

Automatic Cities [Artwork]

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Figure 1: Scan this QR Code to access the Automatic Cities soundwalkAbstract

Automatic Cities is a spatialized AR soundwalk situated in the ancient city of Cagliari, Sardinia. The piece was produced working with various machine learning algorithms and is organized by a symmetrical structure inspired by Italo Calvino's 1972 *Invisible Cities*.

Automatic Cities consists of geolocated audio vignettes curated from the output of a generative pre-trained transformer (GPT-2) inference system and spoken by neural network-driven synthetic voice actors.

The vignettes mirror Calvino's eleven thematic categories of cities, laid out in nine chapters along a walk from the courtyard of the *Museo archeologico nazionale* to the *Galleria Comunale d'Arte*.

Illustrations for each vignette are generated by a VQGAN + CLIP machine-learning system.

Each chapter has a specific sound design that responds both to the physical site and to the groupings of the city vignettes it includes.

These vignettes offer brief glimpses into the lives of other possible and impossible cities, something like a collective networked hallucination reconstituted through machine learning.

The piece is a meditation on cities, memory, and the layering of real and virtual experiences through simultaneous familiarization and defamiliarization of space and sound.

Automatic Cities will be live during GA2021 and may be experienced through the ECHOES.xyz mobile app, available for iOS and Android devices. Please enjoy your walk!

<https://tinyurl.com/auto-cities>



Figure 2: GAN Image "It is possible to walk on the thin ice between houses"