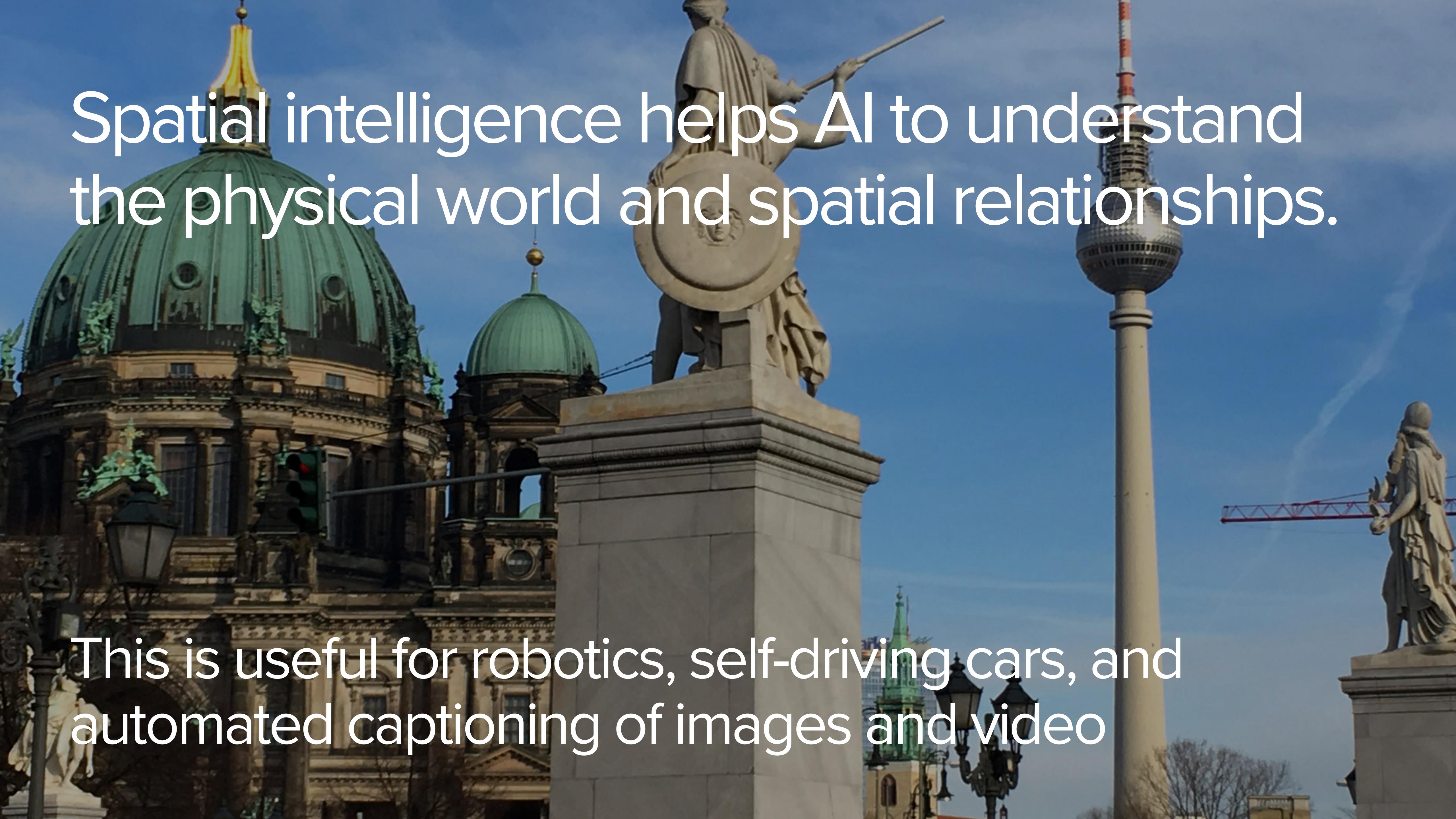


What is spatial intelligence?

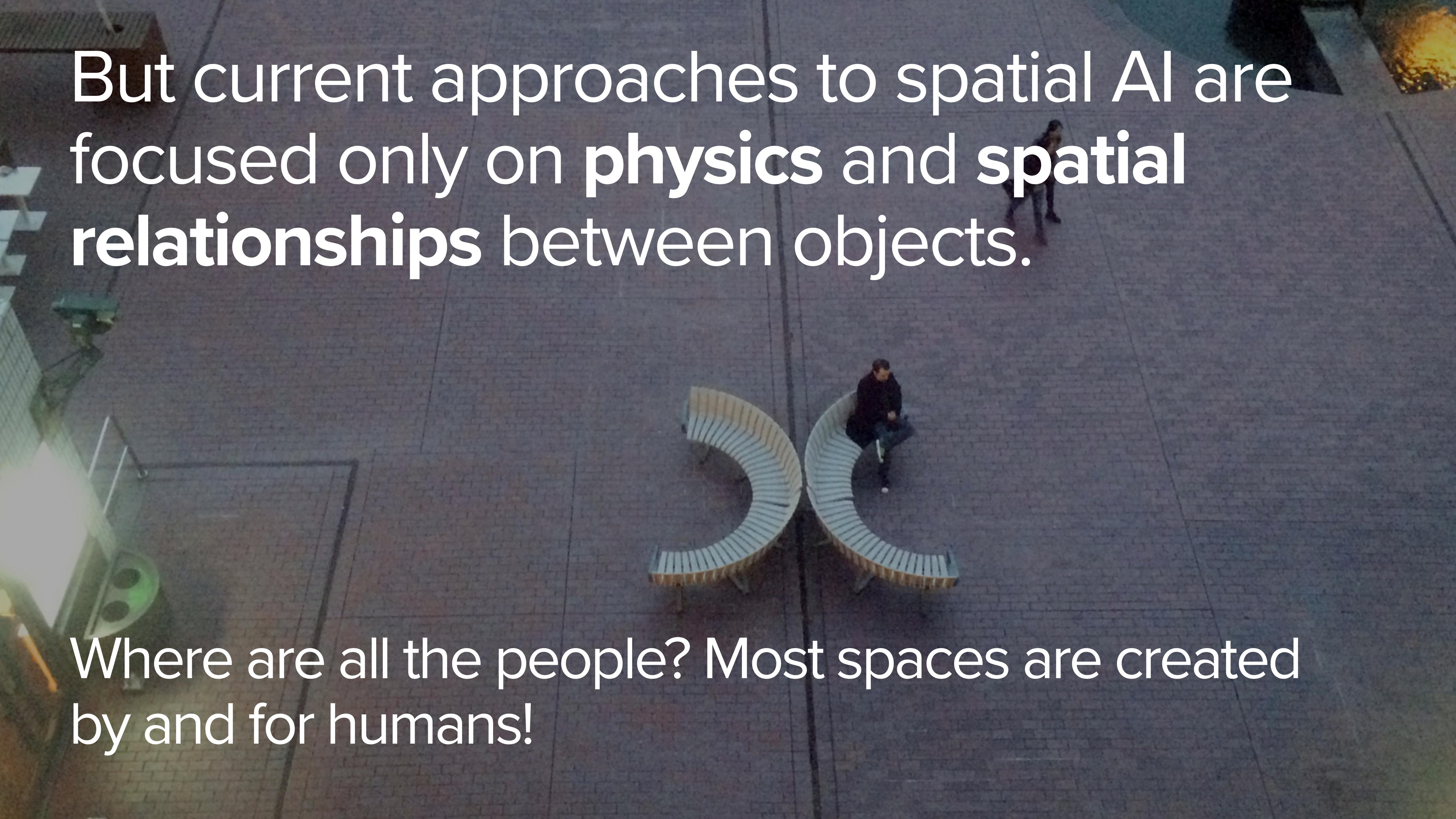


(And where are all the people?)

A scenic view of Berlin's skyline. In the foreground, the Victory Column (Siegessäule) is visible, topped with a statue of the Roman goddess Victoria. To the left is the Berlin Cathedral (Berliner Dom) with its green dome. In the background, the tall Fernsehturm (TV Tower) stands against a clear blue sky. A statue of a soldier with a shield is also visible on a pedestal.

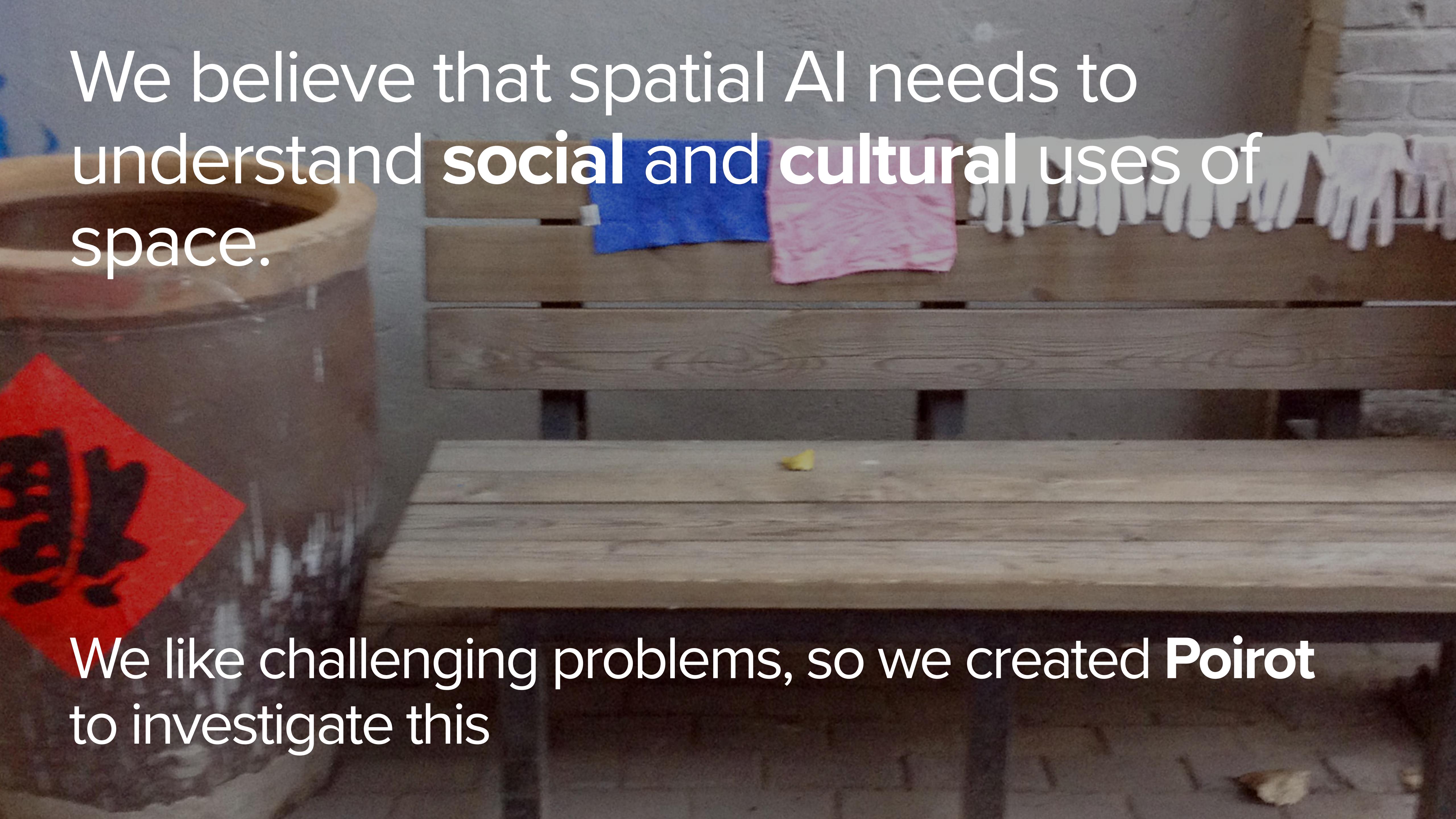
Spatial intelligence helps AI to understand
the physical world and spatial relationships.

This is useful for robotics, self-driving cars, and
automated captioning of images and video

A dark, high-angle aerial photograph of a city street. A single person is walking on the sidewalk. In the foreground, there are two large, light-colored, circular structures, possibly planters or decorative elements. The background shows the grid pattern of city buildings and streets.

But current approaches to spatial AI are focused only on **physics** and **spatial relationships** between objects.

Where are all the people? Most spaces are created by and for humans!

A blurry, out-of-focus photograph of a person's hands and a red book cover with Chinese characters. The background is a dark, textured surface.

We believe that spatial AI needs to understand **social** and **cultural** uses of space.

We like challenging problems, so we created **Poirot** to investigate this



Poirot is an open-source social spatial intelligence model, fine-tuned on philosophy and spatial theory as applied to urban spaces.



We tested Poirot by comparing its interpretations of urban scenes with interpretations generated by general models like ChatGPT and Claude, and interpretations of the same scenes by people.

The general models do pretty well, but Poirot
is better at transforming **analysis** to **actions**,
and identifying **social dynamics** around
urban scenes



A scenic view of a canal in Amsterdam. The scene is framed by a row of red brick buildings with white-framed windows and doors. Some buildings have signs for "FABRIEK", "VERF en VERNIS", and "ZONEN". In the foreground, several bicycles are parked along the canal bank. A small boat with two people is visible on the water. The canal is lined with a wooden boardwalk. In the background, the spire of a church is visible against a cloudy sky.

Poirot also generates multiple interpretations.
This is valuable for questions that have more than
one answer!



Poirot shows the value of developing models grounded in the **humanities** and **social sciences**, as opposed to those led purely by engineering