

gravity sketch

Use case

Car Design tape drawing

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Abstract

This article describes the process of creating black and white tape drawings with GravitySketch in virtual reality.

Overview

Once famous “Piano di Forma,” so loved by Giorgetto Giugiaro, this Front/Side/Top view design drawing, is best in real scale. Creating a such a drawing is one of the oldest automotive design techniques, yet it remains an essential part of the process at most of the car styling centers. We call it full-size tape drawing. Used for both exterior and interior, it allows the designer to create full size drawing as a black and white outline, which gives them an accurate sense of its proportions. Such drawings are used further in the process for clay modeling and digital sculpting.

Tape Drawing with GravitySketch

There are few choices of tools in GravitySketch: from freehand strokes to bezier-like splines, few types of stroke shapes, symmetry, and some other sculpting and modeling tools. The most suitable tool is primary round curve built point to point with mirror symmetry on. With no need to interact too much of a UI, the “taping” is very intuitive. As designer gets controllers closer to the center line, points automatically snap to mirror plane. The user can select multiple points at once, and rotate them in a group with the twist of the wrist. It is also possible to zoom in and out in a similar manner as on your iPad - the gesture made with both arms represent the popular finger pinch-to-zoom.

The result could be exported as IGES curves and directly used with and CAD system, or as a screenshot into Adobe Photoshop.

Tape drawing with GravitySketch is an easy and intuitive process, which generates data with value beyond visual output.

Process: <https://www.youtube.com/watch?v=KiR0Aofz7RY>

Interactive model at Sketchfab: <https://skfb.ly/66YtJ>

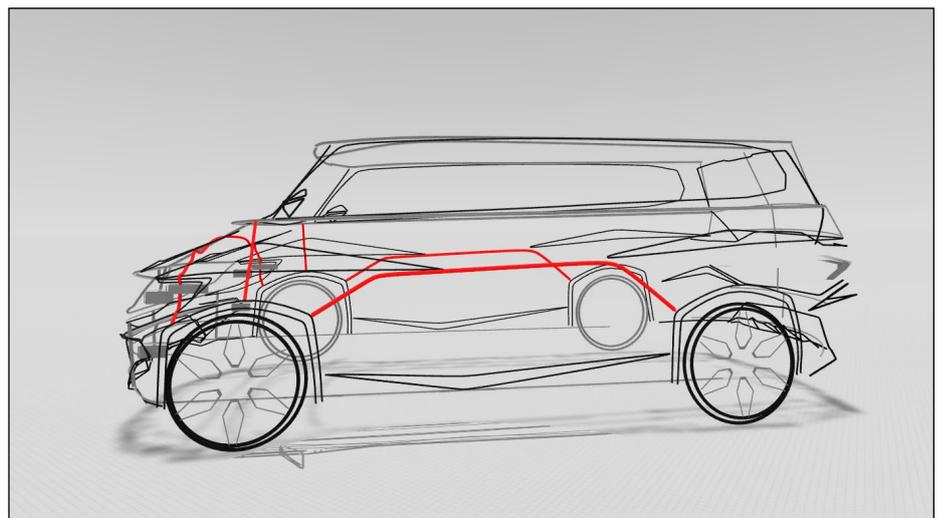
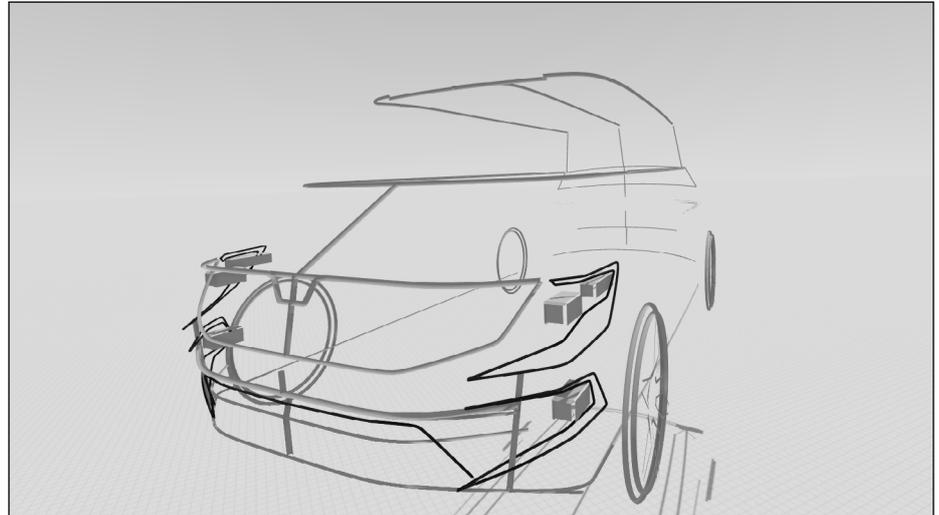


Illustration made with Adobe Photoshop based on the VR tape drawing.

