Interior Design Without Architecture

The Train Interior Studio

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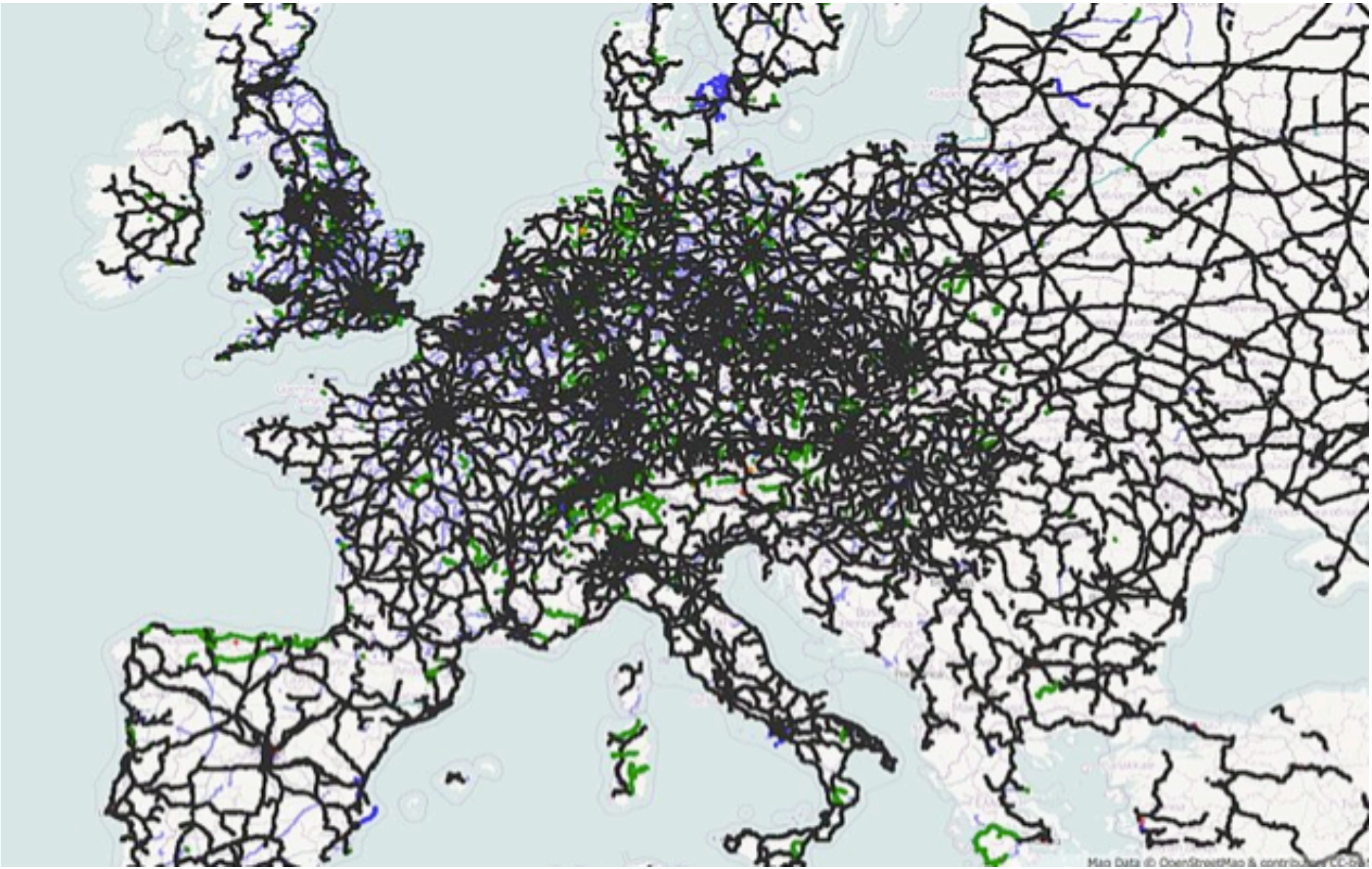
Introduction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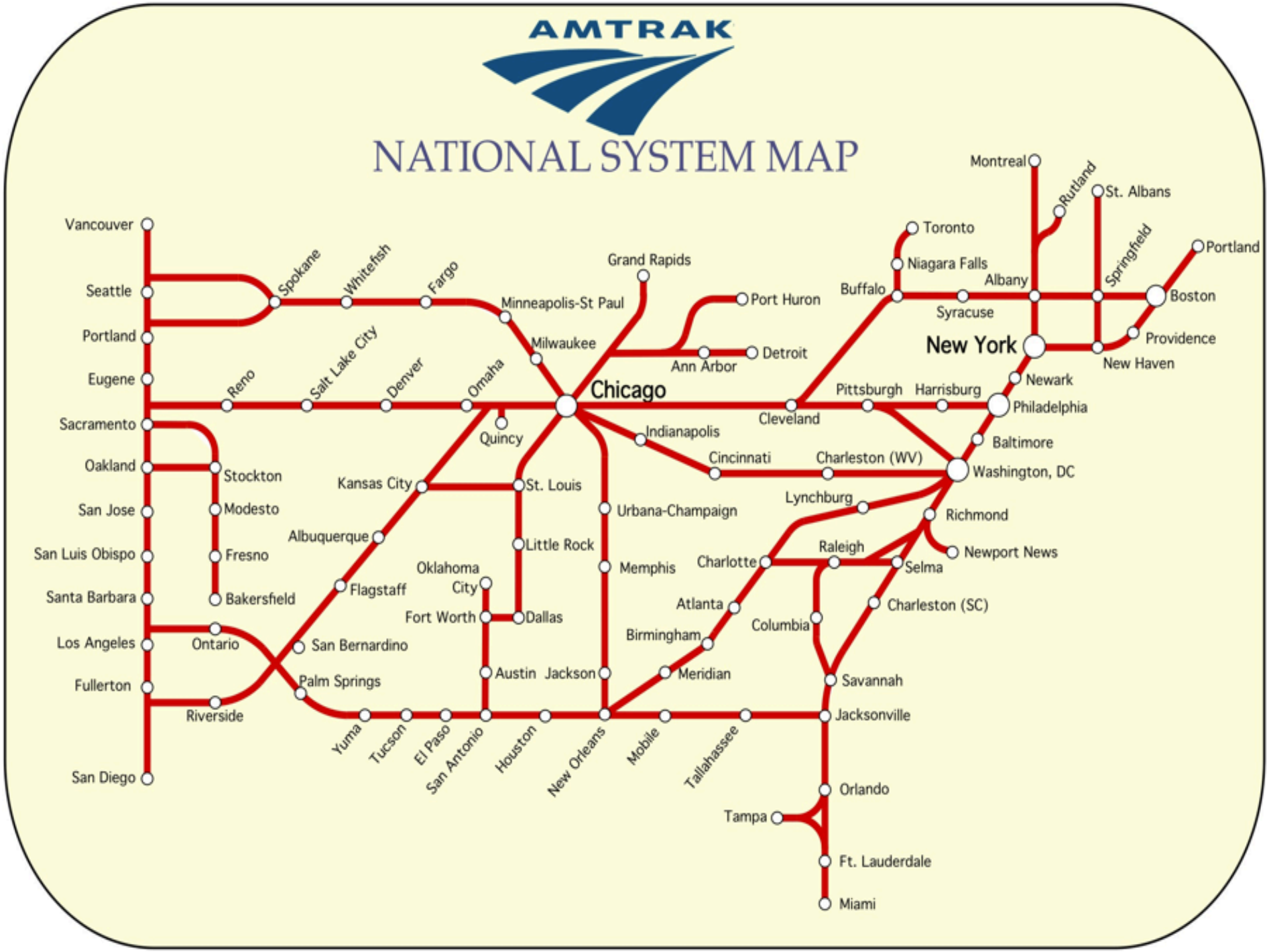
AMTRAK
NATIONAL SYSTEM MAP
Vancouver
Seattle
Portland
Eugene
Sacramento
Oakland
San Jose
San Luis Obispo
Santa Barbara
Los Angeles
Fullerton
San Diego
Spokane
Whitefish
Fargo
Minneapolis-St Paul
Grand Rapids
Port Huron
Detroit
Ann Arbor
Milwaukee
Reno
Salt Lake City
Denver
Omaha
Quincy
Chicago
Stockton
Modesto
Fresno
Bakersfield
Ontario
Riverside
Kansas City
St. Louis
Albuquerque
Flagstaff
San Bernardino
Palm Springs
Yuma
Tucson
El Paso
San Antonio
Oklahoma City
Fort Worth
Dallas
Austin
Houston
Little Rock
Jackson
New Orleans
Urbana-Champaign
Memphis
Mobile
Birmingham
Meridian
Tallahassee
Indianapolis
Cleveland
Cincinnati
Charleston (WV)
Pittsburgh
Harrisburg
Buffalo
Toronto
Niagara Falls
Syracuse
Albany
Montreal
Rutland
St. Albans
Springfield
Portland
Boston
Providence
New Haven
New York
Newark
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Tampa
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Design Process and Project History

The Project Screen


treehugger
DESIGN + ARCHITECTURE
Turn Your Froot Loops Into Furniture With The Sustainable Slotted System
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A SMALL STEP CAN MAKE A BIG DIFFERENCE.
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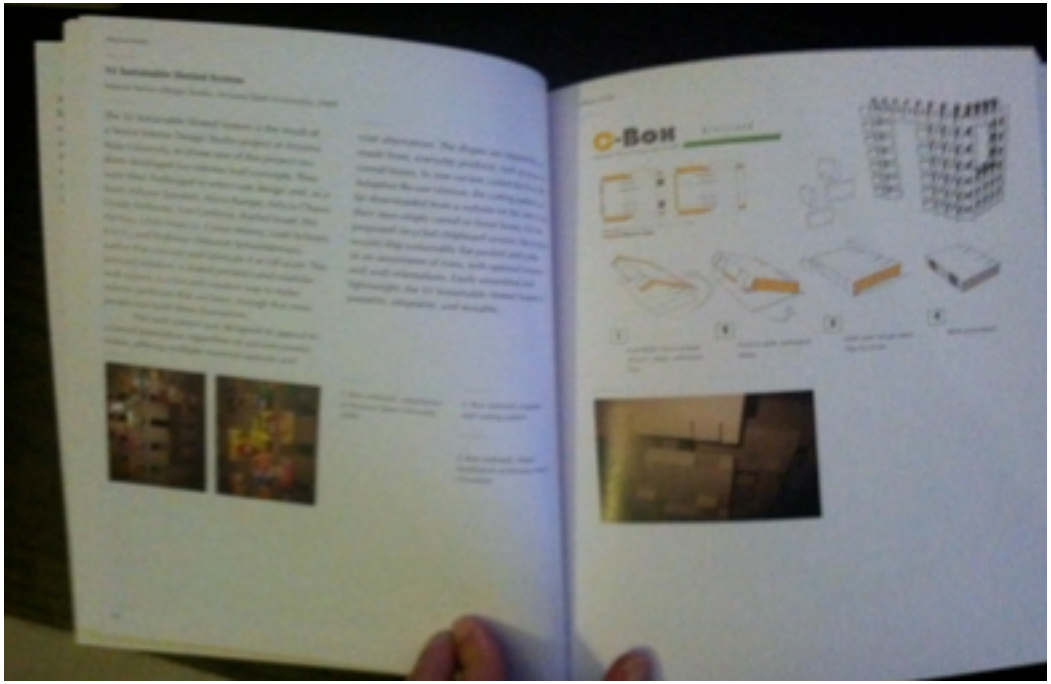
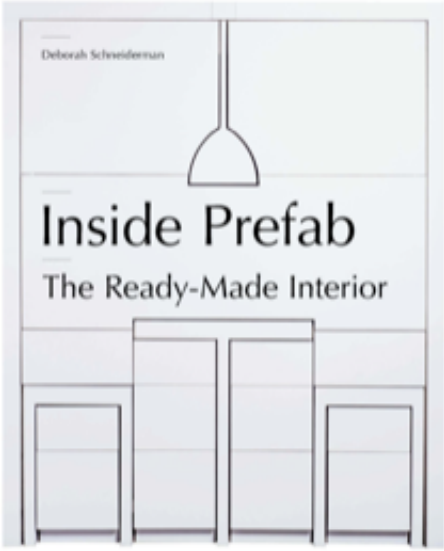
RECENT POSTS
A La Lata Bowl Made From Recycled Soda Can Tabs


C-Box


Inside Prefab
The Ready-Made Interior
Deborah Schneiderman

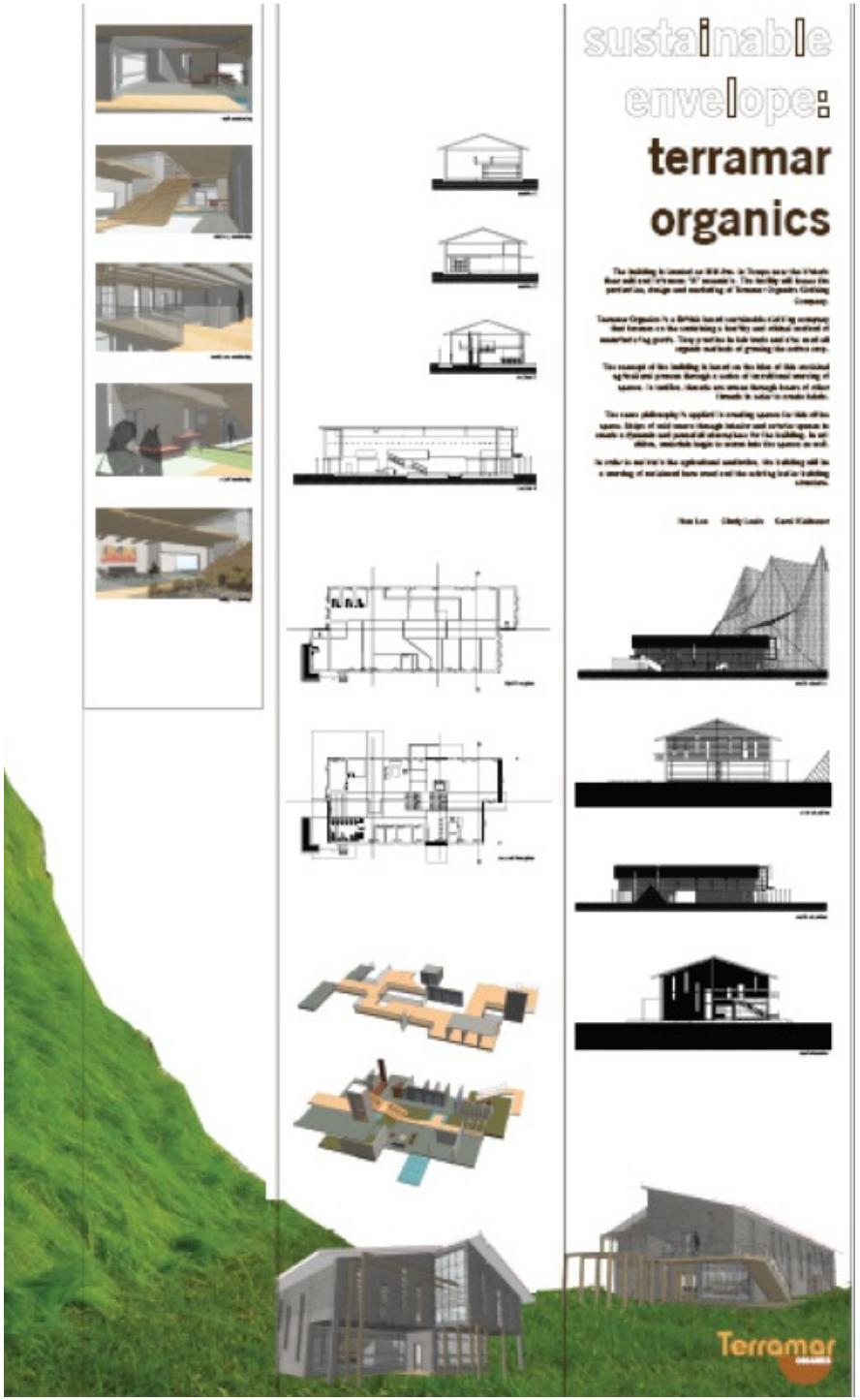

Deborah Schneiderman
Inside Prefab
The Ready-Made Interior

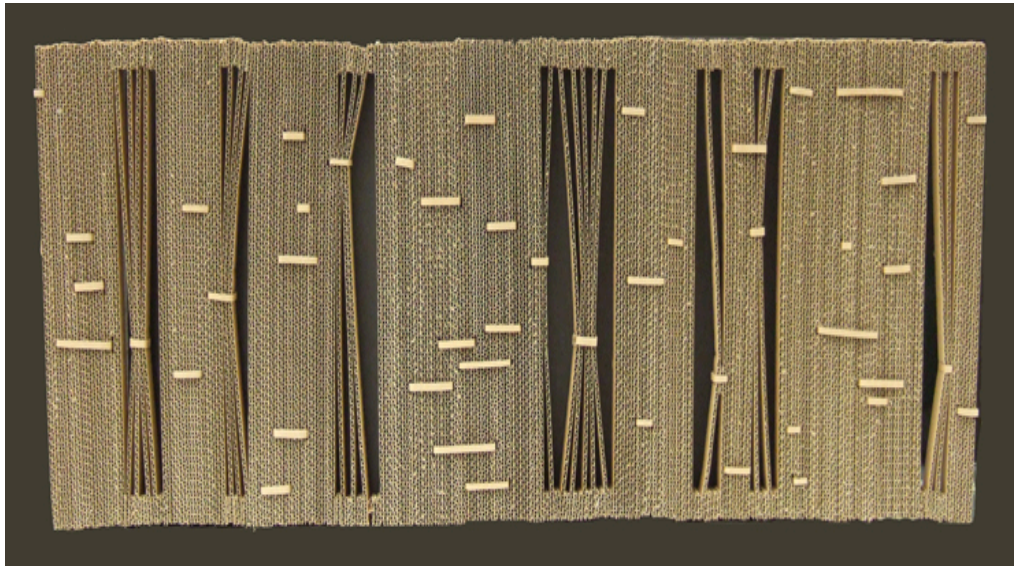
Storefront for Art and Architecture Presents

Total Enthusiasm:
INSIDE PRE-FAB

Feb 3, 2012, 7PM

with Karen Fairbanks, Ferda Kolatan, Britney Malave, Katelyn McKernan, Christopher Quiles, Ada Tolla, Allen Wexler
and author of *Inside Prefab: The Ready-made Interior,* Deborah Schneiderman


sustainable
envelope:
terramar
organics
Terramar



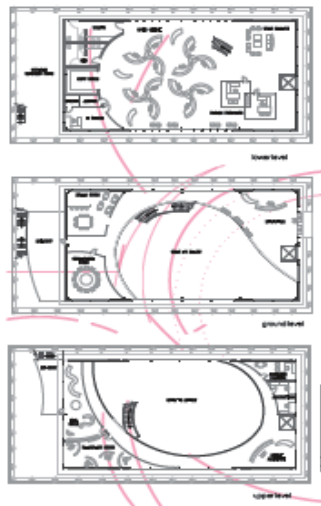
Maxine Sutton: the art of collage.....

is an assemblage of DIVERSE ELEMENTS

a work of art put together from FRAGMENTS

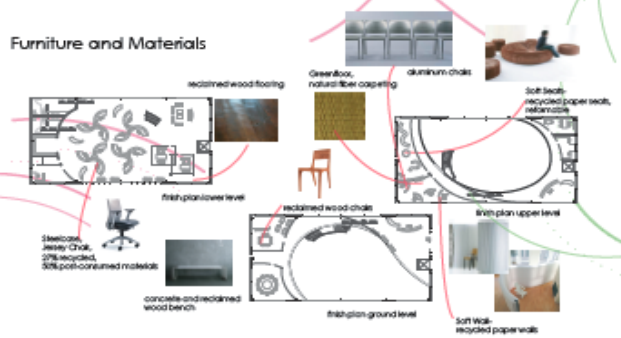
the "RE-USE" of material as components within a "NEW COMPLEX WHOLE"

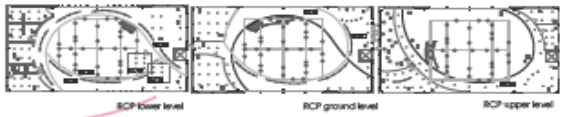
a work of visual arts made from an agglomeration of DIFFERENT FORMS



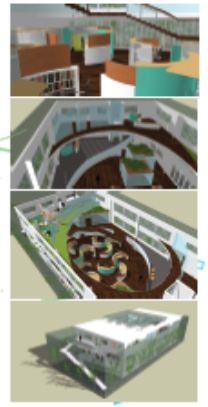
Floor Plans

Furniture and Materials





Sections



Perspectives

Experiences

Maxine Sutton

Representing the work of Maxine Sutton opened up a door of endless design. She has hopped on the sustainable train and it undoubtedly reflects in her design.

Through combining plant dyed yarns, reclaimed materials and organic fabrics, Sutton uses a low-impact image printing method, creating textiles that range from angelic paintings to embroidered sheets and lamp shades.

Her work fuses cultural history, human anatomy, and organicism; it is matched with an array of pigment that speaks delicacy and reads "collage."

Studied in London, UK, her products have been showcased in credible art fairs, exhibitions, and are sold in some of the finest boutiques.

Maxine Sutton proves that sustainability and beauty can co-exist.

Maxine Sutton is green.

Concept

Collage: an object within an object

Our office is designed to communicate the importance of collaboration. A company should serve as a hub for unique personalities and assorted work styles; a collage extends far beyond the arts, overlapping the environment with human development.

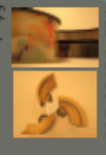
Alternatively, a collage symbolizes the ability to create something new through the reuse of existing elements. This mirrors Sutton's sustainable values and represents our project's mission to create a "Sustainable Envelope". Our building is eco-friendly not only in its construction but through the company it houses.

Site

Our building is located at the intersection of 4th avenue and Portland, near the heart of downtown Phoenix. Nearby access to major transportation arteries such as the I-10 and I-17 make it easily accessible from all corners of the Valley. Light rail stations 10 & 11 are just east of the building, within walking distance.

The Roosevelt district hosts First Friday, a community art walk, on the first Friday of every month. Here, Maxine Sutton & Co. can participate by showcasing their up-and-coming products, selling merchandise, hosting live music and providing refreshments.

System Furniture



The development of our screen and system furniture also draws on the concept of "Collage: an object within an object".

The screen is woven of corrugated cardboard strips, highlighting the interplay of light and shadow. When one looks directly through the screen the contour of a vase is revealed, functioning as a privacy curtain and moreover, a visual experience.

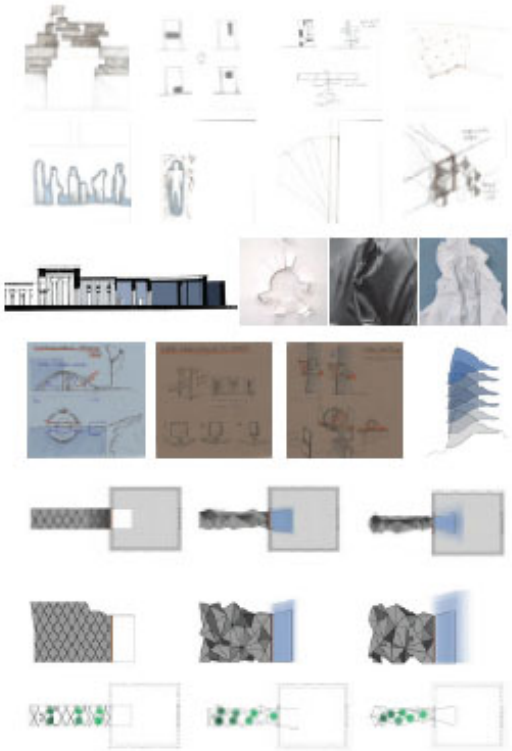
The system furniture was stimulated by Sutton's use of amorphous forms and diverse textures. Each unit is composed of an ellipsoidal outer panel that uses a nesting method to maximize storage space. Inside lays a glass wall that may be used as a writing surface or for extended privacy, a cork memo board and additional shelving. Flanking our screen, we have created a level of privacy in which each individual is veiled by their panel but not completely obscured.

Below the desk are three rotational drawers that fan out allowing the user to access them collectively if necessary. Above this system is a small desktop that pivots 180 degrees along the same axis. When these people rotate this element in unison the desks fit together in a puzzle-like formation, resulting in a synergic work space.

THRESHOLD PROJECT: BECOMING CONSCIOUS

CHANEL LAI
+ YULIYA SUMINA

PRELIMINARY STUDIES



STUDY SKETCH MODELS

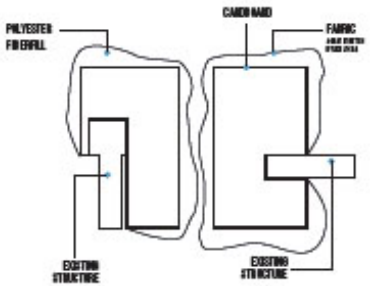
1. TETRIS PULL + PUSH

2. SELF-AWARENESS

FINAL THRESHOLD

PLAN

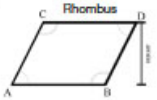
1 1/2" = 1'-0"



SEQUENCE OF MOVEMENT

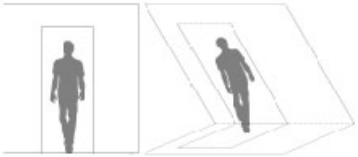
Modular Threshold

Rhombus



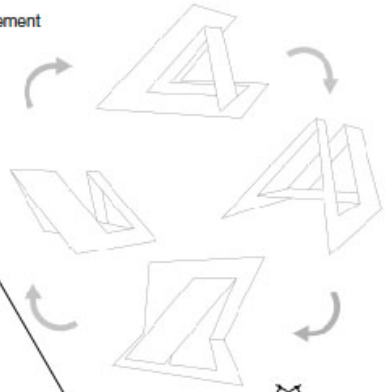
"A parallelogram with opposite equal acute and obtuse angles and four equal sides"

Reflection Across A Plane



The word "rhombus" comes from the Greek (rhombos), meaning something that spins, which derives from the verb (rhemb), meaning "to turn round and round"

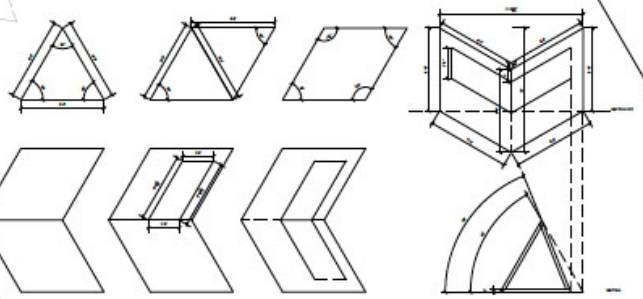
Parallel Movement



Modular Unit

Plan

Scale: 1/2" = 1' - 0"



THRESHOLD

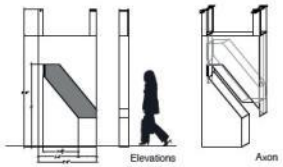
ASHLEY HSU
YANZI ZHO
LIAM DUBLIN

Sketch Studies

Scale Studies

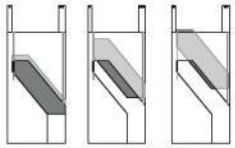
Mock-Up

PROCESS



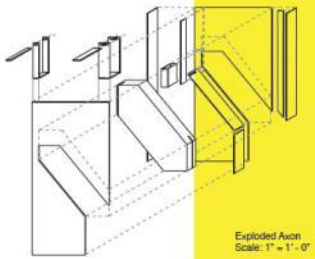
Elevations

Axon



Section Sequence

Scale: 3/4" = 1' - 0"



Exploded Axon
Scale: 1" = 1' - 0"

DRAWINGS

Experience

Details

Sequence

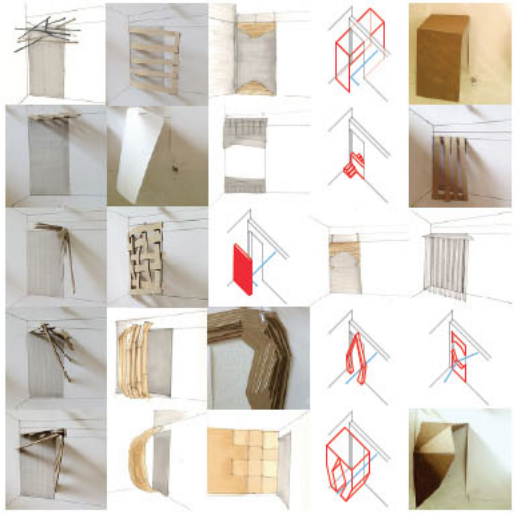
FINAL MODEL

THRESHOLD: REDEFINING THE STANDARD THRESHOLD EXPERIENCE

DESIGN V - FALL 2012
SHUBHI AGRAWAL & GARRETT CHAN

25 SCHEMES: IDEA GENERATION

CONSIDERATIONS: PRIVACY, DIRECTIONALITY, TEXTURE, LIGHT, EXPERIENCE



STUDY MODEL

FORCED INTERACTION TO ENHANCE EXPERIENCE OF THRESHOLD
DIRECTIONAL TRIANGULAR SHAPES POINT TOWARD OPENING
PLAYS WITH LIGHTING CONDITIONS WITH USE OF CUTOUT SHAPES

INTERIOR

EXTERIOR

CLOSED

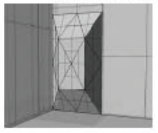
OPEN

INTERIOR

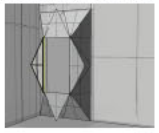
EXTERIOR

RHINO MODEL

EXTRACTION OF IDEAS AND GOALS IN SIMPLIFIED FORM

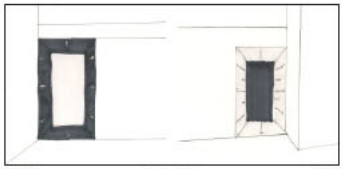


CLOSED



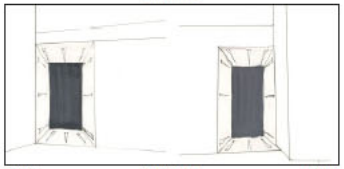
OPEN

THRESHOLD: INVESTIGATIONS & FINAL MODEL



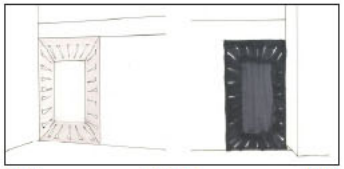
INTERIOR EXTERIOR

SCHEME 1



INTERIOR EXTERIOR

SCHEME 2

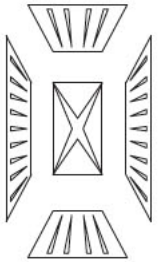


INTERIOR EXTERIOR

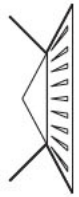
SCHEME 3

FINAL MODEL

DRAWING SCALE: 1" = 1' - 0"

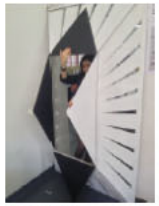


COMPONENTS



SECTION THROUGH THE MIDDLE
OPEN

SECTION THROUGH THE MIDDLE
CLOSED



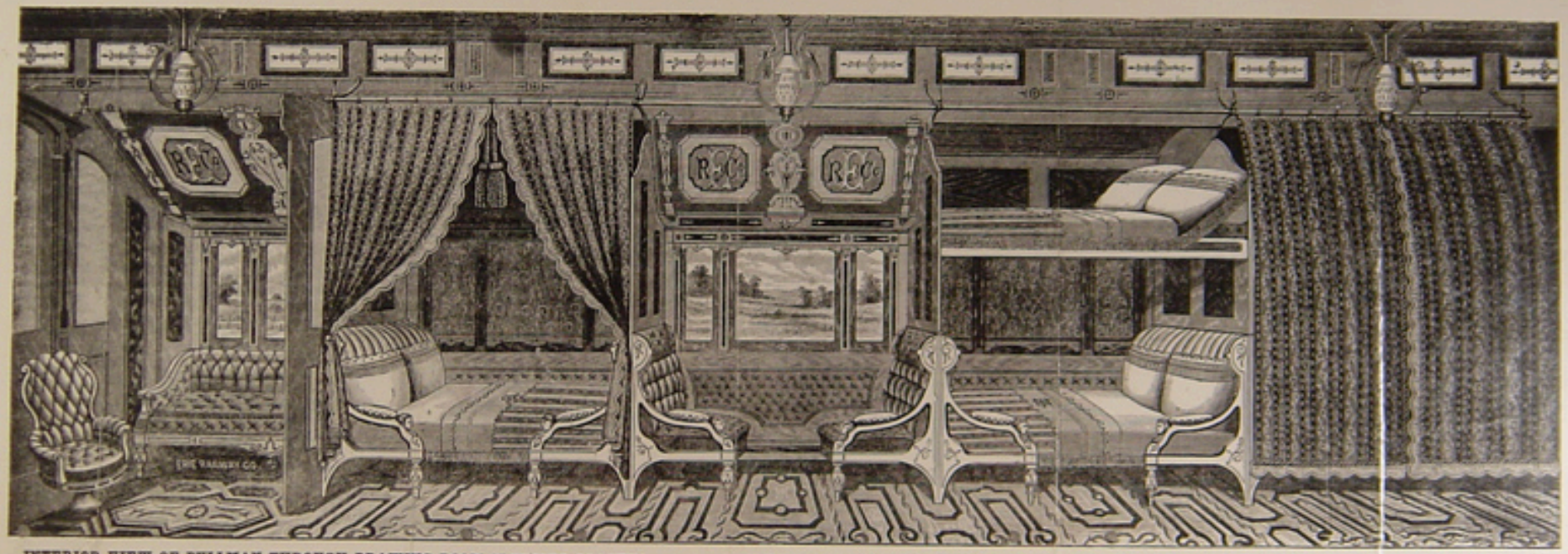
ENTRANCE SEQUENCE

EXTERIOR

INTERIOR

The Train Design Project

AMTRAK®



INTERIOR VIEW OF PULLMAN THROUGH DRAWING ROOM SLEEPING COACHES, running DAILY between CHICAGO, CLEVELAND, NIAGARA FALLS, BUFFALO and NEW YORK, via ERIE RAILWAY.

Tho. N. Abbott, General Passenger Agent

CAFE-LOUNGE CARS IN SERVICE, DESIGNED AND BUILT BY C & E I RY.

6A476

The Designing The Train Interior

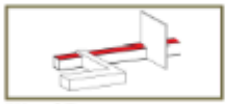

Original Sleeper Car
Zero Gravity

Dining Before= 26 Dining Now= 72

DINING CAR: Composed of a modularized system that is clean, durable and it can easily be replaced when necessary. The Dining tables transform from your typical tables during breakfast, lunch and dinner to a coffee table. This gives the passenger casual yet comfortable place to go to when they don't wish to be in their seat. At the Bar there is plenty of stools on a new track system that are easy to pull out and take a seat at, or put back in for extra standing room. The Lounge area is a great place to socialize with a little more comfortable yet durable seating and a little privacy from the bar area you are able to pull up a table from the floor and plug in your electronic devices.

A Modularized Building System- Easy for Amtrak to assemble and replace when necessary.

Table to Coffee Table.



Kit of Parts.

Lounge Tray.

Using Train Power & Materials

Light Emitting Wall covering The material uses organic light emitting diodes or OLEDs. The OLEDs run on very low voltage and are twice as efficient as energy saving bulbs. This energy will used to power the environmental walls will be taken from stored energy produced by the motion of the train. The wall covering is constructed by "sandwiching" a number of layers together that combine to produce light. The back layer is a silver based solution that conducts electricity. While the layer above this contains phosphorous pigments that light up. On top of this is a flexible, transparent ITO conductor layer, with regular wall covering placed on top to act as the final, outwards-facing layer.

Switchable Glass is used for all of the doors on the train to create privacy. The glass is electrically switchable meaning that, at the press of a button, it changes between clear and opaque states. This remarkable effect is low voltage, high impact, and suitable for a variety of applications such as privacy, partitioning and heat management.

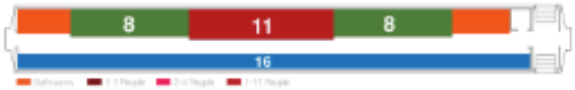
Powerflex, automatically charges electronic devices when placed onto it. Key areas of application include upholstery fabrics, table covers, and mats. In reality, does take mobility to a whole new level. It's an ideal practical solution for meetings, as participants will be able to charge and use their laptops and mobiles without using power leads or adaptors.

PaperStone is the Greenest Architectural Surface on the Planet. PaperStone is made from 100% post-consumer recycled paper that has been saturated with our proprietary PetroFree chemistry resins and selected natural pigments on our feeder lines. After trimming to length, resin-saturated sheets are stacked and moved into a press where they are fused together under heat and pressure. Paper sheet count determines the thickness of the finished panel. It's non porous surface provides a lifetime of stain resistance and it absorbs virtually no water. Surface cuts or marks may be sanded or rubbed out with an abrasive pad and treated with PaperStone Finish.

Green Electric Automation Window System Maximum indoor comfort can be achieved through building automation systems which regulate and allow users discrete management over thermal control and light levels to suit individual needs. The window shades can be controlled from the passengers seat and is powered by the solar film located on the exterior of the train. The dividing panes between each Red Room is controlled the same way from the same energy source. All material used is recycled soundproofing material to minimize noise from the train and to maximize comfort.

Dining Car.

Sleeper Car Before= 32/ Coach Car= 57 Sleeper Car Now= 43

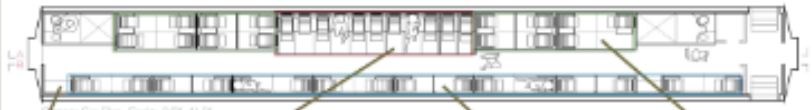


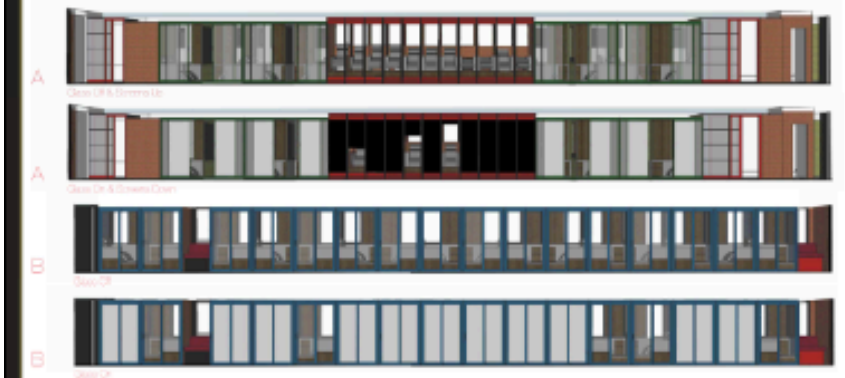
Sleep up to 11 in the Red Rooms.

SLEEPER CAR: A translation of the original sleeping car and the coach car. This new design gives you as a passenger many options while traveling. You can travel just as comfortably alone as you can with group up to eleven people. This is possible with the retractable smart fabric wall partitions. As you lay back in your Zero Gravity chair that moves toward slightly, it will carry you into the best comfort position, and you are then able to watch or project your electronic devices or videos onto the fabric partitions.

Room Systems.

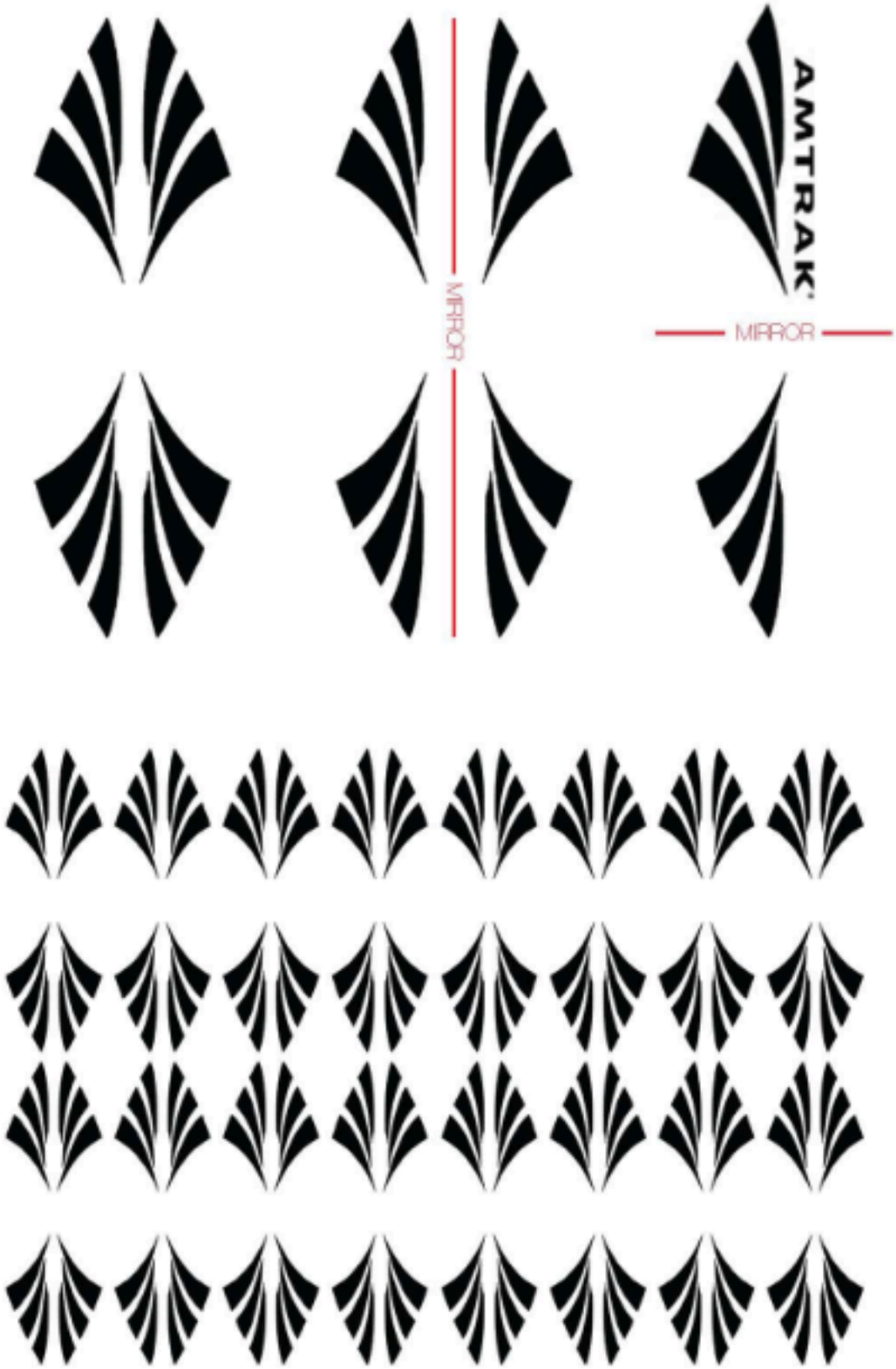
Chair Positions.

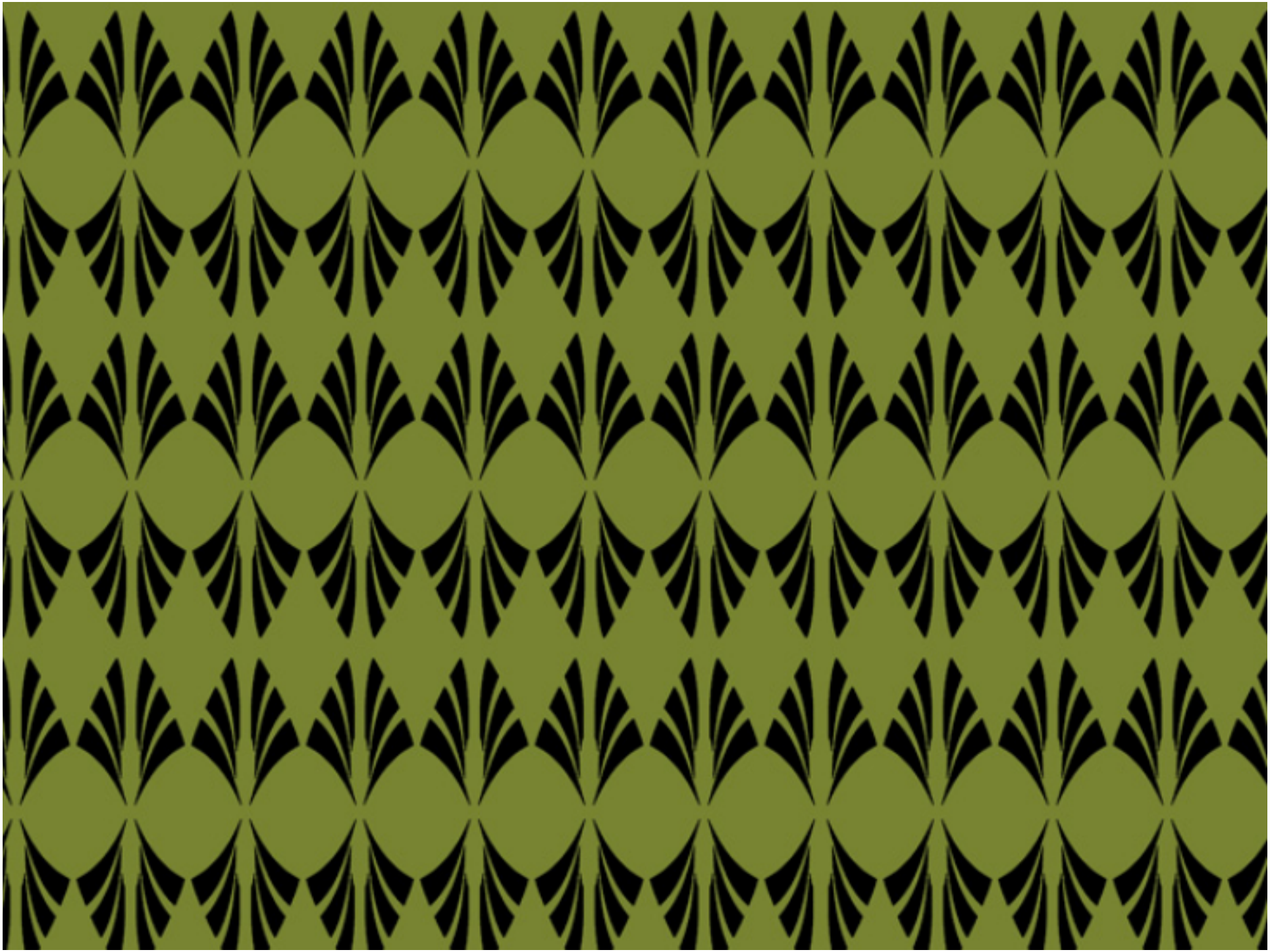




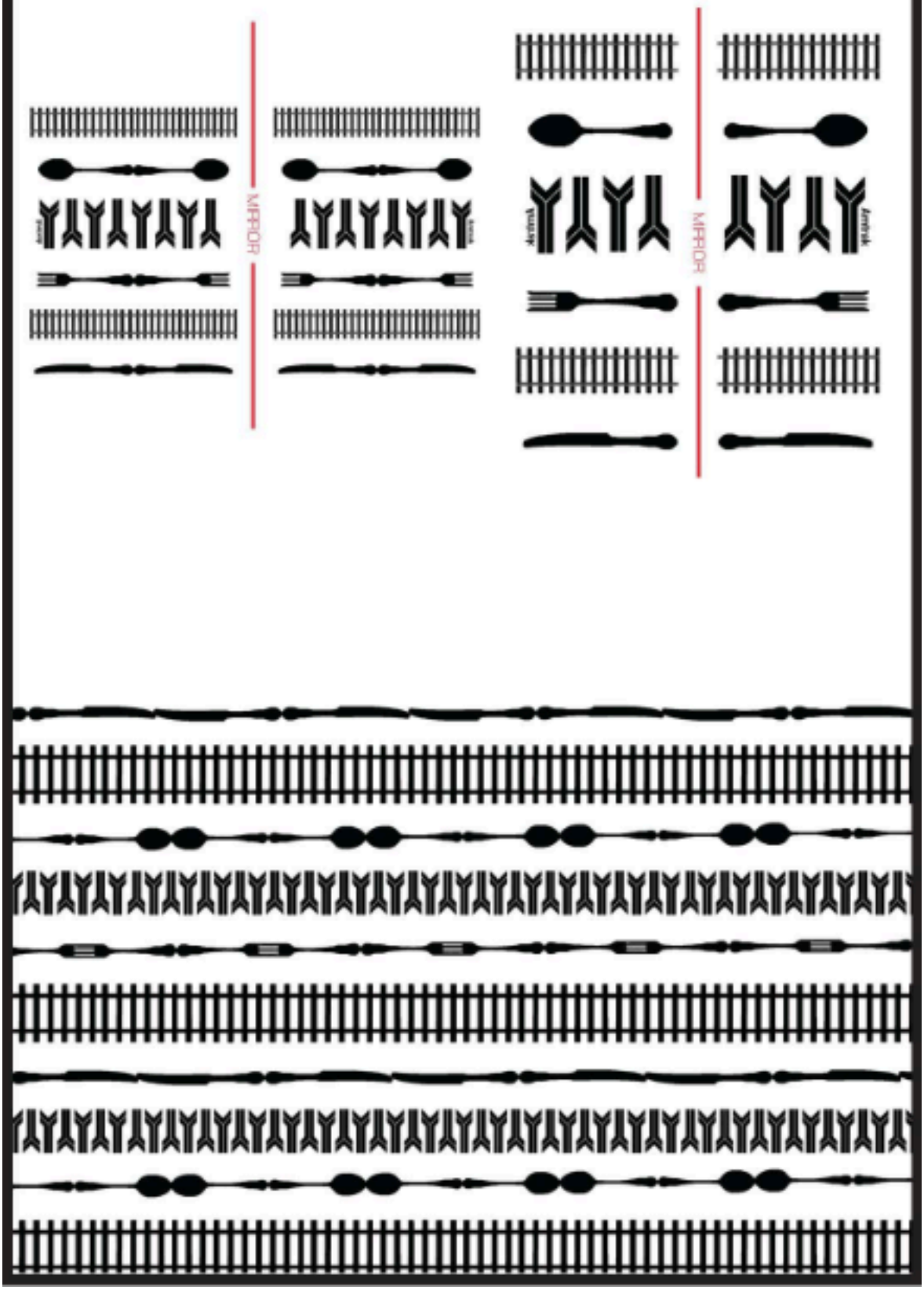
Sleeper Car.

Sleeper Car Pattern Diagram

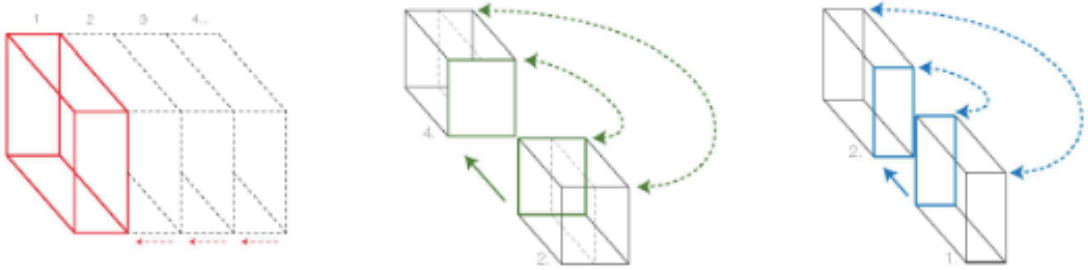




Dining Car Pattern Diagram



Room Systems.

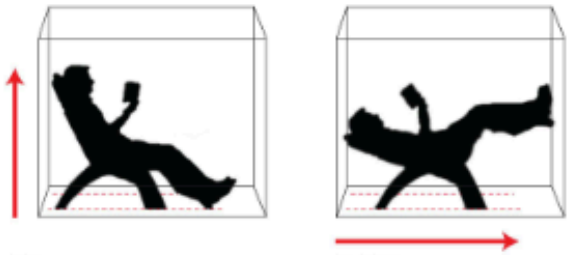


RED ROOMS: 1-11 PEOPLE

GREEN ROOMS: 2-4 PEOPLE

BLUE ROOMS: 1-2 PEOPLE

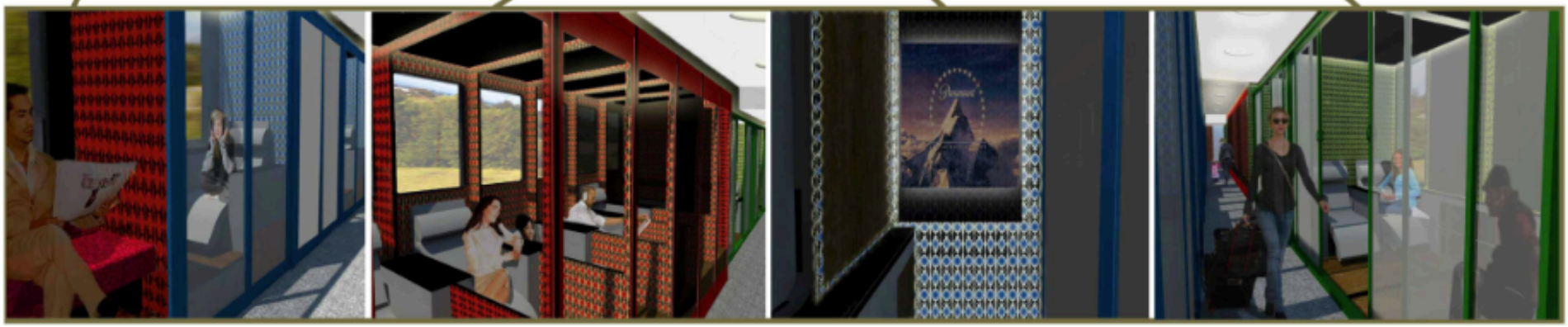
Chair Positions.



SIT.

SLEEP.

Sleeper Car Plan- Scale: 3/8"=1'-0"



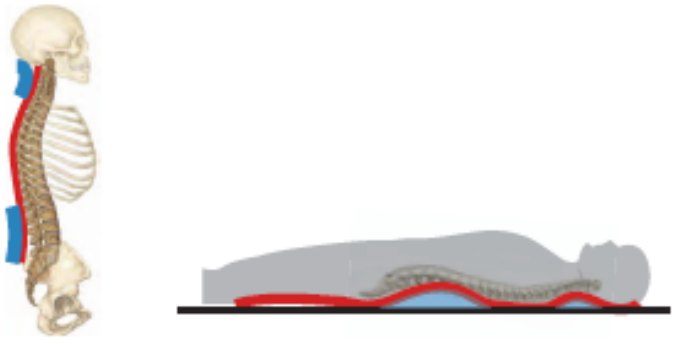
CONCEPT:
FLEXIBILITY & COMFORT

-How did these seats become standard?

-Why can't people have comfort (SEATS CONTOUR TO BODY>ERGONOMICALLY DESIGNED) and value?

-How can seating be revamped for solo travelers, couple/2 people, 3-4, 5-6, 7 or more?

-How can you also apply concept to dining car?

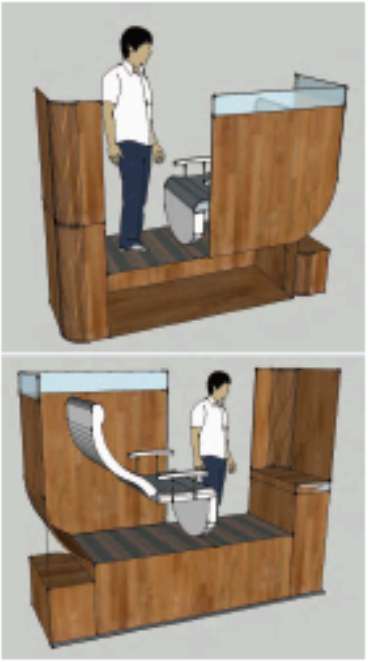


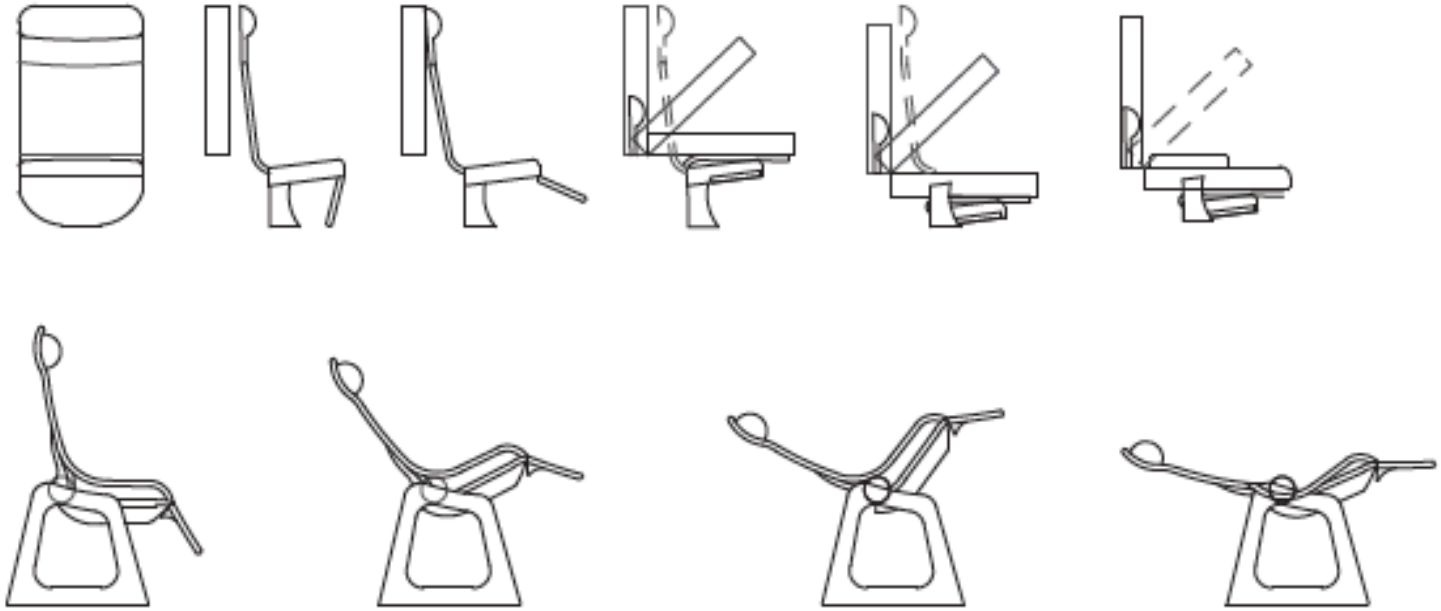
(chiropractic-singapore.com)

-NATURAL CURVE OF SPINE > Neck and lower back curve in

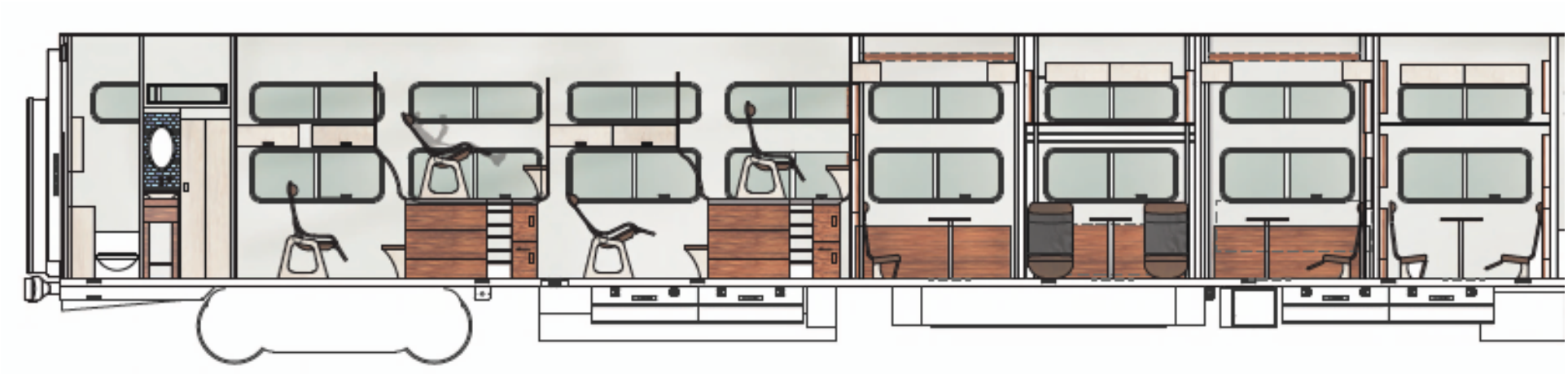
-Illustrations of improper and proper neck alignment
(www.fbpc.co.uk)

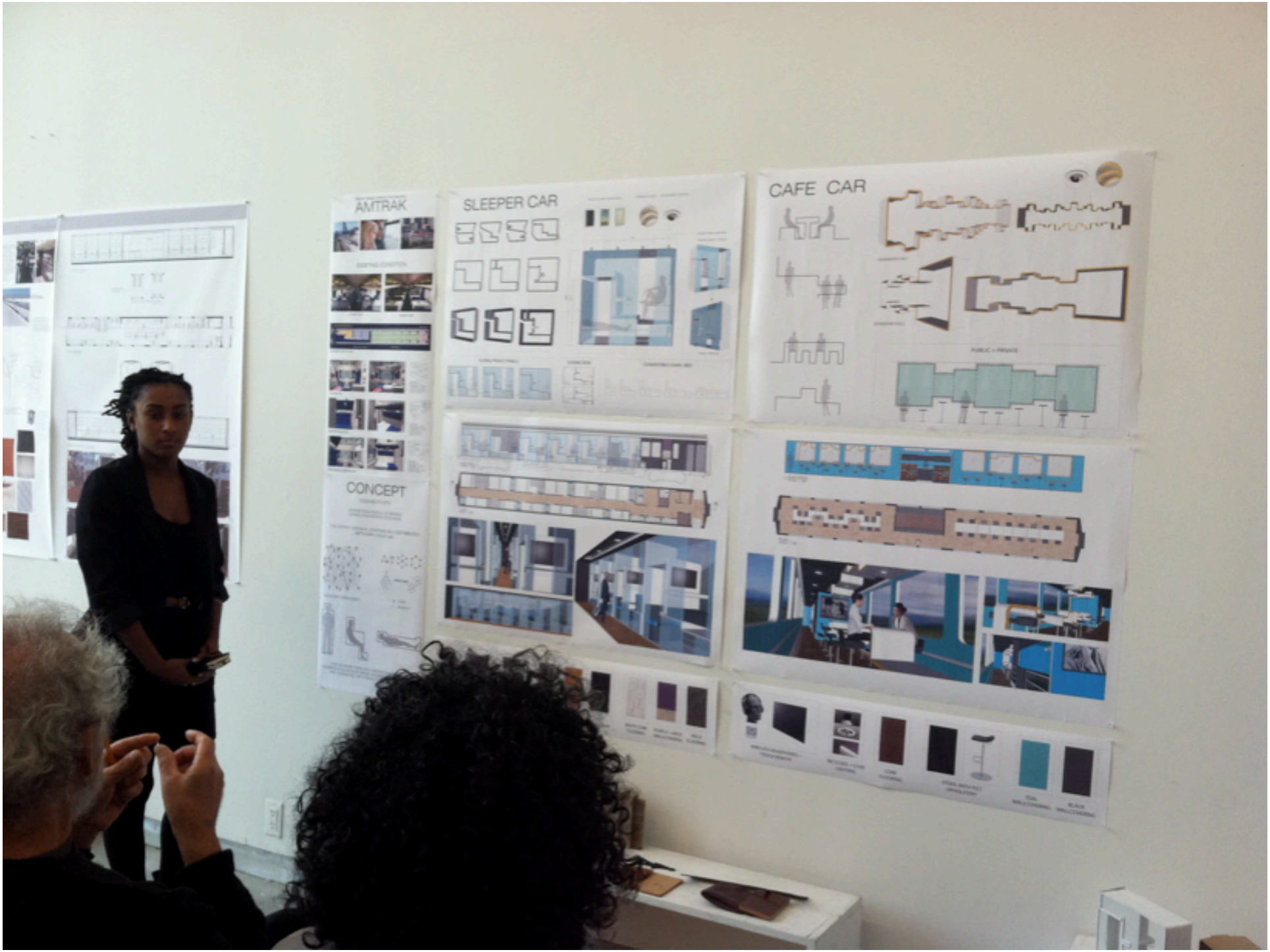
-Illustrations of ideal sleeping positions (www.fbpc.co.uk)



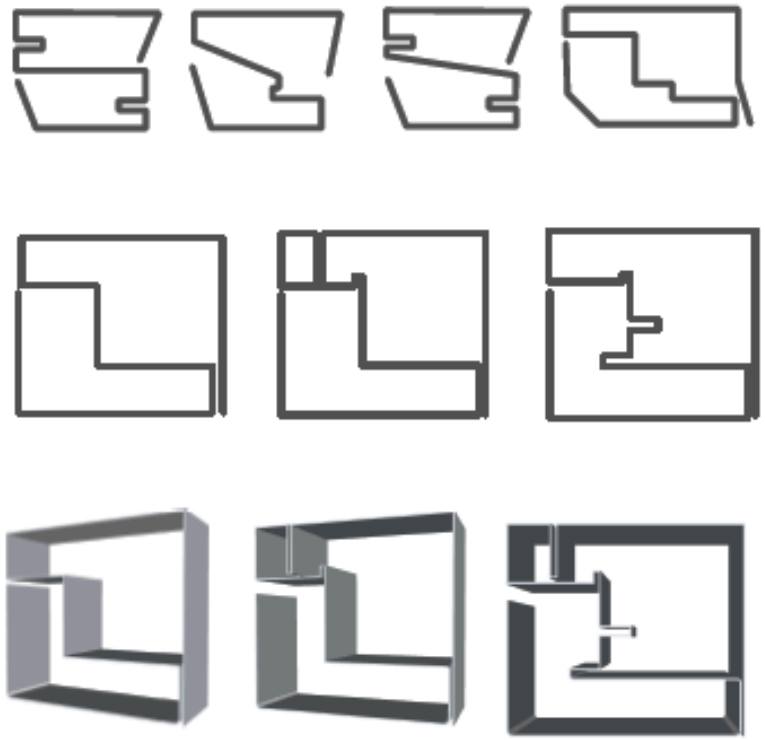


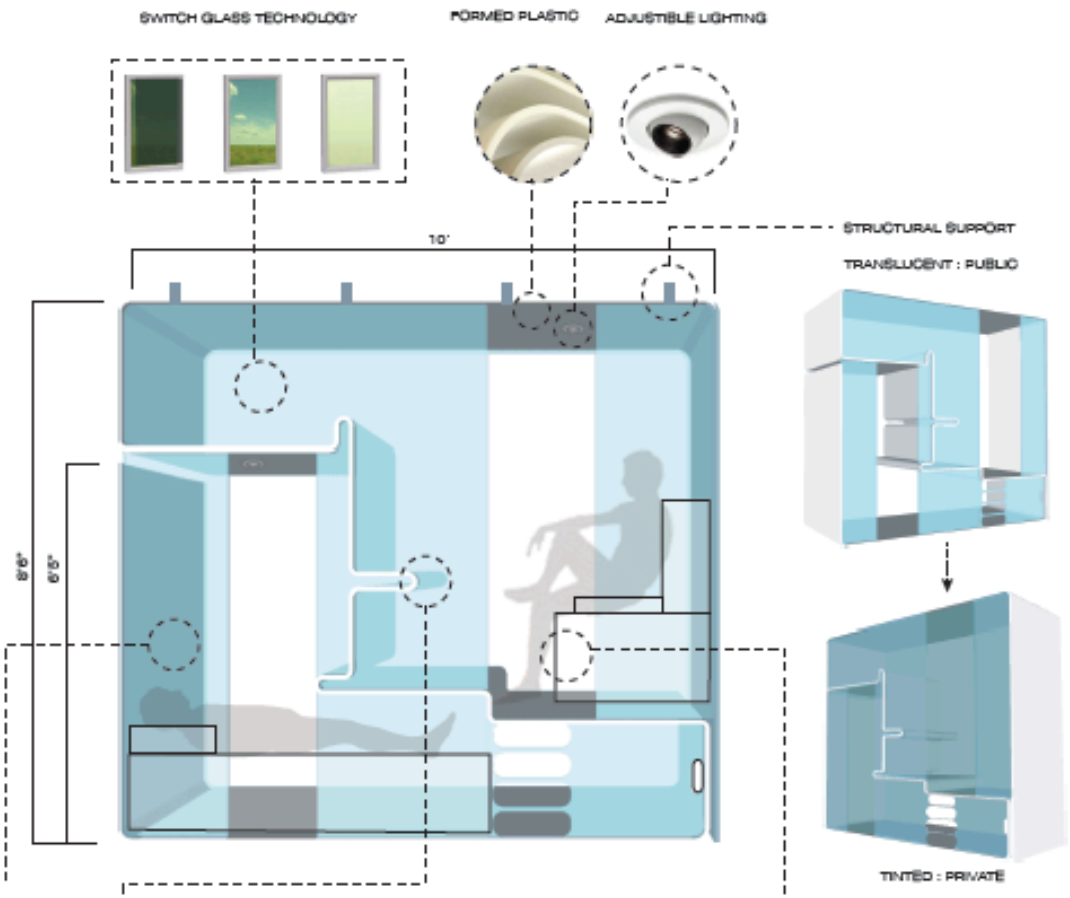
CHAIR DIAGRAMS

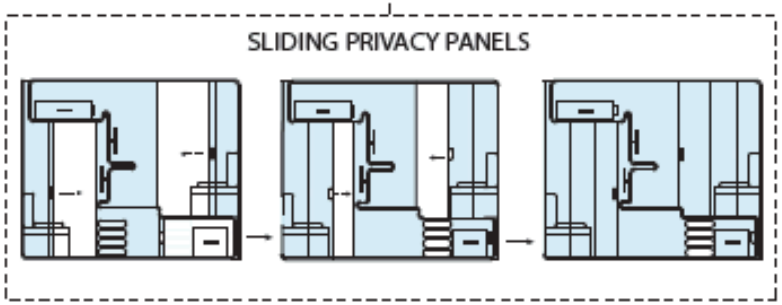


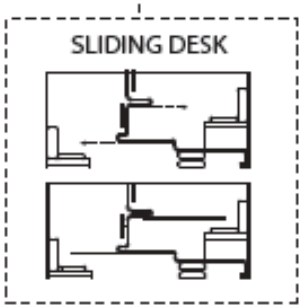

AMTRAK
SLEEPER CAR
CAFE CAR
CONCEPT

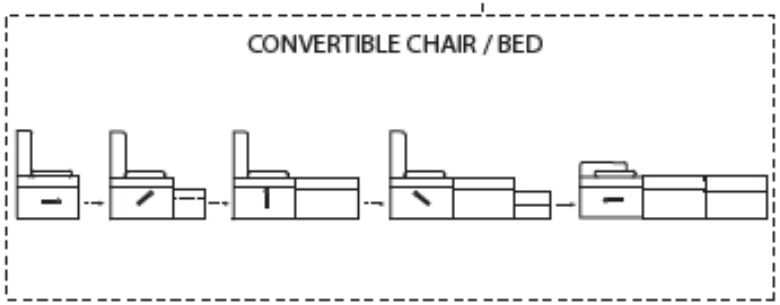
SLEEPER CAR



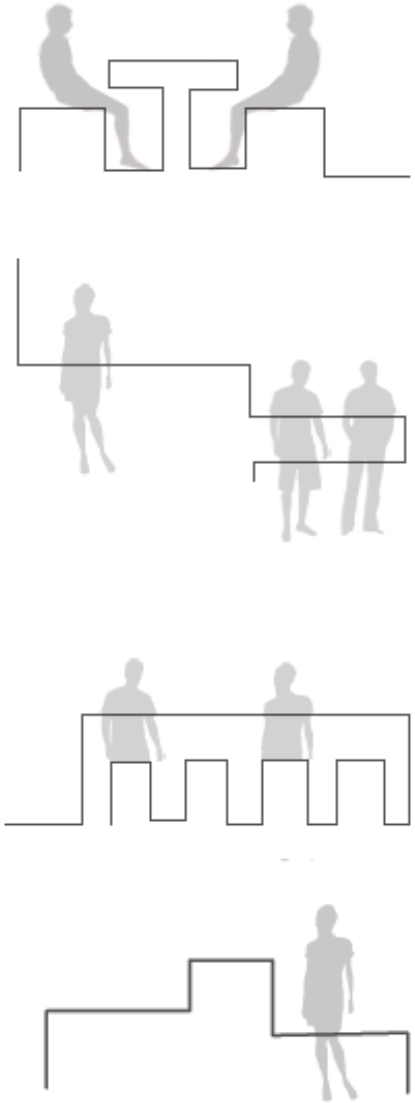

SWITCH GLASS TECHNOLOGY
FORMED PLASTIC
ADJUSTIBLE LIGHTING
STRUCTURAL SUPPORT
TRANSLUCENT : PUBLIC
10'
8'6"
6'5"
TINTED : PRIVATE

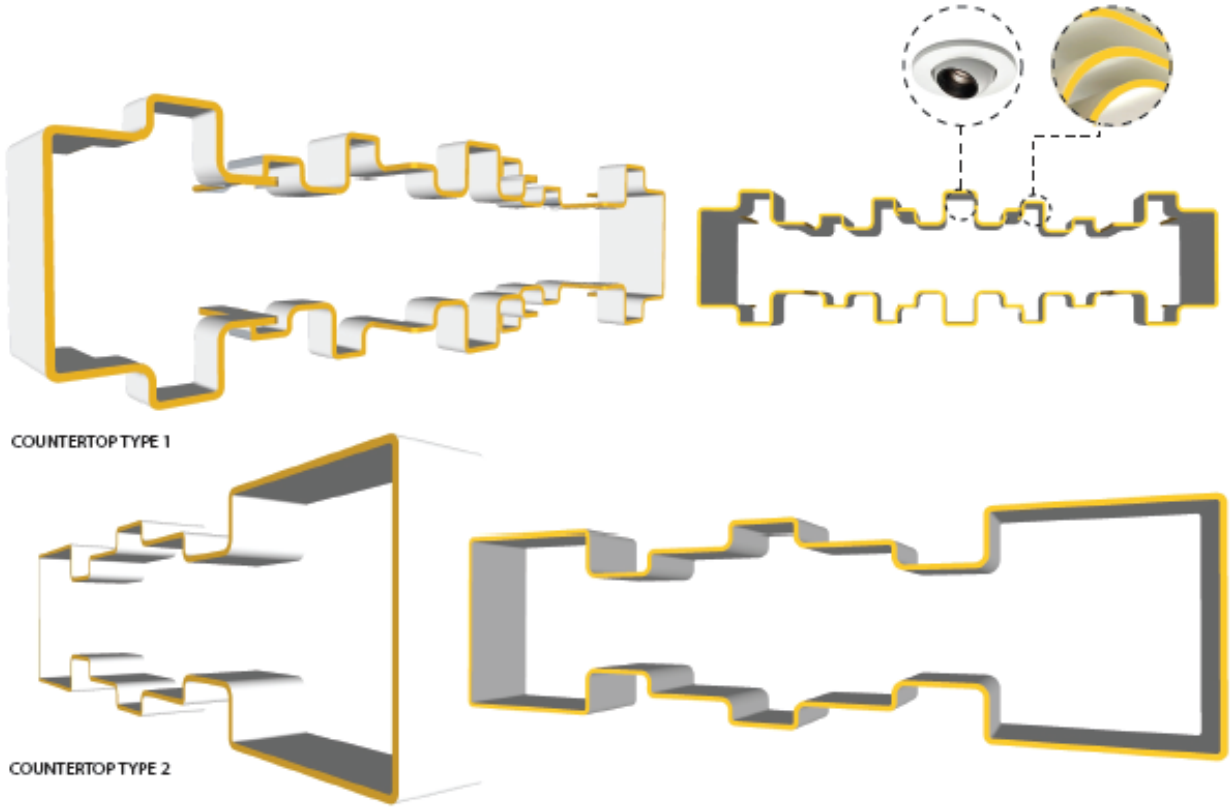

SLIDING PRIVACY PANELS

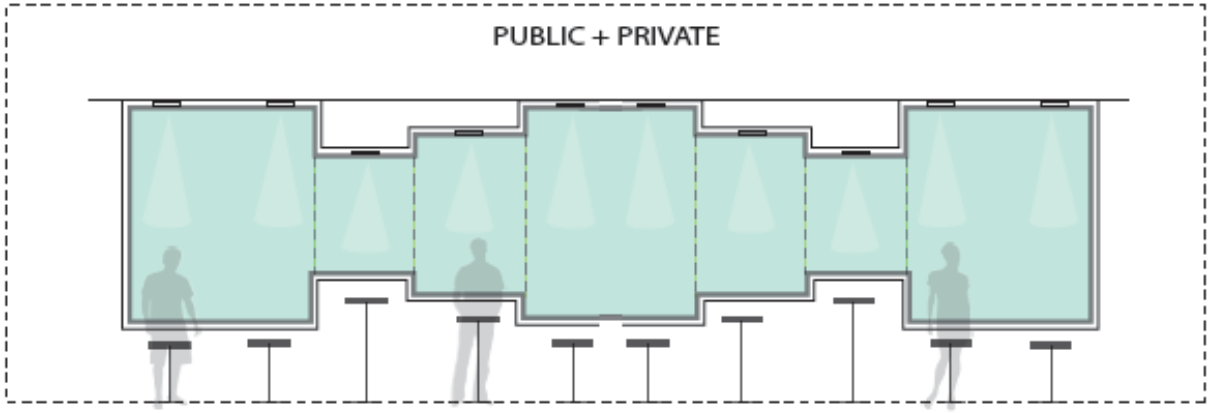

SLIDING DESK


CONVERTIBLE CHAIR / BED

CAFE CAR








Sleeping Car
Drawings
Diagram of how chairs move
Interior Rendering
Material

Design Fall _ INT 401
Jisoo Paik
Professor. Deborah Schneiderman

Precedent Cafe Car Analysis

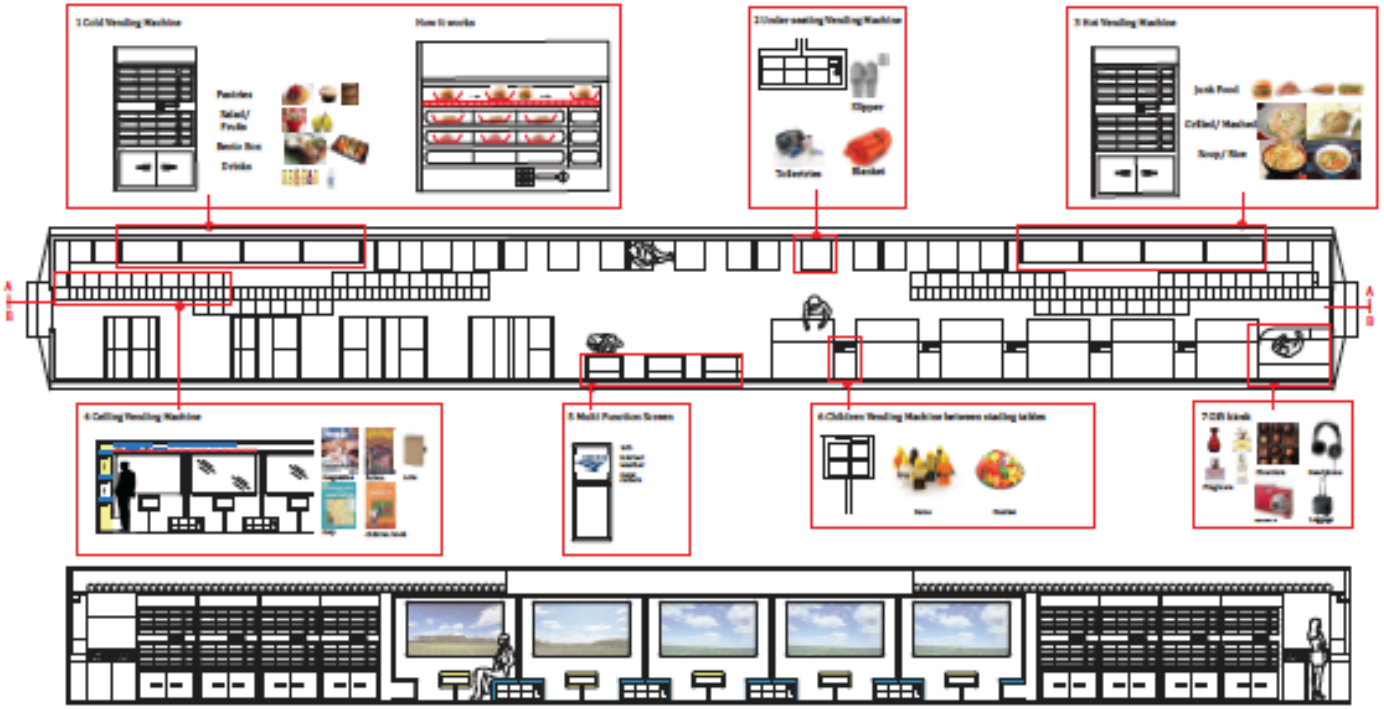
Amtrak has a cafe car, which has a small kitchen. When passangers want to buy food, they need to be in a line at small space. All the food are unshown and only a few pictures are posted on the wall. Peopl want to buy more when they see actual product and display. Therefore, I want to give more choice and entertainment for passangers that I designed different vending machine system that they can enjoy of their shopping.

Precedent Cafe Car Analysis

One counter for a cafe car

Narrow waiting space with food pictures

One types of eating desk



Section A

Interior Rendering

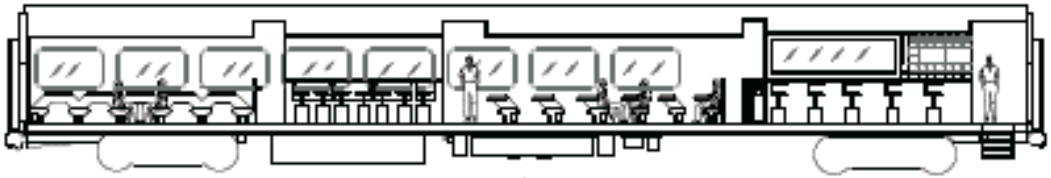
Seating for group

Seating for two


Cafe car

Cafe car

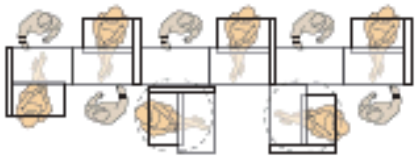
Plan



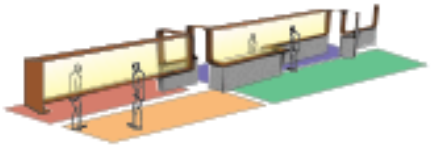
Section 1

Perspective 1

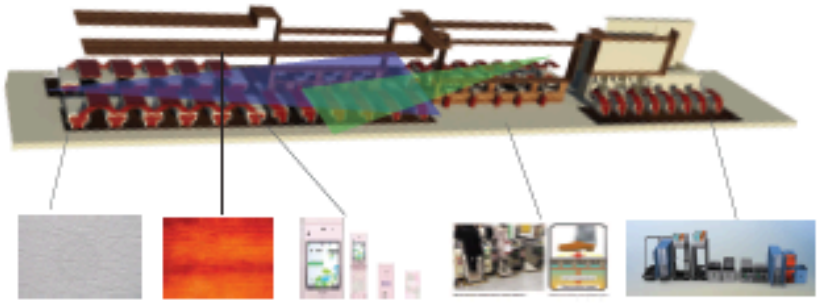
Perspective 2



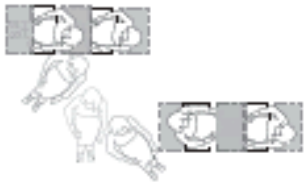
Rotating barstool



Bar Table as a continuous piece to serve multiple functions



White Leather Jagorta wood Bio plastic Piezoelectric Spice Airline Galley

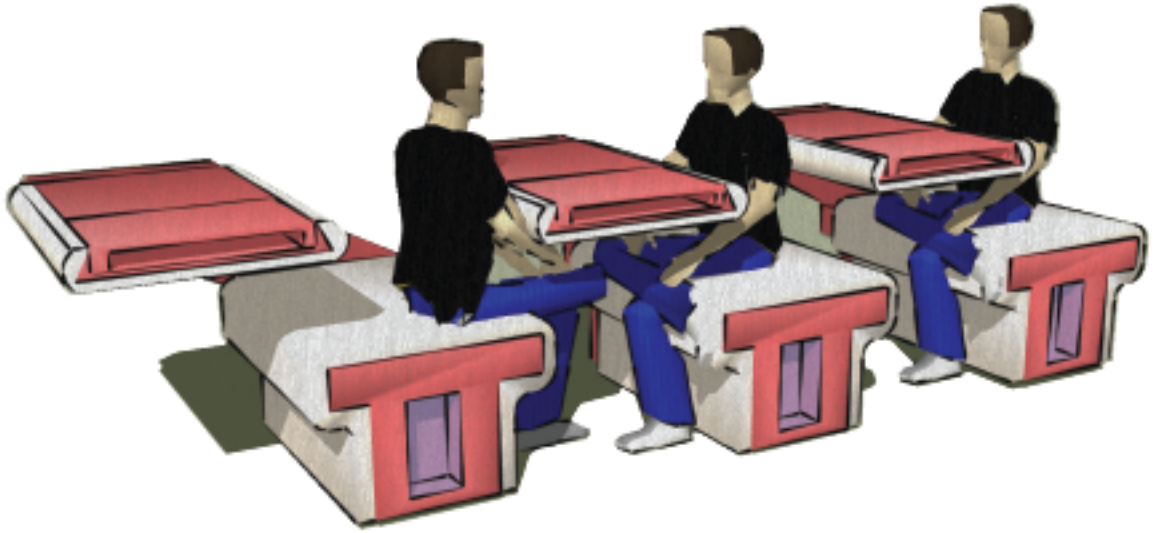


Flexible seating

Flexibility offers change in positions for different people

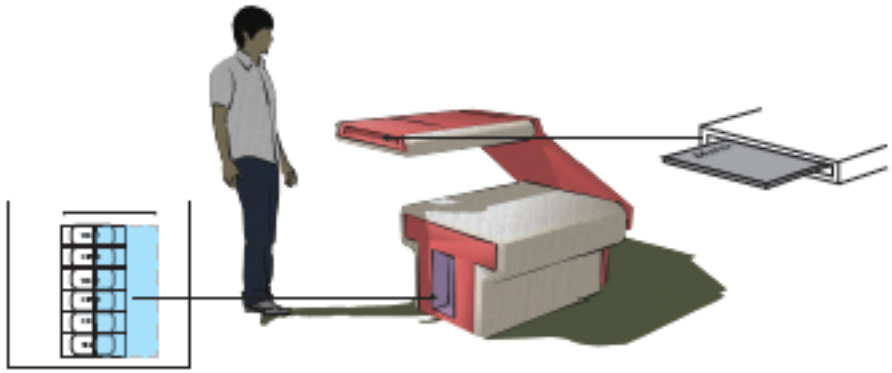
Cushioned areas for comfort

Storage space within seats and tables



Flexibility offers change in positions for different people

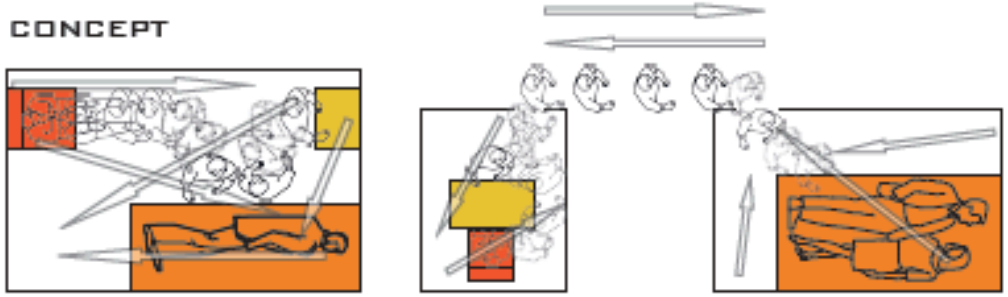
Cushioned areas for comfort



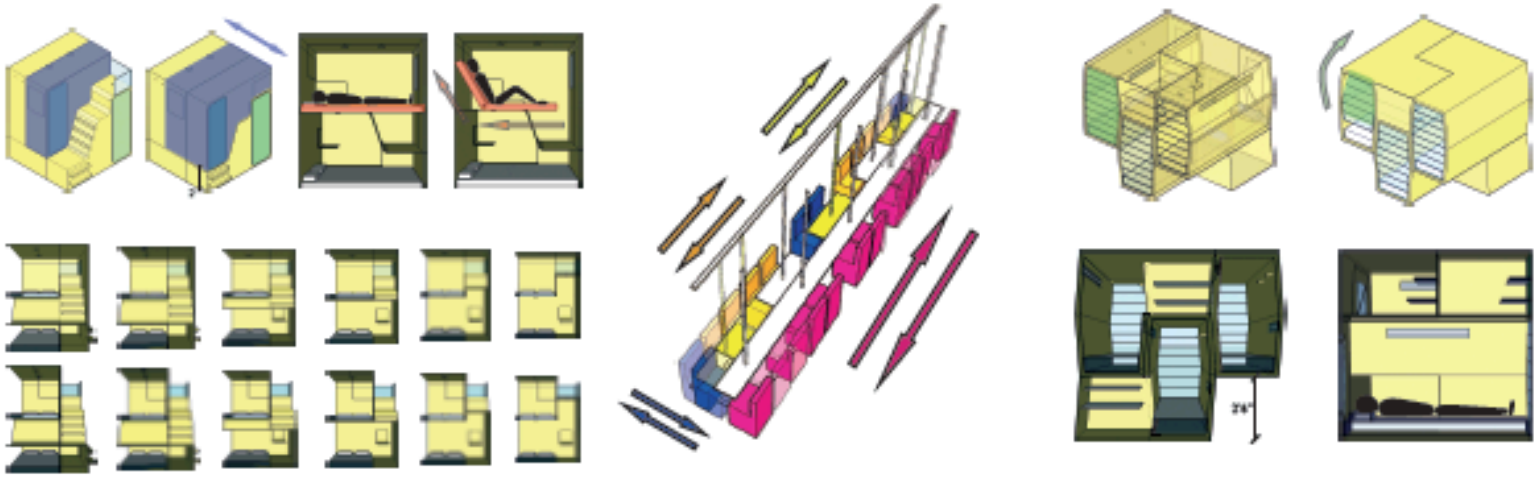
Storage space within seats and tables

AMTRAK - SLEELPING CAR

CONCEPT



PROVIDING TWO SPACES FOR STAYING IN STEAD OF ONE SPACE. DIVIDED SPACES MAKES PASSANGER NOT BORING FOR STAYING ONE SPACE. PEOPLE WOULD SLEEP IN ONE SPACE AND SITTING, GATHERING, AND TALKING IN OTHER SPACE. IT WILL BE MORE ISOLATION AND INTERMIXTURE.



SERIES OF SECTION DIAGRAMS (OPEN & CLOSED)

TWO DOUBLE ROOMS - EASILY ACCESSIBLE UPPER ROOM 2' HIGH (ELDERS AND KIDS)

ONE FAMILY ROOM - WALL COMES OUT TO COMBINE TWO ROOMS

BED CAN PROVIDE BOTH SLEEP & SIT

ONLY BACK & FORTH (6 SEATS)

ONLY LEFT & RIGHT (10 SEATS)

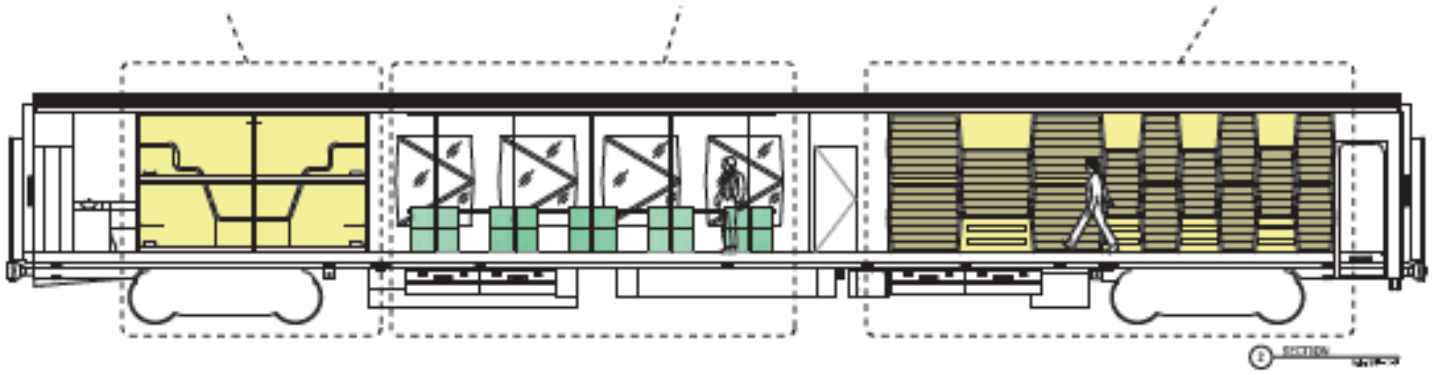
ONLY LEFT & RIGHT (4 SEATS)

ONLY LEFT & RIGHT (3 TABLES)

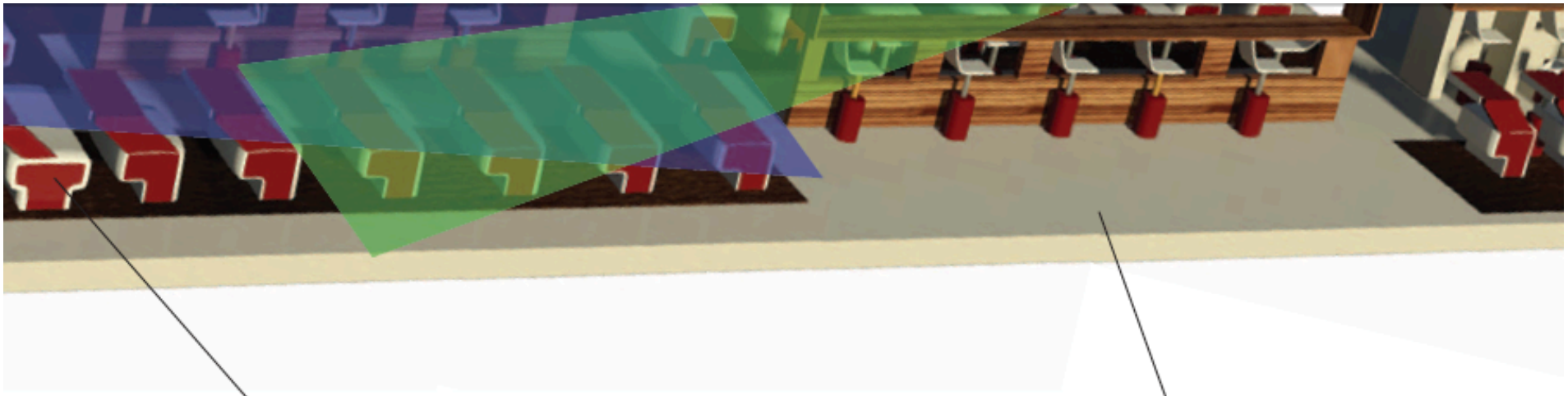
SINGLE SLEEPING POD - CONTAINING STORAGE, TWO SHELVES, HANGERS, AND READING LIGHT

THE GLASS DOOR IS SLIDED INTO THE CEILING LIKE A GARAGE DOOR

DOUBLE SLEEPING POD - SAME AS SINGLE SLEEPING POD, BUT THE SIZE IS TWICE BIGGER THAN SINGLE

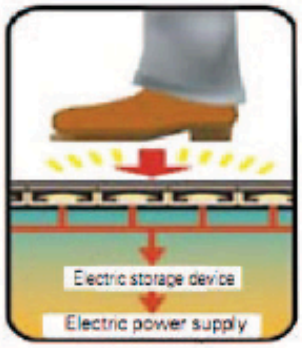


Sustainability Research



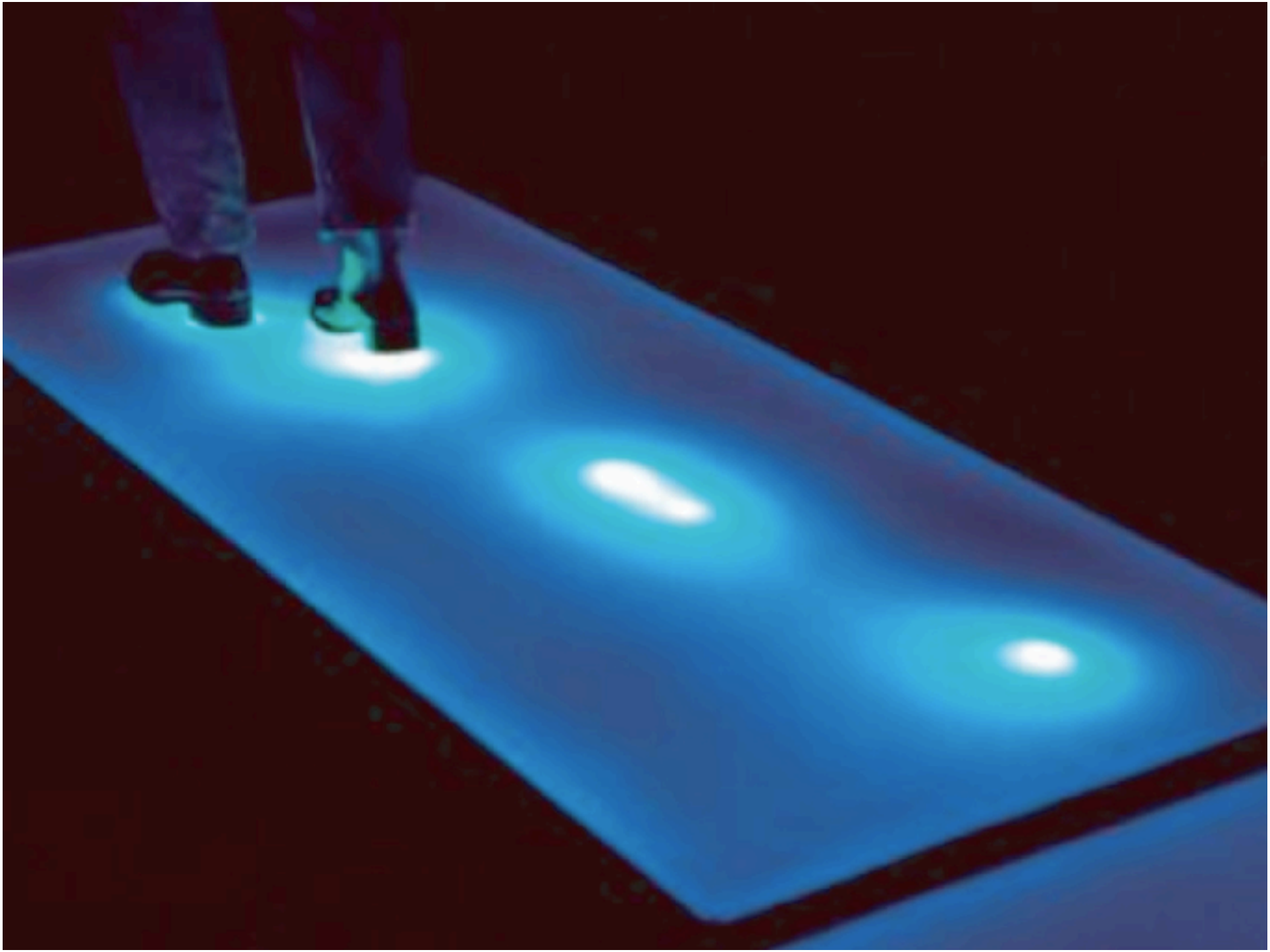
Bio plastic

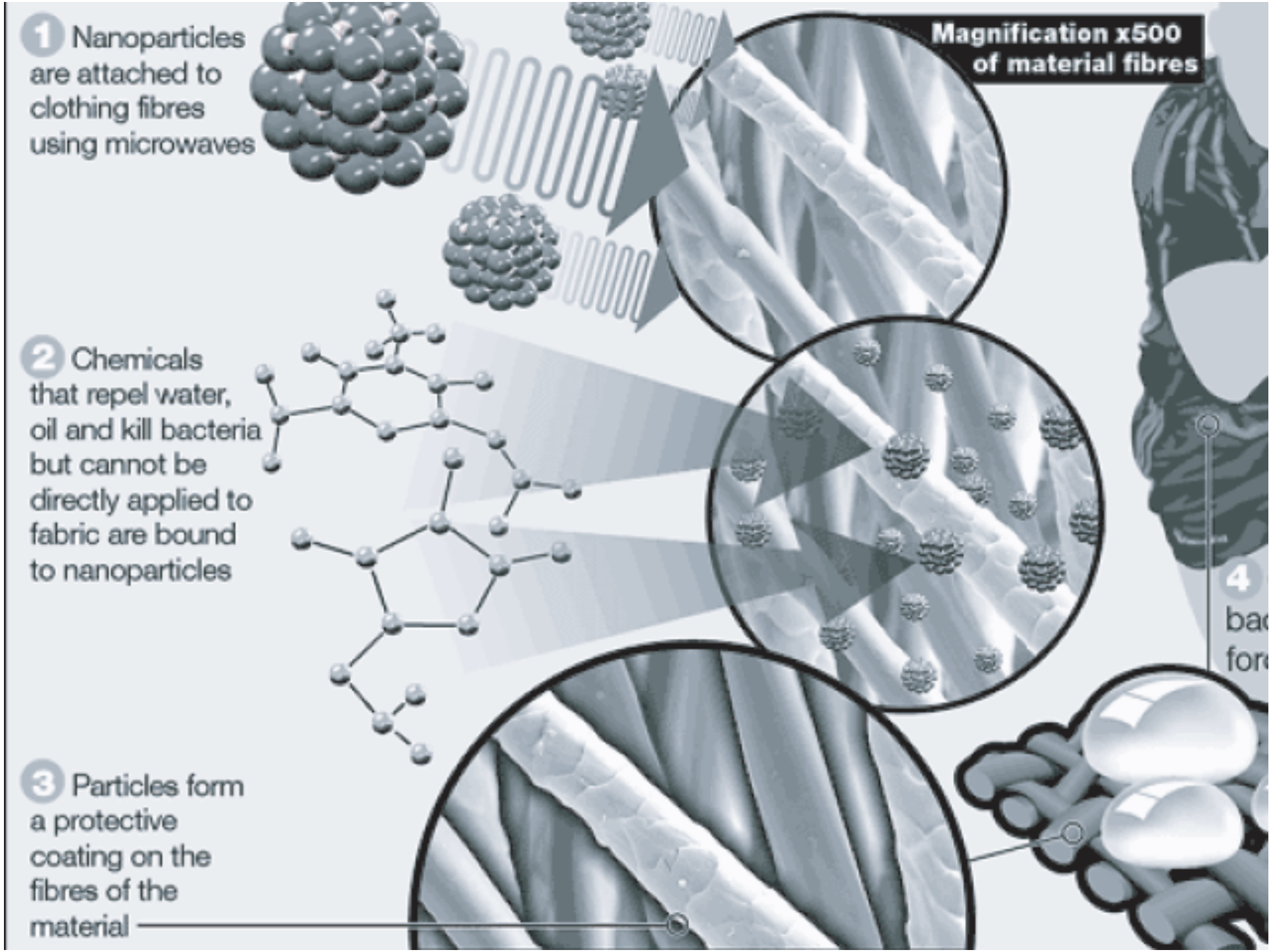
Demonstration experiment at Tokyo Station

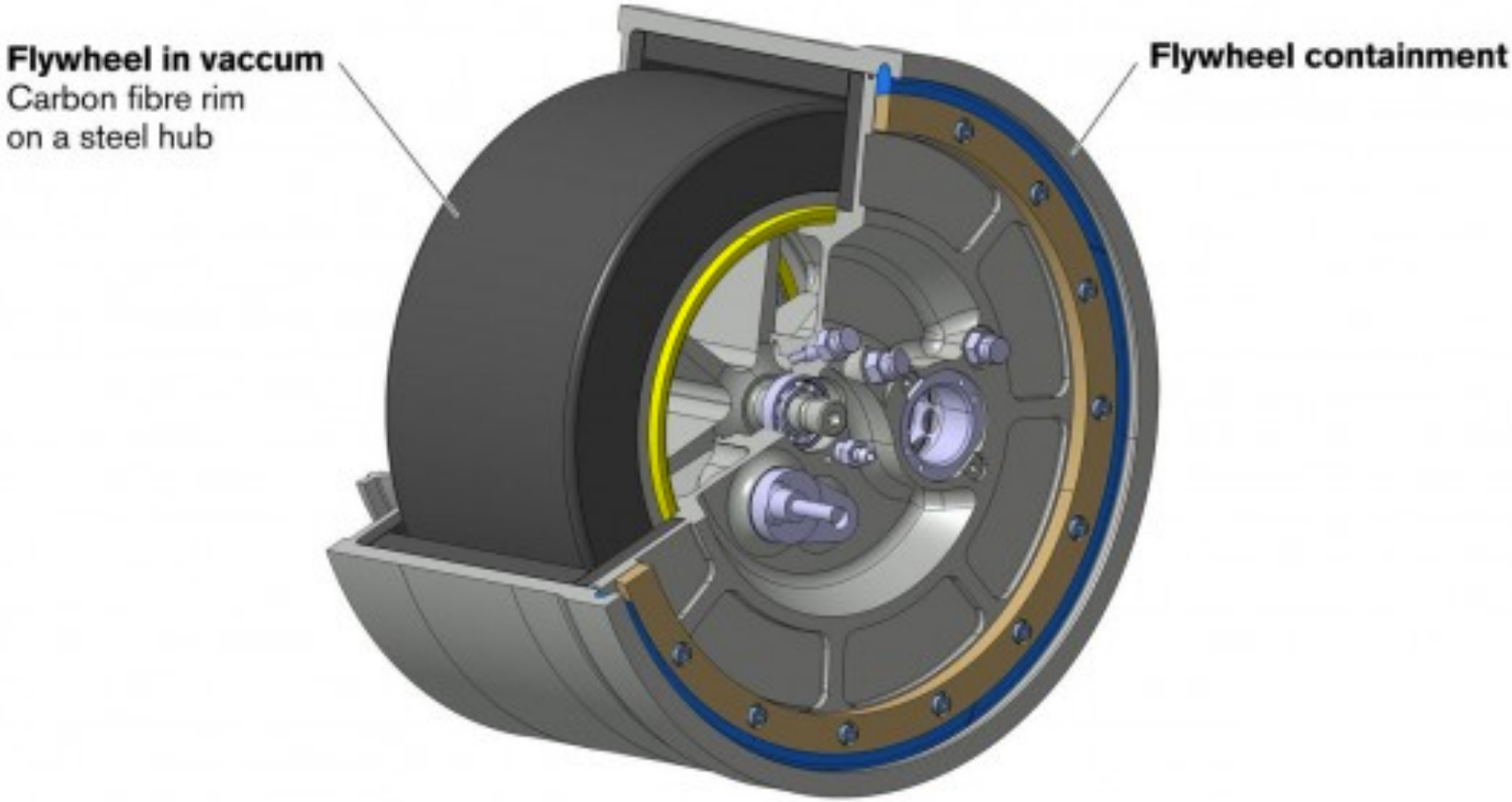


Mechanism of the power generating floor

Piezoelectric




1 Nanoparticles are attached to clothing fibres using microwaves
Magnification x500 of material fibres
2 Chemicals that repel water, oil and kill bacteria but cannot be directly applied to fabric are bound to nanoparticles
3 Particles form a protective coating on the fibres of the material
4


Flywheel in vaccum
Carbon fibre rim
on a steel hub
Flywheel containment

Pratt

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