

POINT OF ACCESS: A user's perspective on mass transit entrance system design.

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this thesis is submitted to the faculty of
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Master of Science in Architecture with a Concentration in
Industrial Design

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Public transportation entrance processes do not get enough attention from today’s great designers and innovators, from whose skilled services they could greatly benefit. While most creative professionals in public transportation design are motivated to work on the architectural conception of mass transit systems, the lower profile and less glamorous aspects of a system’s infrastructure typically get little or no attention. Such things as signage, ticketing systems, and interior elements are purchased directly from manufacturers as minimally customized off-the-shelf components. But paradoxically, these parts that go unconsidered and undesigned are what transit riders most directly interact with, and what most affects their experience of the product.

This thesis investigates how riders of public transportation experience entering a heavy-rail transit system. The intention of this thesis is threefold. First, primary and secondary design research is conducted using observational and interactive methods to produce an informed picture of the Metrorail user’s perspective. Secondly, a design strategy is developed from the collective research findings. And finally, ideas are formulated for an elegant and accessible mass transit entrance system.

The suggested design application represents one possible interpretation of the research findings for the design of a mass transit entrance system. Anchoring the design ideas presented here is a desire to see public transportation be appealing and accessible to a diverse population including non-english speakers, illiterate persons, and physically or cognitively challenged persons. This design thesis focuses specifically on the Washington Metro Area Transportation Authority’s (WMATA) Metrorail, which operates in the Washington, D.C. metro area, though the research and design results are applicable to other transit systems as well.

“Transportation is not traveling from point A to point B.
It’s everything. Before you can do anything, you’ve
got to get there.”
- Joseph Coughlin, founder of MIT’s AgeLab (Shulman 2001)

Abstract / Thesis Intention

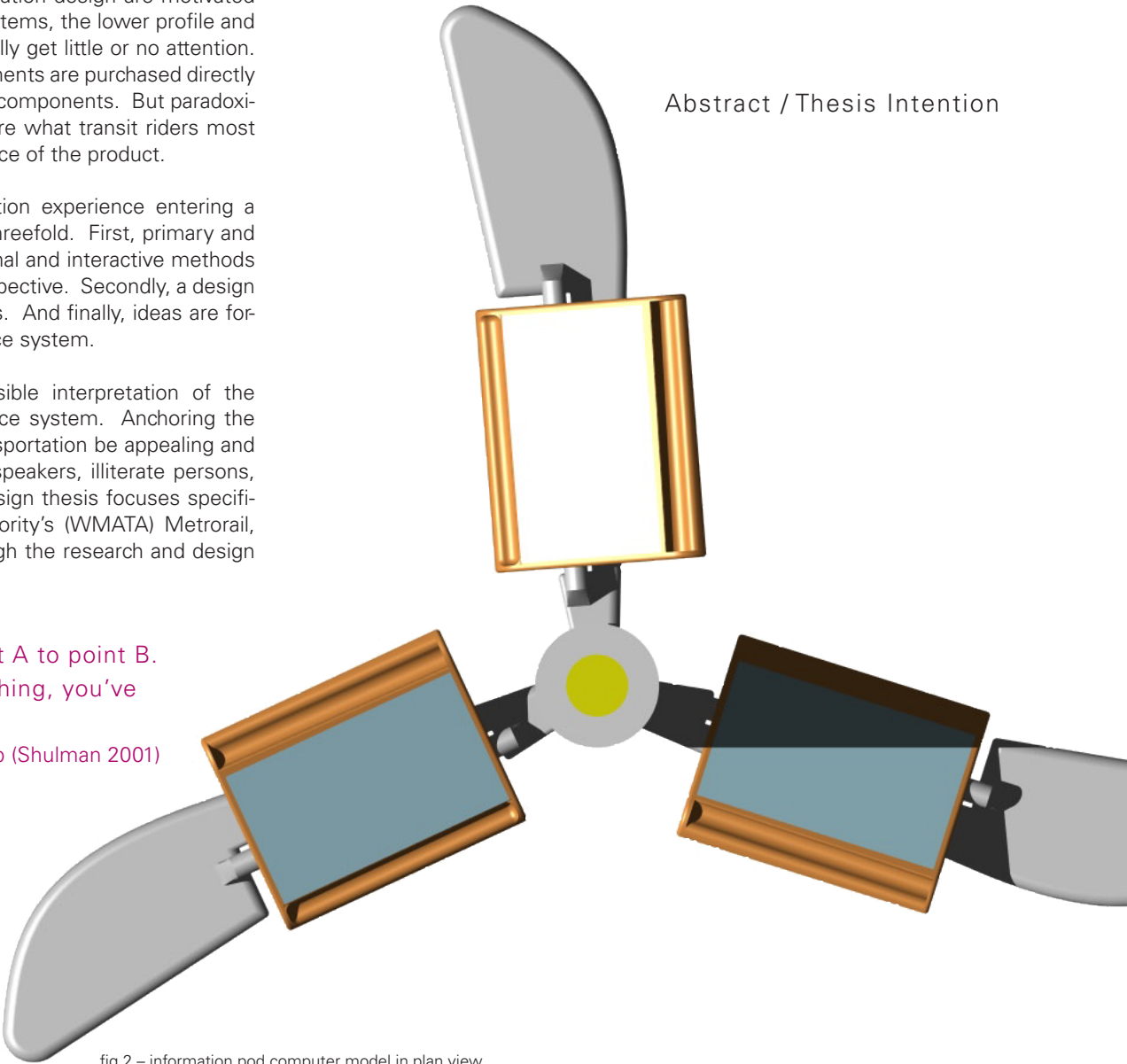


fig 1 (preceeding page) – point of purchase computer model, created with Cobalt
front cover photo – escalator exit to the bus area at West Falls Church station
back cover photo – view of an orange line train headed in-bound

fig 2 – information pod computer model in plan view

Acknowledgments

Thank you to my committee, Ed, Bill, and Bob, for their guidance and support throughout my design education.

I am grateful to the Washington Metro Area Transit Authority, especially Mr. Steven Taubenkibel who personally secured permission for me to do my in-station research work, for their generous cooperation, without which I could not have done this thesis. I would also like to thank and acknowledge the Verizon employees who anonymously filled out questionnaires and participated in a focus group exercise, and Dr. Robert Shirey for providing logistical support in that endeavor.

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This thesis is dedicated to my buddy Emmett, who will never even get to ride on Metrorail, yet has put up with an awful lot during this ongoing saga, tirelessly waiting to welcome me home with unconditional love and kisses each time I returned.



fig 3 – exterior of West Falls Church Station at night

Production Notes

This document was created on an Apple Macintosh G3 PowerBook, a Power Mac G4, and a Dell PC. In doing so, the following software was used: Adobe Photoshop, Adobe InDesign, Adobe Illustrator, Adobe Premier, Adobe Acrobat, Ashlar-Vellum Cobalt (3D modeling), and Microsoft Word and Microsoft Excel.

the video footage was shot with a Sony DV camera.
original photographs were shot with a Nikon N65 camera and a Kodak DC3200.

the section marker font is Myriad. the title font is Universe.
the text body fonts are Universe and Helvetica.



fig 4 – exiting via the escalator at the Ballston Station

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fig 5 – computer rendering of an information pod on the upper platform at the Rosslyn Station

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