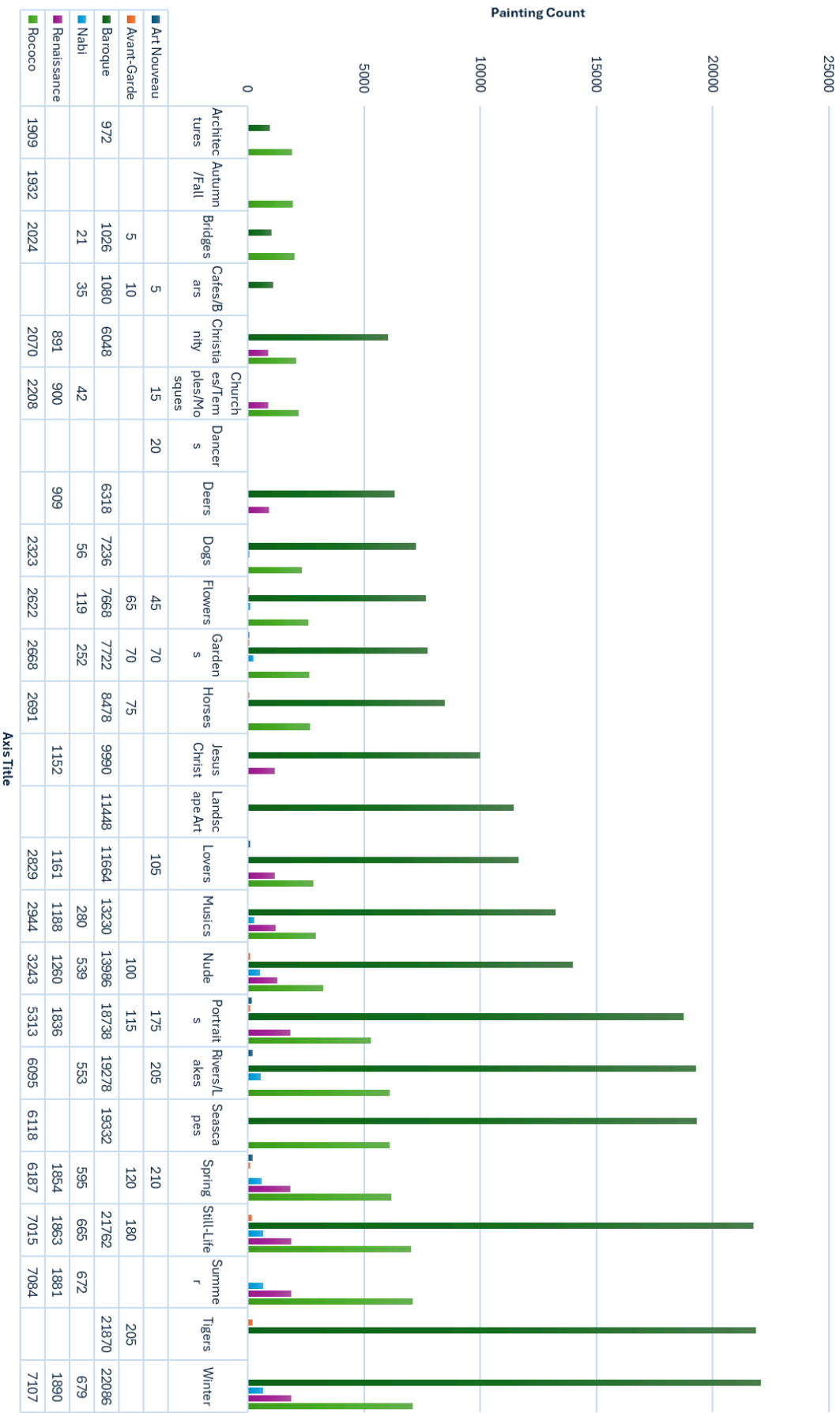
1. According to the given data, "Solomon R. Guggenheim Museum" has the most Cubist paintings on average with 16.2% of total inventory in the building falling under that category. "The Museum of Modern Art" would be second with a 13.2% inventory total. Impressionism is a style of art that is also held by both locations.
2. There are multiple artists that have their work in multiple countries. Vincent Van Gogh (8), Paul Gauguin and Claude Monet (7), and Pierre-Auguste Renoir, Rembrandt Van Rijn, and Francois Bouche (6) have the highest total of countries.
3. [Table for Question 3](#)

Max of row\_number

## Subject Count of Paintings Per Style

style ▾

■ Art Nouveau ■ Avant-Garde ■ Baroque ■ Nabi ■ Renaissance ■ Rococo



Axis Title

subject ▾

## SQL Formulas

### Cubism Count Per Museum\_ID

```
SELECT a.museum_id, avg(case when b.style ='Cubism' then 1.0 else 0.0 end ) *100,a.name
FROM museum a
INNER JOIN work b on a.museum_id=b.museum_id
INNER JOIN artist c on b.artist_id=c.artist_id
GROUP BY 1,3
```

### Style Count Per Museum\_ID

```
SELECT a.museum_id, a.style , row_number() over (partition by a.museum_id order by a.style)
FROM work a
INNER JOIN artist b on b.style=a.style
```

### Average Count of Cubism Paintings Per Total

```
SELECT AVG(case when b.style ='Cubism' then 1.0 else 0.0 end)
FROM artist a
INNER JOIN work b on b.artist_id=a.artist_id
INNER JOIN museum d on d.museum_id=b.museum_id
```

### ArtistWorkPerCountry

```
SELECT first_name || ' ' || last_name artist_name, count(distinct(country)) as num_countries
FROM museum a
INNER JOIN work b on b.museum_id=a.museum_id
INNER JOIN artist c on b.artist_id=c.artist_id
GROUP BY 1
ORDER BY 2 desc
```

### SubjectOfPaintingsPerStyleRowNumber

```
SELECT b.subject, a.work_id, a.style, row_number() over (partition by a.style order by
b.subject)
FROM subject b
```

```
INNER JOIN work a on a.work_id=b.work_id
INNER JOIN artist d on d.style=a.style
```

### **SubjectOfPaintingsPerStyle**

```
WITH subject_count AS (
    SELECT a.style, b.subject, COUNT(a.style) AS subject_count
    FROM work a
    INNER JOIN subject b ON a.work_id = b.work_id
    WHERE a.style IS NOT NULL
    GROUP BY 1,2
),
style_count AS (
    SELECT a.style, COUNT(1) AS painting_amount
    FROM work a
    INNER JOIN subject b ON a.work_id = b.work_id
    WHERE b.subject IS NOT NULL
    GROUP BY 1
),
recurring_subjects AS (
    SELECT style, subject, subject_count,
    ROW_NUMBER() OVER (PARTITION BY style ORDER BY subject_count DESC) AS
    row_num
    FROM subject_count
)
SELECT recurring_subjects.style, recurring_subjects.subject, subject_count,
painting_amount,
```

```
ROUND((subject_count::numeric / painting_amount) * 100, 2) AS  
percent_of_subject_overall  
  
FROM recurring_subjects  
  
INNER JOIN style_count ON recurring_subjects.style = style_count.style  
  
WHERE row_num = 1;
```