

[Lessons in Sustainability and Solidarity From Ancient Mesopotamia](#)



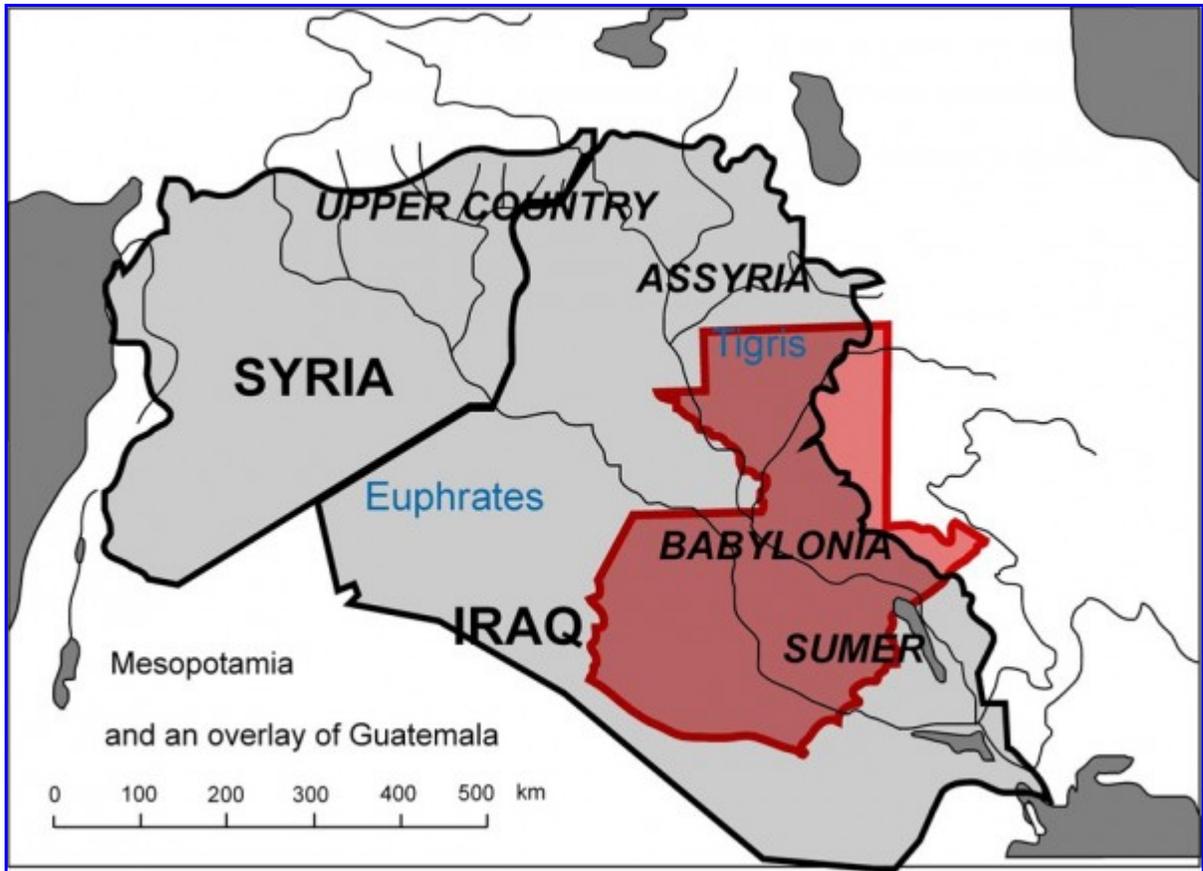
Posted by [Andrew Howley](#) of [National Geographic Society](#) on April 16, 2013

The [three-day “Dialogue of Civilizations” conference](#) in Guatemala is bringing together archaeologists studying five ancient cultures to discuss their similarities and differences and what they can tell us about human society as a whole. You can be a part of the conversation as well, tweeting your questions using [#5Civilizations](#).

On the first day of the conference, after the initial presentations on the rise of ancient Chinese civilization, [National Geographic Explorer Fred Hiebert](#) took the stage to introduce experts in ancient Mesopotamia, the “Land Between the Rivers,” in modern day Iraq, Syria, southeast Turkey, and northwestern Iran.

Giorgio Buccellati from the Cotsen Institute of Archaeology, UCLA won the crowd over by showing a map of the area with the conference’s host country of Guatemala added for scale. He was the second presenter however. First up was Dr. Augusta McMahon, Professor of Ancient History of the Near East, University of Cambridge.

Focusing on the conference’s theme of investigating how ancient civilizations can help inspire solutions for modern problems, McMahon discussed how Mesopotamians dealt with problems of water, sanitation, and employment in dense and rapidly growing cities.



A map of the region of ancient Mesopotamia, with local modern states (and conference host country Guatemala) shown for scale. (Map Courtesy Giorgio Buccellati)

Water

Beginning around 6000 BC, she said, people of the region began digging simple small-scale canals for irrigating small plots of land. By 3000 BC, canals had become enormous in scale, transforming the landscape and even being used for transportation between cities. Saddled with the huge responsibility of their upkeep, neighboring kings would even work together to maintain this central infrastructure.

There was a downside however to the prosperity water management brought. Booming populations outstripped the fertility of the land, stagnant water bred disease, and variability in the landscape, weather, and use led to conflict over access and rights. Today, we see the same issues affecting people globally. The World Health Organization estimates more than [3.4 million people die](#) from water-related disease every year, experts wonder [how can](#)

[we feed 7 billion](#) living humans, and conflict over water rights continues among individual farmers and [entire nations](#).



Enki, the god of drinkable water, seen in an ancient Sumerian relief. (Photo from Wikimedia Commons)

While the people of Mesopotamia may not have solved these issues, McMahon pointed out that in some ways at least they may have been a step ahead of many of us. From symbolically decorated vases to the nature of some of their gods, these people recognized at a practical and even spiritual level how fundamentally important reliable access to clean water is.

Enki, god of drinkable water, with streams and fish pouring forth from his shoulders, was seen as one of humanity's greatest friends.

Waste

The growth in population and city size created another problem: garbage and its accumulation. We know from modern examples, McMahon said, that in smaller villages people will simply carry sharp, large, dangerous, or smelly waste to the edge of town and dump it there. But what happens when the edge of town gets further away?

Listening from the audience, and knowing how big of a problem sanitation and human waste are even today, I was strangely dismayed by what she said next.

Around 3500 BC, big cities were on the rise in Mesopotamia. By 2900 BC, people were already building individual deep pit toilets, and by 2500 BC at the site of Tello, there's evidence of a well designed bathroom. So the ques-

tion is how can we take 5000-year-old urban technology and get it to rural areas still in need of it today?

Work

Finally, in a prosperous city, with the efficiencies of mass production of goods, you end up with a lot of people needing food and needing work. The people of Mesopotamia recognized this and had an interesting way of dealing with it. They cooked up projects for women and children.

Around 5000 BC, McMahon said, most pottery was made individually, with lots of care and fine detail. By 3500 BC, it's mass produced, not very well decorated, and relatively roughly made. There are also indications that thread-making and weaving became standardized.

With this standardization, women in cities were no longer at home weaving as part of many daily chores. Written records from 2040 BC, shows that in some cities, women were employed with children in industrial-scale weaving factories. In exchange for labor, they received food and clothing. Still, much like many women around the world today, they faced exploitation, were paid less than men, and even dealt with sweatshop-like conditions of hard rationing.

McMahon's other illustration was really fascinating. In Uruk around 3200 BC, a large religious complex would take 100 years to be built, then be flattened and rebuilt—for no apparent functional reason. It seems to be a deliberate attempt by the government to keep the city at full employment by keeping construction continuous.

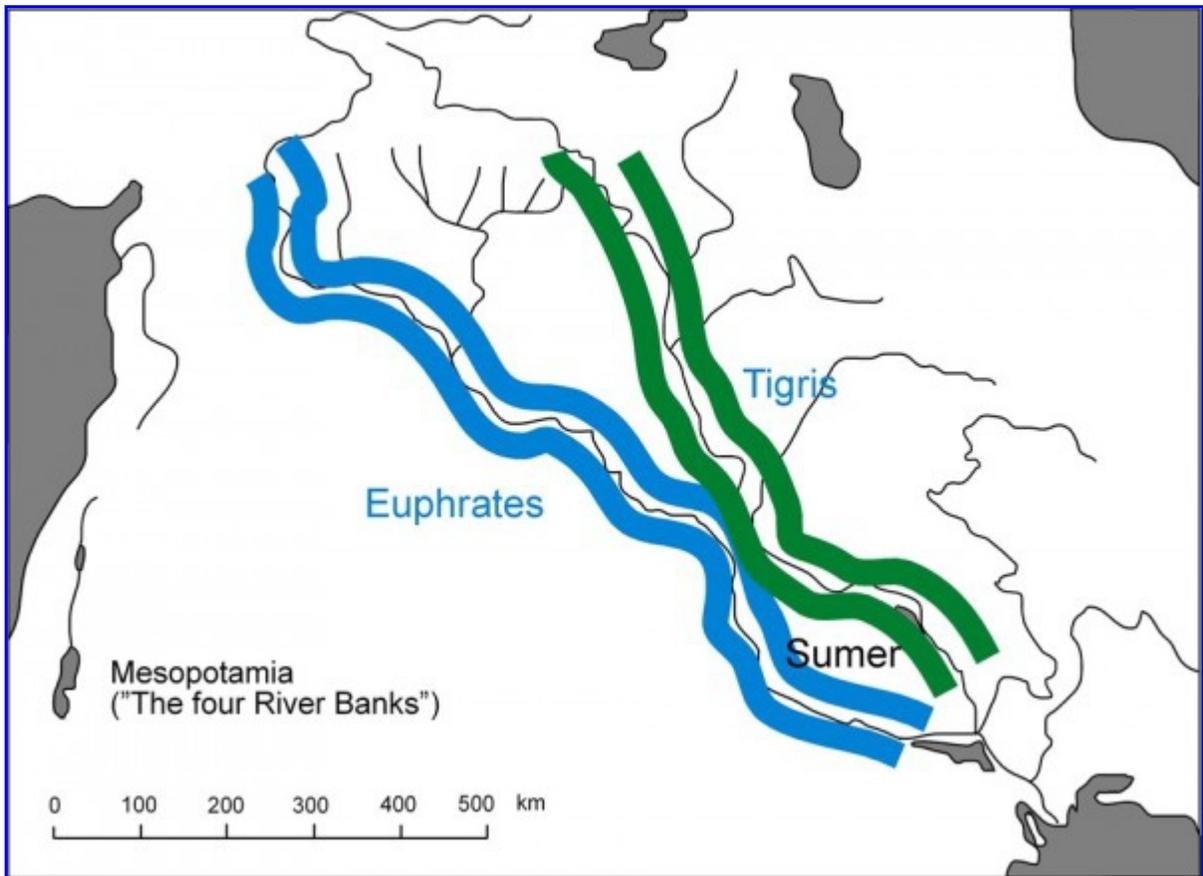
In summary, McMahon said the key to Mesopotamian success was using a mixed bag of solutions for these three major challenges. For all its pros and cons, it worked for thousands of years, and that says something for us today.

Cities, Writing, and a New Human Mindset

When Giorgio Buccellati took the stage next, he didn't just please the crowd with his "Guate-potamia" map above. He challenged everyone to think outside of our expectations and assumptions about the ancient world.

For one thing, we kind of have the name wrong. "Mesopotamia," meaning "The Land Between the Rivers" is a word and concept that comes from the Greeks. Akkadian king Naram-Sin around 2250 BC had his own concept of

the defining character of the area, calling himself “King of the Four River Banks.”



Instead of one land between two rivers, the ancient Akkadian king Naram-Sin conceived of the area as consisting of four river banks. (Map courtesy Giorgio Buccellati)

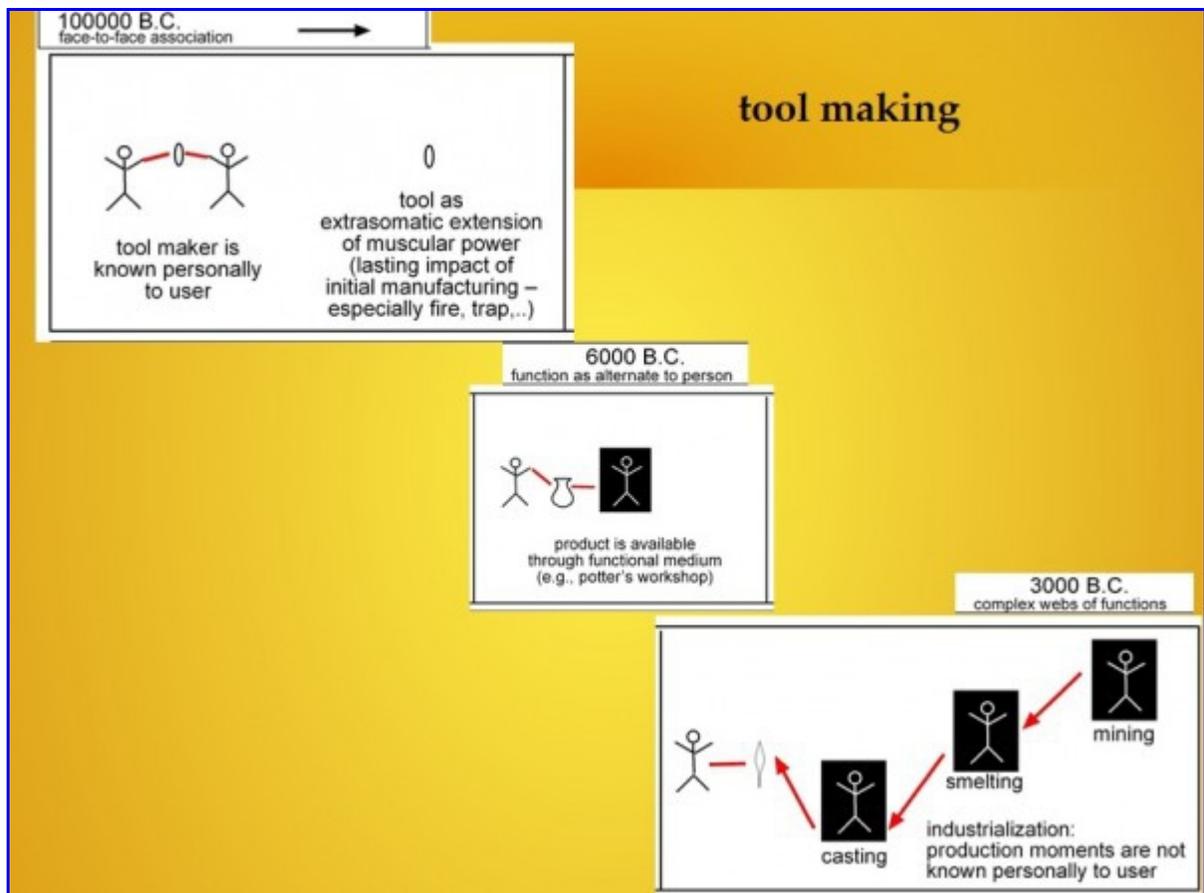
Buccellati’s real eye-opener though regarded the whole nature of what it means to be part of a civilization. It’s certainly not about cars or electricity, since we have ancient cities that clearly had neither. “All cities, for all their differences,” he said, “are closer to ancient cities than ancient cities were to villages.”

In the transition from smaller villages, cities develop monumental architecture, luxury items, and perhaps most importantly, writing. Using these tools, settlements “expand exponentially and create a wholly new built environment.”

Why Has This Changed Human Life?

The answer comes down to our relationships with each other. “The real difference,” according to Buccellati, “is that we can relate to each other without knowing each other, because we have a common purpose that transcends.”

Long before cities, he said, “personal interaction” was the only way people could feel bonded to each other. As detailed language developed, people could learn about things they never saw themselves. Writing then multiplied this effect. “People could relate via symbols that have an existence of their own beyond the moment of audio contact.” Once you can read a language, you no longer need another person to be present to get information from them. The symbols alone are all you need.



Buccellati's conception of the development of how civilization changes people's relationships and concepts of each other and the things we make and use. (Image courtesy Giorgio Buccellati)

As shown in the image from Buccellati's presentation above, the same happens with tools. Originally a tool maker was a person you knew personally.

Then they were someone you may never meet, but you still identified as the maker of the thing you acquired. Eventually, manufacturing can become separated by task, and you no longer even know how many people were involved in the creation of an object.

While some view this as alienating, Buccellati sees it as the key to extended solidarity. We no longer know these people individually, but we are still connected to them, and we know this, and conceive of them as part of our group. Relating to the functions that people serve instead of to people you meet in person “provides efficiency that revolutionizes the idea of solidarity.”

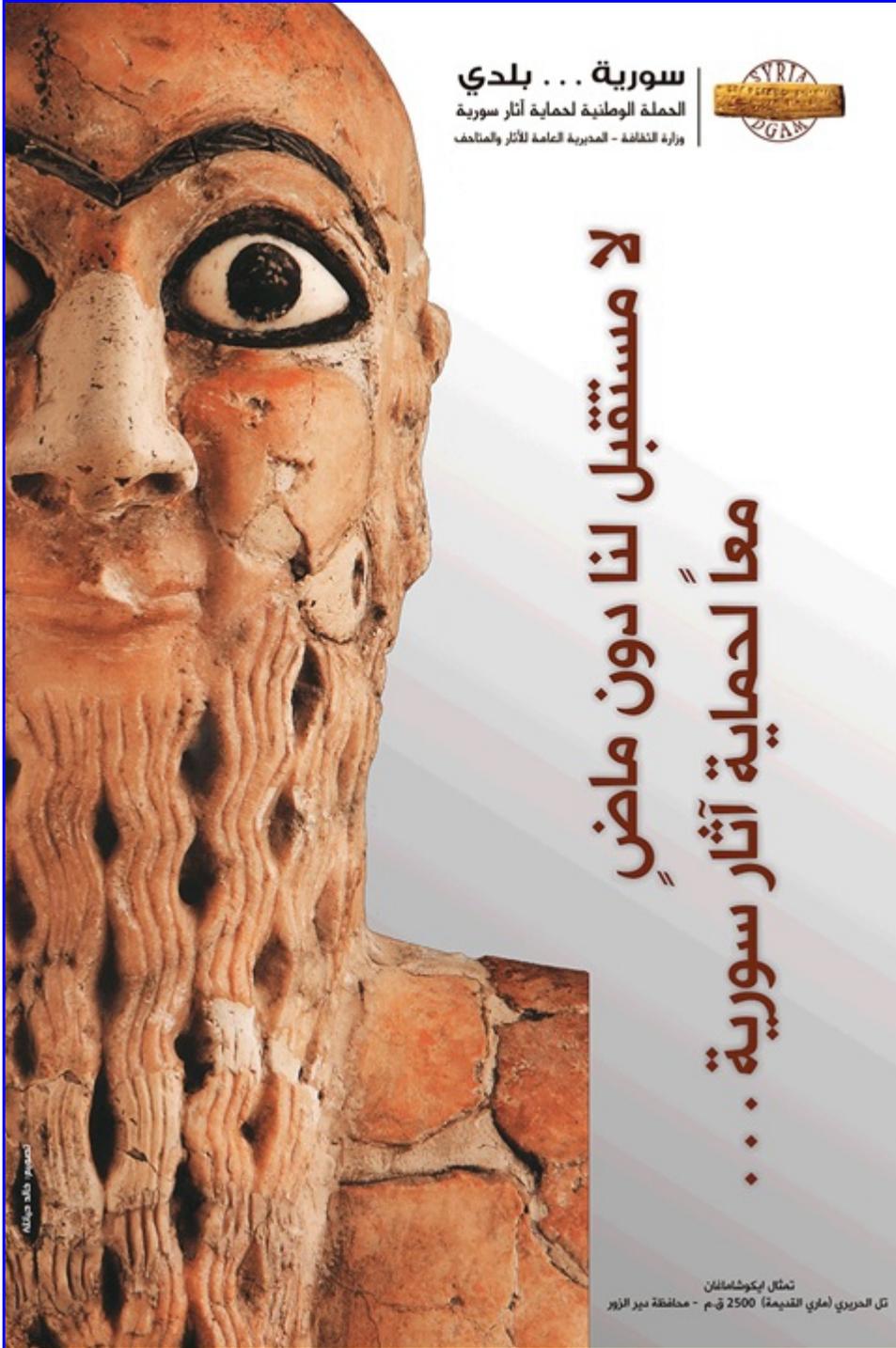
Solidarity Today

Buccellati then traced the development of Mesopotamian civilization through to Hammurabi and his famous code that gave people across vast areas a standard way to relate to each other, wherever they went.

“After that,” he said, “the whole civilized world began to interact using international protocols...[and] now the individual could relate to the whole known world.”

To close, Buccellati made the connection that we must continue to develop these positive and reinforcing relationships, also develop solidarity with the the people of the past, expressed through conservation of the record of their lives and ideas. Working for much of his life in and around Syria, he feels these points especially strongly now, during the extensive conflict there today.

He closed by showing this poster, one in a series posted throughout Syria, aiming to get locals to protect their local heritage. This particular one he sees as “a daunting image of an ancient Syrian looking in disbelief at what is happening in his country today.” He then translated some of the text: “Syria our country, let us be proud.”



Giorgio

Buccellati sees one of modern Syria's posters promoting conservation of cultural heritage as "a daunting image of an ancient Syrian looking in disbelief at what is happening in his country today." (Photo Courtesy Giorgio Buccellati)