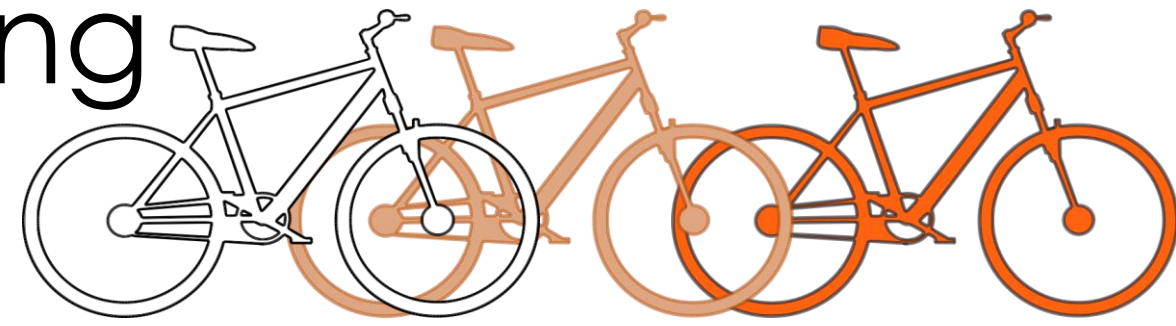


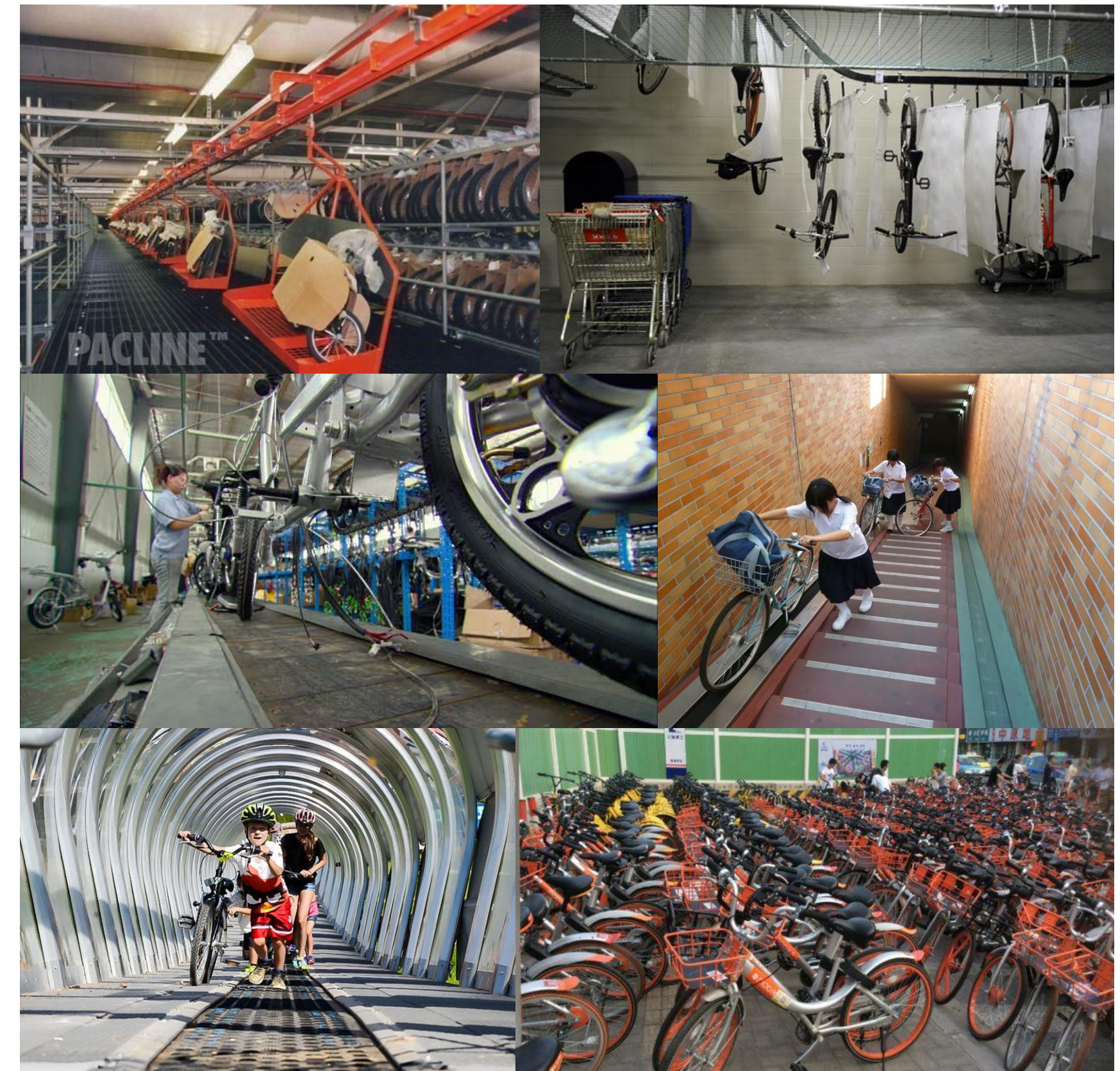
Velo Vending



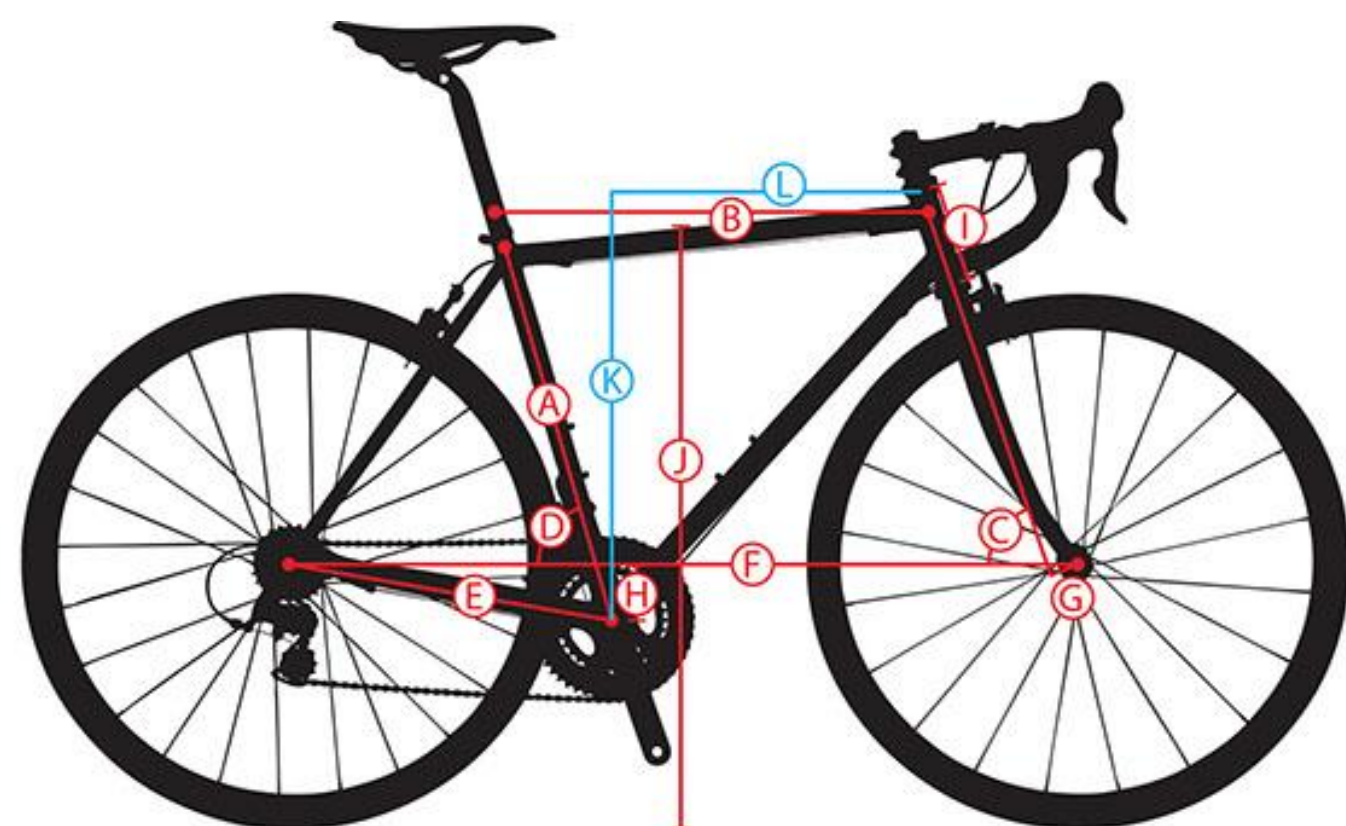
Upon spatial exploration and the study of void and mass within the framework of a traditional American Four-Square home, the degenerative process occurred. Where an excess of overlapping masses intersected, created the rules by which to either cut away, or keep parts of the existing structure. What was left after many iterations was something that no longer resembled a home, therefore breaking up it's purpose and designed function, as well as any preconceived notion to what role it serves. The primary role of my latest spatial iteration is a bicycle vending machine. The machine has many roles with its related system of parts, serving functions such as returning, washing, maintaining, sorting, and vending. This is all done in a linear process similar to that of a carwash or assembly line.

The unique thing about a bicycle is it is lightweight enough to break the traditional plane needed in an assembly line which means it may be going up walls, ceilings, or any direction. A bike can easily be hoisted on conveyors and lines that no longer need a floor plane, even rotating the bike upside down by the wheels or frame. The entire linear process is on display through the apertures, creating a duality of purpose not only for viewing the inventory and advertising it, but creating a barrier between the threat of thieves as well as mother nature and rusting on any metal component on the bikes.

The process on display would firstly wash the bike with a high-power wash, then a quick dry. Moving on to the wall and ceiling planes of the protrusion over the model, proceeds to oil the chain, air up the tires, shift through the gears, and check tire tread. If any inspections are failed, the bike is sorted to the side for human inspection at a later time. Passing bikes continue through the machine onto sorting the bikes by size, and ultimately vending them upon checkout.



- A = Size
- B = Effective TT Length
- C = Head Tube Angle
- D = Seat Tube Angle
- E = Chainstay
- F = Wheelbase
- G = Fork Rake
- H = Bottom Bracket Drop
- I = Head Tube
- J = Standover
- K = Stack
- L = Reach



The stakeholders for this particular Velo Vending machine is a city. This is run by a small team of state-employed workers. Team members maintain the machine and bicycles that fail the machine's inspection. Several of these stations could exist within a city, housing different types of bicycles. Some may hold popular city cruisers with 3-5 gears. Some may house utility/hauling bicycles with racks, panniers, and cargo trays. Others might be franchised out near mountain bike trails and contain the latest mountain bike rental. In any case, each machine is unique and would have its parts arranged in different ways, reacting to the environment in which it is located. Each structure also acts as sculpture, as large glazed apertures allow the process to be viewed.

Each machine would only house one style of bike but in 3 different frame sizes depending on the height of the rider. Small riders below 5'6" would choose a S, 5'6"-6' might choose a medium, and 6' and taller might go with a large. The machine registers what size frame has entered the system once returned. That way, in its place along the conveyor line, the machine can adapt to different wheel-bases as well as know the 3D space the bike will take up to be able to work on it. This is why the machine must all contain the same type of bike with the only variant being the frame sizing, as the tools to maintain different bike types would vary slightly.

