

# THE FUTURE OF AI IN EDUCATION: LEARNING EXPERIENCES

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# A LITTLE BACKGROUND

- ✓ My view of learning experience design using technology is holistic, drawing on work from education, cognitive science, computer science, motivational theory—and practical areas including writing and video.
- ✓ My background includes work in corporate learning, professional development, and higher education; my company works with organizations and I also teach at Columbia University.

# AI IN LEARNING

- ✓ How can we best use AI and new technologies—virtual reality, augmented reality, holograms, robots, sensors, and more—to reimagine what learning experiences can be?

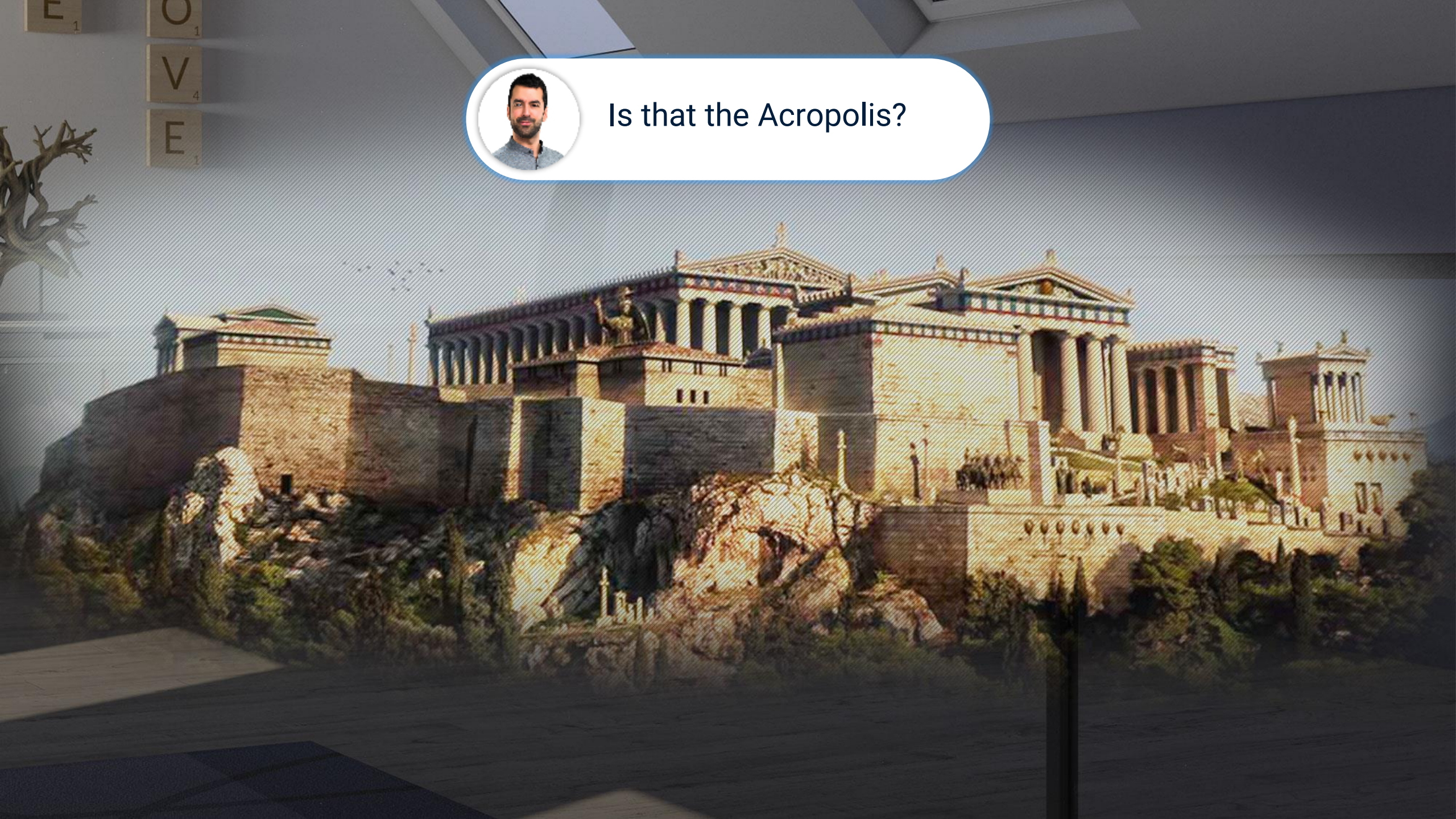
# A POTENTIAL FUTURE LEARNING EXPERIENCE







Is that the Acropolis?

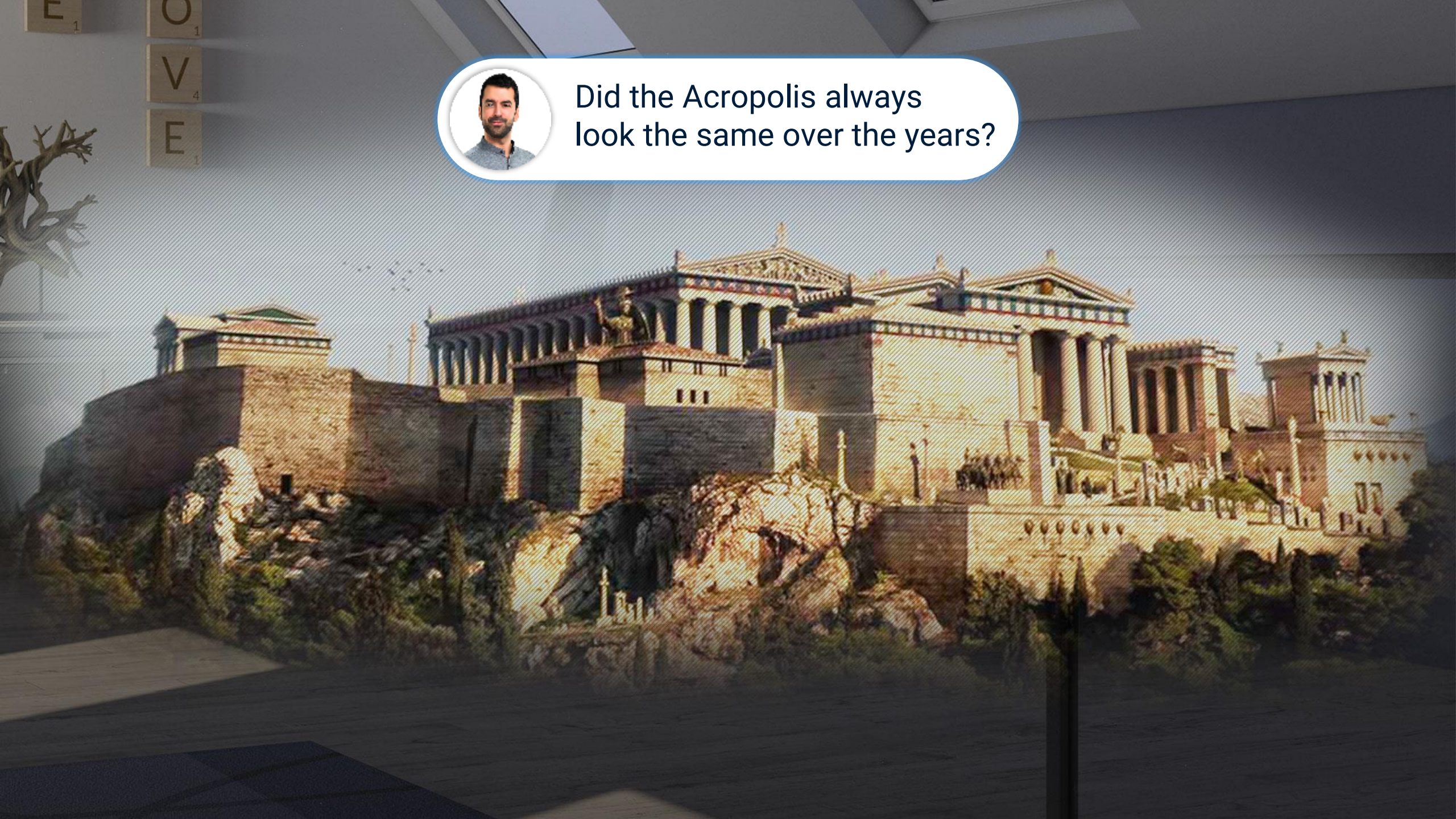


**AI Coach:** It is! There were actually a number of buildings known as an acropolis in ancient Greece. The word acropolis means “highest point.” But the Acropolis in Athens, which you recognized, is the famous one and is known as “The Acropolis.”





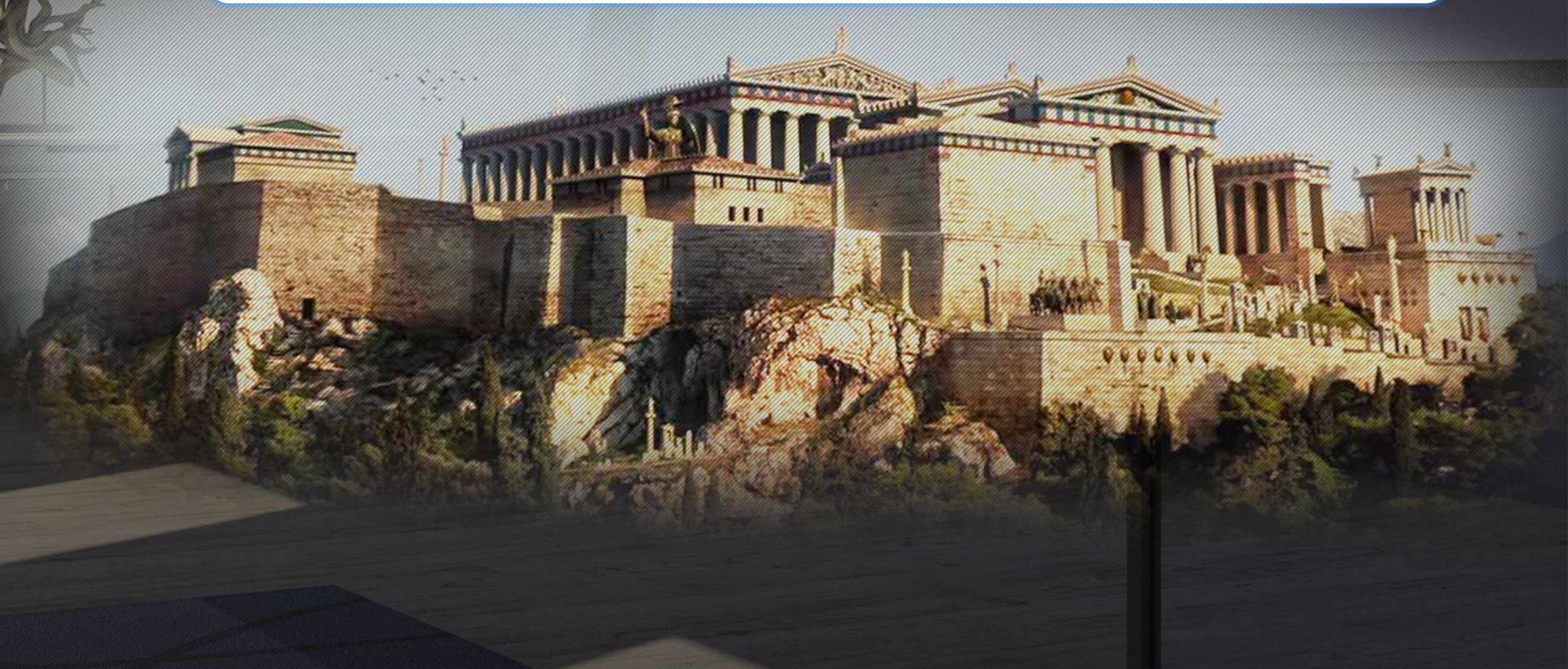
Did the Acropolis always look the same over the years?







**AI Coach:** We don't know much about the architectural appearance of the Acropolis before the Archaic era, which started in the 8th century BC. One major addition was when Peisistratos built an entry gate, or Propylea.





**AI Coach:**  
Take a look!



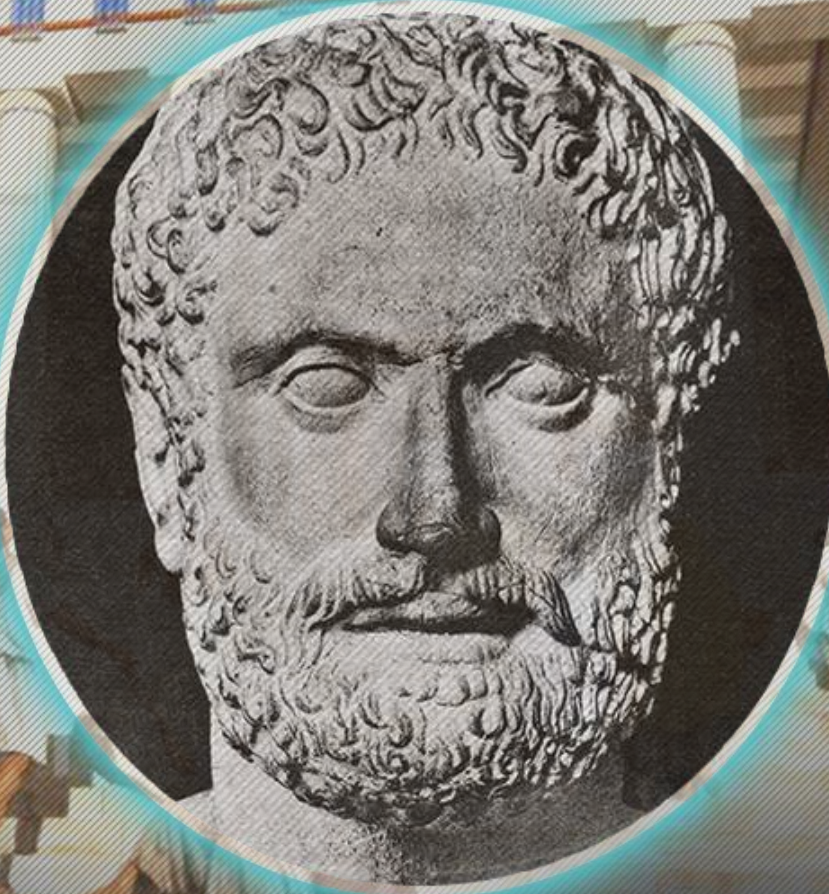


Who was Peisistratos?





**AI Coach:** Peisistratos was the ruler of ancient Athens during most of the time from 561 BC to 527 BC. He was the son of Hippocrates.





The Acropolis is so much bigger than I imagined!



**LEAVING THE VIRTUAL WORLD AND  
VISITING GREECE TODAY...**



**Coordinates:** 37°58'15"N 23°43'34"E



**Location:** Athens, Attica, Greece



# KEY ELEMENTS OF THIS EXPERIENCE

- ✓ Experiential learning, in a (very!) realistic context
- ✓ Coaching guidance
- ✓ Feedback (from a coach and from peers)
- ✓ Learner control, but the learner is assisted and advised—expertise is valued but the experience is learning-focused, not solely instructional.
- ✓ An immersive, personalized experience—and we could add more learning by doing, too!



# A POTENTIAL FUTURE TRAINING EXPERIENCE

TRAINING ROOM 2





EXIT

EXIT

BIGGER.  
BETTER.

LANCÔME  
FREE GIFT  
CUSTOMIZED BY YOU



Hello!  
Can I help you find anything?





**AI Coach:**  
Make sure you smile  
and look friendly!



Hello!  
Can I help you find anything?





Hello!  
Can I help you find anything?



**Customer:** Yes! Do you have  
this in a size “small”?





Hello!  
Can I help you find anything?



**Customer:** Yes! Do you have  
this in a size “small”?



I'm sure we do!  
Let me check for you...



# PERFORMANCE SUMMARY



**AI Coach:** You did great!  
But you need to work a bit more  
on your facial expressions.

**Wording:** 95 

**Tone:** 85 

**Facial Expressions:** 60 

**Overall Customer Satisfaction:** 70 



# KEY ELEMENTS OF THIS EXPERIENCE

- ✓ Experiential learning in a realistic context
- ✓ Learning by doing, resulting in skill transfer to the job
- ✓ Coaching guidance
- ✓ Feedback (from an AI coach, from the customer's reaction, and potentially from peers)
- ✓ A realistic, performance-based assessment and evaluation
- ✓ Learner control, but the learner is also assisted and advised
- ✓ An immersive, personalized, experience

# AI'S ROLE IN THESE EXPERIENCES

- ✓ An AI coach interacting realistically – in audio and/or text – with the learner.
- ✓ Tracking learner performance in detail and providing intelligent analysis; the can be used in an adaptive way to determine future learning suggestions based on a nuanced view of past performance and also, potentially, for assessment and reporting.
- ✓ Incorporating learner preferences – content, how they choose to interact, more!

# SCALING UP



# KEY THEMES

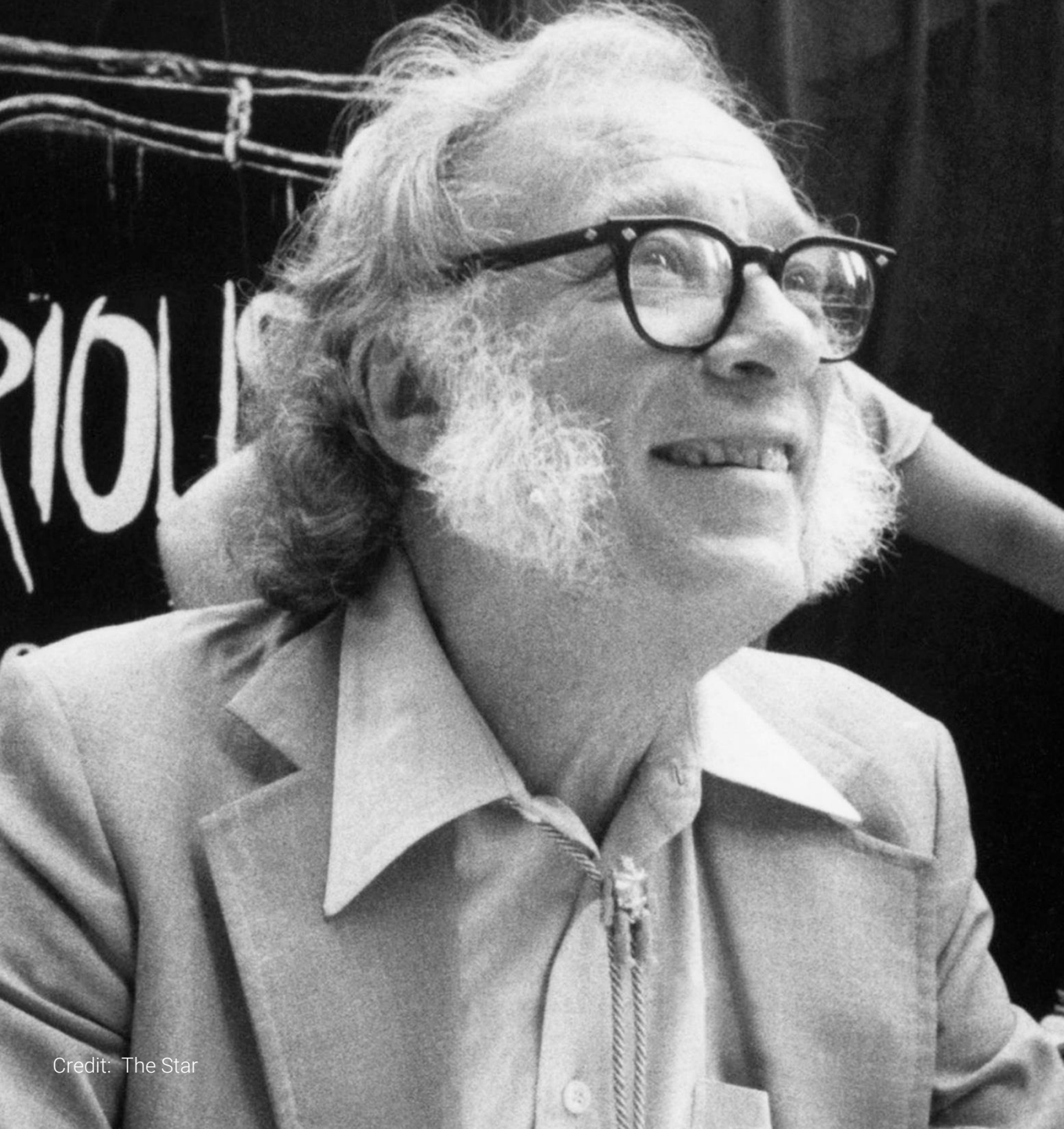
- ✓ Create learning experiences that are respectful and individualized.
- ✓ Design technology-based experiences that feel warm and personal.
- ✓ Put people in positions to learn to explore, make decisions, and think critically.
- ✓ Value the expertise of someone who's experienced, but continue to move away from the sage-on-a-stage model.
- ✓ Create experiences that suit a diverse audience.

# PERSON VS./WITH MACHINE

- ✓ Ideally, machines do what they're best at and people do what they're best at. Generative AI blurs these lines a bit...but let's see what the future will hold.

# AI AND NEW TECHNOLOGIES IN LEARNING

- ✓ We can use AI to help create more humanizing experiences if we design the right types of experiences.
- ✓ AI and new technologies can help us create individualized, engaging, relevant, meaningful, respectful learning experiences that are scalable—and that can help us reimagine education in a way that's inclusive and prepares people for the world we live in.



December 31, 1983

## Isaac Asimov Predicts the World of 2019

“Education, which must be revolutionized in the new world, will be revolutionized by the very agency that requires the revolution – the computer....

There will be an opportunity finally for every youngster, and indeed, every person, to learn what he or she wants to learn. in his or her own time, at his or her own speed, in his or her own way....

Education will become fun because it will bubble up from within and not be forced in from without.”

# THANK YOU!

I'm happy to discuss any questions and comments!

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My book, "*How Organizations Can Make the Most of Online Learning*," is available now at Amazon at [amzn.to/3ykuoMm](https://amzn.to/3ykuoMm) or just search for my name.