

Course 7

Master 1
Architecture

Commenting on Tables, Diagrams, and Illustrations in English

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COURSE OBJECTIVES

01

Develop the ability to provide clear and informative commentary on tables, diagrams, and illustrations.

02

Learn the appropriate language and structure for describing and analyzing visual data.

03

Enhance your communication skills for explaining complex information visually.

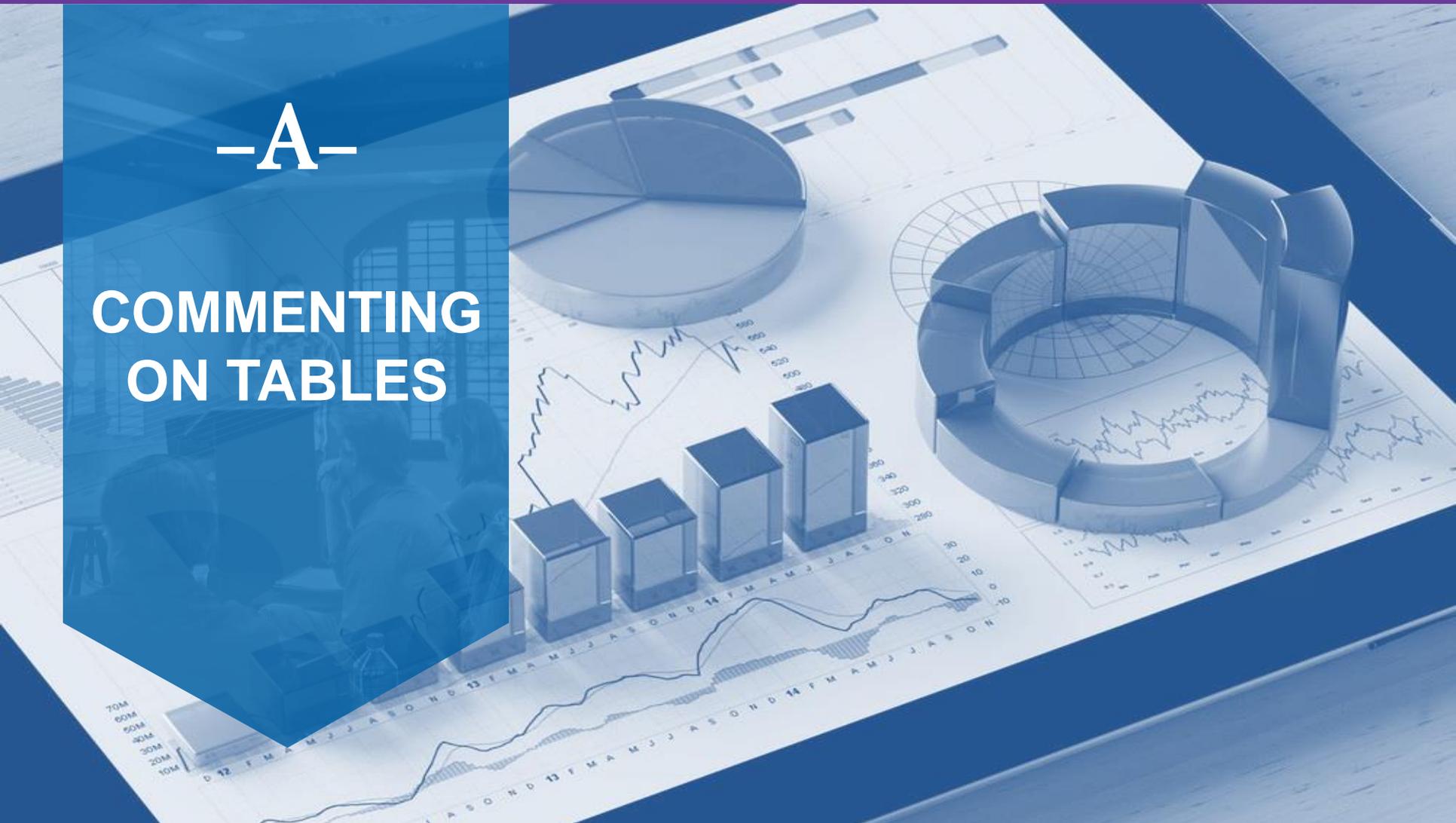
Introduction

In various fields, from science and engineering to business and academia, tables, diagrams, and illustrations are commonly used to present data and complex information. Being able to comment on these visual representations effectively is a valuable skill for professionals and researchers. This lesson will guide you on how to provide insightful commentary on tables, diagrams, and illustrations.



-A-

COMMENTING ON TABLES



A. Commenting on Tables

1. Introduction:

Start by introducing the table's purpose and its key elements, such as title, headings, and source.

- "This table presents data related to..."
- "The table, titled '...', provides information on..."



A. Commenting on Tables

2. Describing Data:

Explain the data within the table using clear and concise language. Mention any trends, patterns, or outliers.

- "As we can see from the table, there is a clear upward trend..."
- "The data in the table indicates a significant variation between..."



A. Commenting on Tables

3. Comparisons:

If applicable, compare data points or categories within the table.

- "Comparing the figures in the 'A' and 'B' columns, we observe that..."
- "In contrast to the previous year, the current data reveals..."



A. Commenting on Tables

4. Interpretation:

Offer insights or interpretations based on the data presented in the table.

- "The data suggests that..."
- "This could be indicative of..."



A. Commenting on Tables

5. Conclusion:

Summarize the main findings or takeaways from the table.

- "In conclusion, the table highlights..."
- "To summarize, the data in the table underscores..."



Practice Activity 01

practice commenting on this table using the techniques learned in the course.

Table 01: Building Materials Comparison for Residential Construction

Building Material	Cost per Square Meter (\$)	Durability (Years)	Energy Efficiency (Scale 1-10)	Ease of Maintenance (Scale 1-5)
Brick	120	100	8	4
Wood	90	80	6	3
Concrete	100	120	7	5
Steel	150	150	9	4



Solution:

Introduction:

The table compares various building materials commonly used in residential construction, considering factors such as cost, durability, energy efficiency, and ease of maintenance.

Describing Data:

Brick: While more expensive, bricks offer high durability and excellent energy efficiency. Maintenance is moderately easy.

Wood: Wood is cost-effective but has lower durability and energy efficiency. Maintenance is relatively simple.

Concrete: Concrete provides a balance between cost, durability, and energy efficiency. It has a high durability rating and is easy to maintain.

Steel: Steel is the most expensive option but boasts exceptional durability and energy efficiency. Maintenance is moderately easy.

Comparisons:

Cost: Wood is the most cost-effective, while steel is the most expensive.

Durability: Steel and concrete have the highest durability, surpassing wood and brick.

Energy Efficiency: Steel and brick are rated higher for energy efficiency.

Ease of Maintenance: Concrete and steel are considered easier to maintain than wood and brick.

Interpretation:

Builders looking for a cost-effective option might lean towards wood.

Those prioritizing durability and energy efficiency might choose steel or concrete.

Consideration for maintenance ease could influence the choice, with concrete and steel requiring less effort over time.

Conclusion:

The table aids architects and builders in making informed decisions based on project priorities. It highlights trade-offs among cost, durability, energy efficiency, and maintenance ease, helping select the most suitable building material for specific construction needs.



Engineered wood: also called mass timber, composite wood, human-made wood, or manufactured board



Concrete recycling: is the use of rubble and crushed from demolished concrete structures. Recycling is cheaper and more ecological than trucking rubble to a landfill. Crushed rubble can be used for road gravel,

Example Table: Building Material Comparison for Sustainable Construction

Material Type	Thermal Conductivity (W/m·K)	Environmental Impact (kg CO2 eq./kg)	Cost per Square Meter (\$)
Recycled Concrete	1.2	0.25	80
Engineered Wood	0.15	0.15	120
Steel	50.0	2.0	150
Bamboo	0.18	0.10	60
Glass	1.0	1.5	100



Practice Activity 02

practice commenting on this table using the techniques learned in the course.



Solution: Commenting on the Table:

Introduction:	<p>This table provides a comparison of different building materials commonly used in construction, focusing on thermal conductivity, environmental impact, and cost. As sustainable construction practices gain prominence, understanding the characteristics of various materials becomes crucial in making informed decisions during the design and construction phases.</p>
Describing Data:	<p>The table includes five material types: Recycled Concrete, Engineered Wood, Steel, Bamboo, and Glass. Each material is characterized by its thermal conductivity (W/m·K), environmental impact (kg CO₂ eq./kg), and cost per square meter (\$). For instance, Engineered Wood exhibits low thermal conductivity (0.15 W/m·K) and a relatively low environmental impact (0.15 kg CO₂ eq./kg) but comes at a higher cost of \$120 per square meter.</p>
Comparisons:	<p>Comparing thermal conductivity, Engineered Wood and Bamboo demonstrate superior insulation properties compared to Steel and Glass. In terms of environmental impact, Bamboo emerges as the most environmentally friendly option, with the lowest carbon footprint. However, the cost varies, with Recycled Concrete being the most affordable, while Engineered Wood and Steel are comparatively more expensive.</p>
Interpretation:	<p>The data reveals trade-offs among the materials. For example, while Steel has high thermal conductivity and a considerable environmental impact, it might be chosen for its structural strength. Engineered Wood, on the other hand, offers a balanced profile with good insulation properties and a moderate environmental impact, albeit at a higher cost. The choice of material should consider the project's specific requirements, budget constraints, and sustainability goals.</p>
Conclusion:	<p>In conclusion, this table aids architects, builders, and environmental consultants in making informed decisions regarding building material selection. While each material has its strengths and weaknesses, a holistic approach that considers thermal performance, environmental impact, and cost is essential for achieving sustainable and cost-effective construction. The table underscores the need for a thoughtful balance between these factors to promote environmentally conscious and economically viable architectural solutions.</p>

-B-

**COMMENTING
ON DIAGRAMS
AND
ILLUSTRATIONS**



B. Commenting on Diagrams and Illustrations

1. Introduction:

Begin by introducing the diagram or illustration, including its title, purpose, and context.

- "This diagram, titled '...', illustrates..."
- "The illustration provides a visual representation of..."



B. Commenting on Diagrams and Illustrations

2. Description:

Describe the key components and elements within the diagram or illustration. Point out any notable features.

- "In the diagram, we can see..."
- "The illustration consists of several components, including..."



B. Commenting on Diagrams and Illustrations

3. Explaining Relationships:

Explain any relationships, connections, or processes depicted in the diagram.

- "The arrows in the diagram represent..."
- "The lines connecting the elements indicate..."



B. Commenting on Diagrams and Illustrations

4. Analysis:

Analyze the significance or implications of the information presented in the diagram or illustration.

- "This visual representation highlights..."
- "By examining the illustration, we can infer..."



B. Commenting on Diagrams and Illustrations

5. Conclusion:

Summarize the main insights or findings conveyed by the diagram or illustration.

- "In summary, the diagram emphasizes..."
- "To conclude, the illustration conveys..."

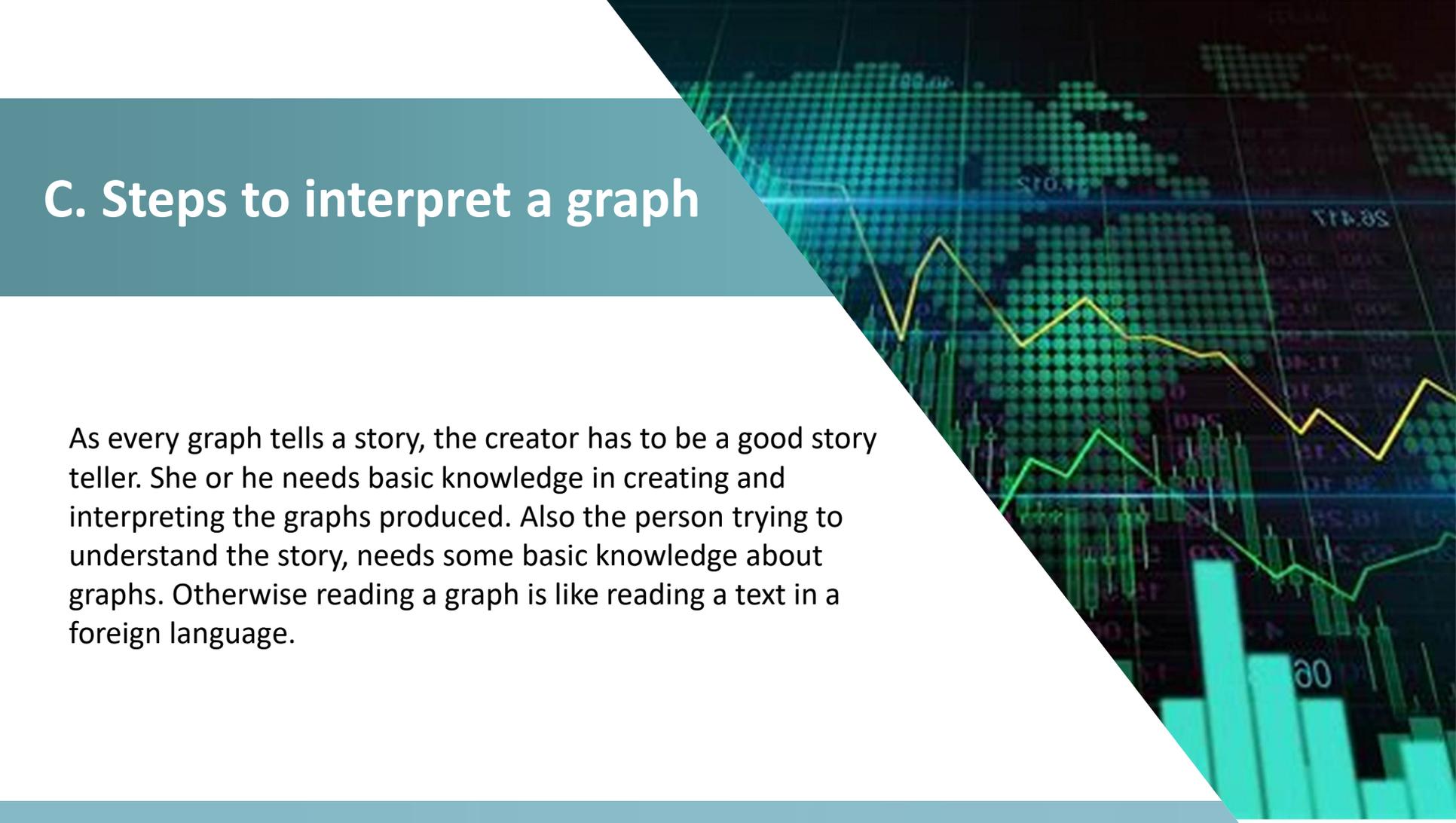


-C-

STEPS TO INTERPRET A GRAPH



C. Steps to interpret a graph



As every graph tells a story, the creator has to be a good story teller. She or he needs basic knowledge in creating and interpreting the graphs produced. Also the person trying to understand the story, needs some basic knowledge about graphs. Otherwise reading a graph is like reading a text in a foreign language.

C. Steps to interpret a graph

Introducing ...

THE TOPIC	THE <u>GRAPH</u>
I'd like you to look at ...	This <u>graph</u> shows...
Let me show you ...	The <u>diagram</u> outlines...
Let's have a look at ...	This table lists...
Let's turn to...	This <u>chart</u> represents...
To illustrate my point let's look at...	This <u>chart</u> depicts...
As you can see from these...	This <u>chart</u> breaks down...
If you look at ... you'll see/notice/understand...	



C. Steps to interpret a graph

Change can be described concerning their change:

degree	dramatic(ally), vast(ly), huge(ly), a lot, significant(ly), considerable(ly), moderate(ly), slight(ly), substantial(ly), a little
speed	rapid(ly), quick(ly), swift(ly), gradual(ly), gentle(ly), little by little, slow(ly), quiet(ly)

Some prepositions for describing elements in a graph

Prepositions	A rise FROM x TO y
	TO INCREASE BY 5 %
	AN INCREASE OF 5 % IN kestrel sightings



C. Steps to interpret a graph

Some vocabulary you need to know:

To go up:	increase, rise, rocket, climb, lift, grow, go up, jump, surge, shoot up, soar, rocket, a rise, an increase, growth, an upward/rising/increasing <u>trend</u> , an improvement, a jump, a surge, extend, expand, push/put/step up, progression
To go down	decrease, drop, decline, fall, go down, slump, plummet, a fall, a decrease, a decline, a downward/falling/decreasing <u>trend</u> , a slump
No change	Remain stable/constant/steady at, stay at the same level, stabilize, keep stable, hold constant
Indicating a change of direction	level out/off, stand at, stop falling/rising, stop falling and start rising, stop rising and start falling, change
Frequent change	Fluctuate, fluctuation
At the top	Reach a peak, peak, reach its/their highest point
At the bottom	Reach/hit a low (point), hit/reach its/their lowest point



C. Steps to interpret a graph

In our example urban area growth and the availability of green spaces in a city

Let's try to interpret this example carefully.

Analysis 1: Reading basics

First you have to read the labels and the legend of the diagram. What does it visualize?

In our example...

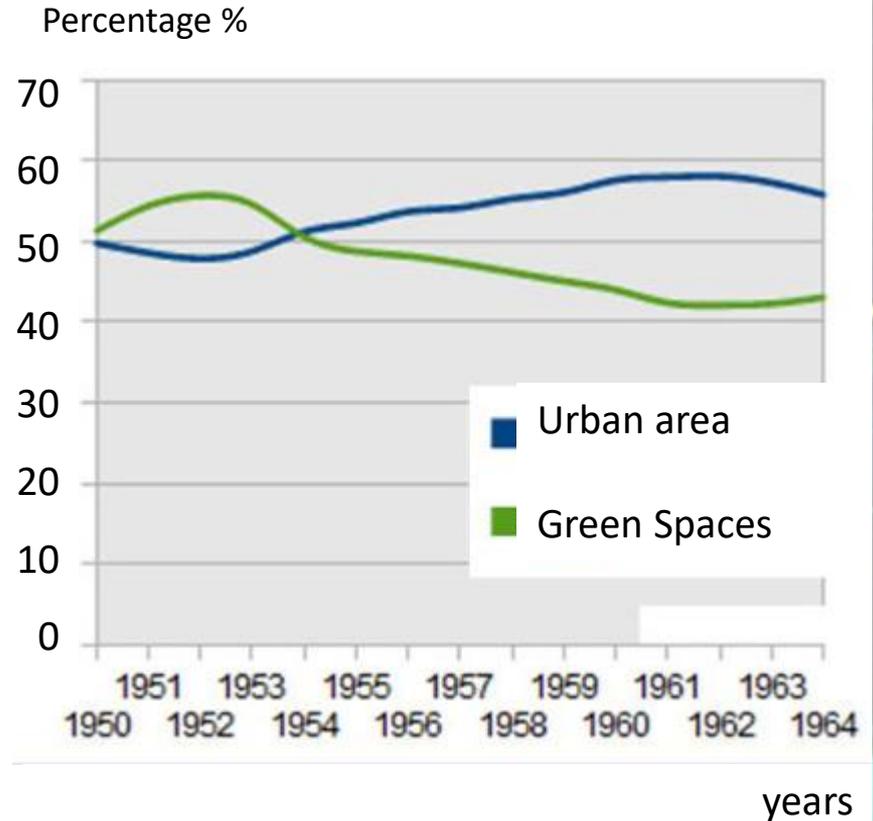
x-Axis: You can read what years

y-Axis: You can read the surface percentage %.

Blue line: The percentage of Urban area.

Green line: The percentage of green Spaces.

So this diagram visualizes the relationship between urban area growth and the availability of green spaces in a city over the period from 1950 to 1964



C. Steps to interpret a graph

Analysis 2: Reading important numbers

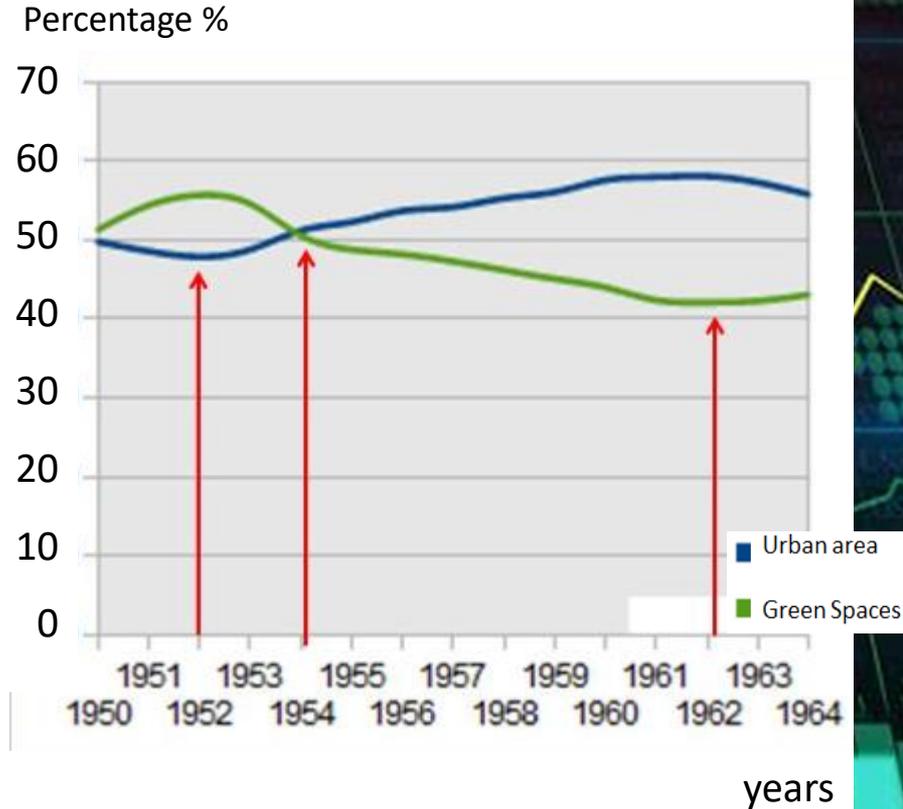
First we have to read the most important points. Important points are peaks, lows, turning points and intersection points.

In our example...

1952: A peak of the green spaces line and a low of the urban area line. A turning point for both lines.

1954: An intersection point between the urban area line and green spaces line.

1962: A low point of the green spaces line and a highpoint for the urban area line. A turning point for both lines.



C. Steps to interpret a graph

Analysis 3: Define trends

Now it is important to define all significant trends.

In our example...

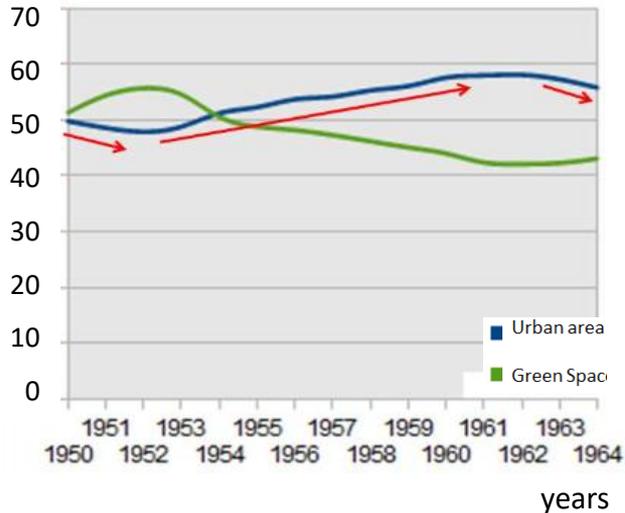
For urban area:

From 1950 to 1952 they drop.

Since 1952 they rise steadily.

Since 1962 they drop slightly again.

percentage %



For green spaces:

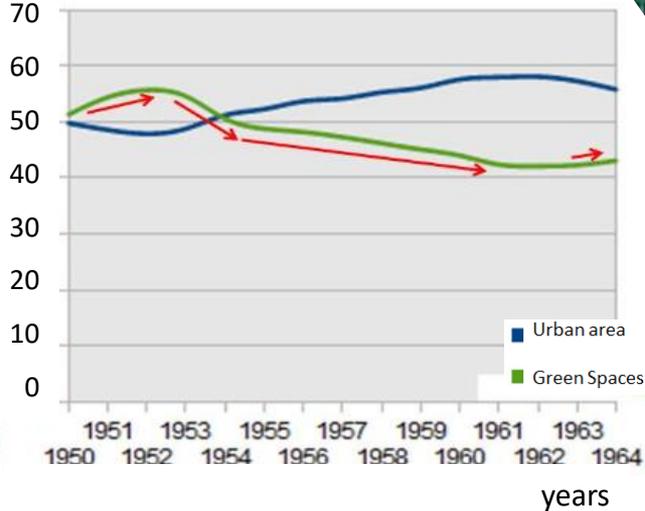
From 1950 to 1952 they rise significantly.

Since 1952 they drop significantly.

Since 1954 they drop much slower.

Since 1962 they rise again slowly.

percentage %



C. Steps to interpret a graph

Analysis 4: Compare trends

Knowing the trends, we can compare them, to find out differences and relations.

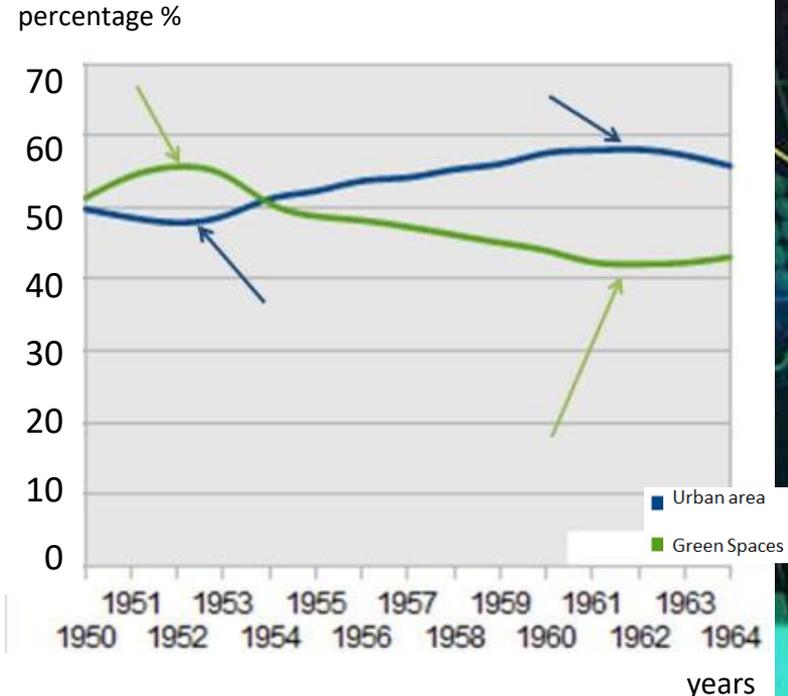
Are there common trends?

Is there a pattern?

In our example...

The graph shows a negative slope, indicating that as one variable increases, the other decreases.

As the urban area expands, the space available for green areas diminishes.



C. Steps to interpret a graph

Analysis 5: Analyse trends

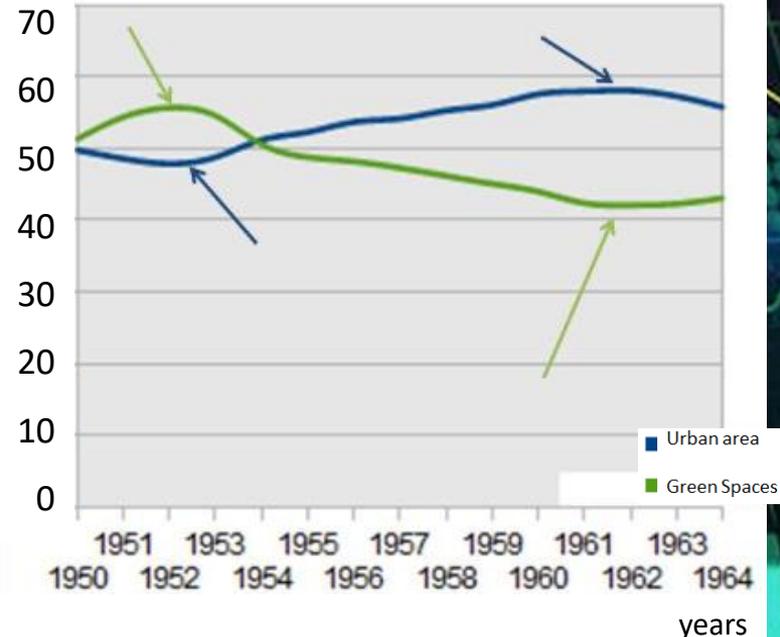
Finally we can establish hypotheses how the data is related. These hypotheses have to be questioned and assessed.

In our example...

The graph shows a consistent inverse relationship, it suggests that:

- A) The rate of decrease in green spaces may also provide insights into urban planning policies or environmental initiatives during that era.
- B) A steeper decline could indicate a lack of emphasis on preserving green spaces: The city experienced substantial urban sprawl at the expense of green spaces. Factors such as increased population density, industrialization, and migration to urban centers may have contributed to the reduction in green spaces.
- A) Re-increasing of green spaces might suggest efforts to balance urban development with environmental conservation

percentage %



C. Steps to interpret a graph

Analysis 6: Predict a development

Based on the development of the diagram and the established hypothesis we can predict future developments of the diagram.

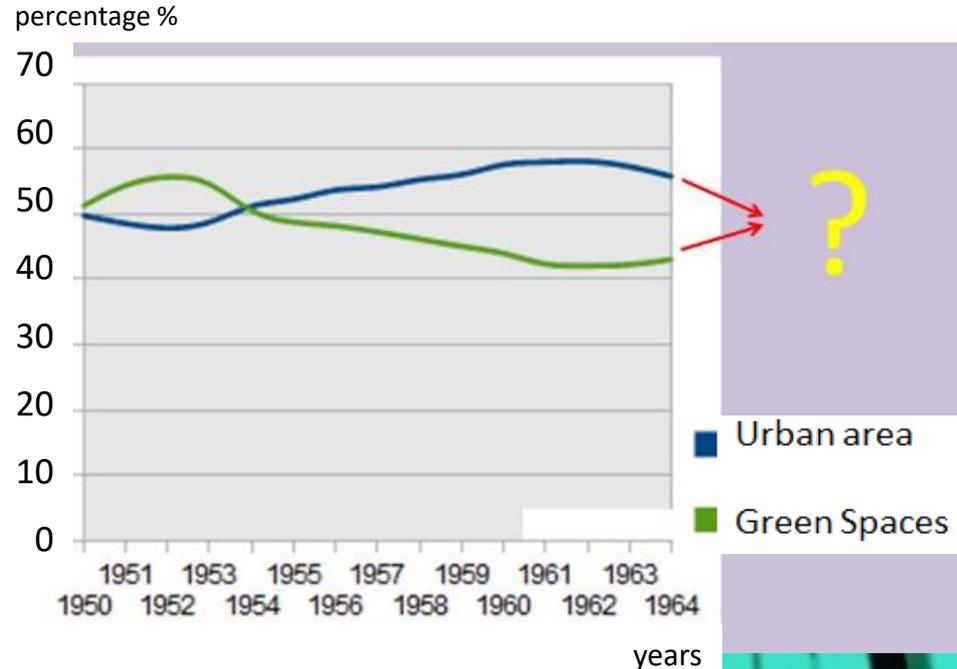
In our example...

Re-increasing of green spaces might suggest efforts to balance urban development through:

Policy Changes: Changes in urban planning policies, zoning regulations, and environmental conservation efforts.

International Sustainability Initiatives: Participation in international initiatives promoting sustainable urban development may influence local policies and contribute to an increase in green spaces.

But be careful: Predictions are always only speculations!





Thank You !