

## ***Furniture City* Exhibition Evaluation Report, July-Sept. 2009**

For the Grand Rapids Public Museum (to get copies of the figures, email baserrell@gmail.com)

### **Introduction**

Opened in 1994, the Public Museum's "Furniture City" exhibition is now 15 years old. Renovations are needed. By gathering feedback from visitors, museum staff, and community members, the Museum wanted to find out what was working, and what was not, and then use that information in tandem with other demands, to determine if this exhibition gallery will remain unchanged, continue to hold a modified version of the same exhibit, or hold some new exhibit entirely.

*Furniture City* occupies 9,600 square feet of space. It contains 120 pieces of Grand Rapids-made furniture, a mural that depicts the story of the city, objects, models, photographs, videos, text panels, a recreated show room and furniture market, and interactive exhibits that are grouped into 70 exhibit elements. See Figures 1 and 2 (floorplan and exhibit list).

In July 2009, Christian Carron, Director of Education, Interpretation and Research, hired Beverly Serrell to plan an evaluation study consisting of three strategies: unobtrusive observations of visitor behavior in the galleries, a questionnaire with visitors after they'd seen the exhibition, and an advisors' forum with community members.

Serrell trained museum staff to gather the data for the observational tracking and timing (T&T). They randomly selected 81 visitors to *Furniture City*, noting where they went, where they stopped, how they interacted with the exhibits and each other, and how long they stayed. For the cued questionnaires (CQ), museum staff recruited 64 visitors in *Furniture City* to fill out an open-ended questionnaire about what they thought about the exhibition. Data entry was done by Carron's assistant, Breanna Stayskal, and analyzed by Serrell.

Data were collected from a diverse sample of visitors in family groups and adults-only groups, on different days, and at different times, to get a broad-brush picture of how people were using and reacting to the exhibition.

Serrell also moderated the first advisors' meeting that included furniture industry specialists, educators, furniture design and collection experts, members of the museum staff, and a docent with extensive experience giving school tours in *Furniture City*. They had all recently visited the exhibition, and gathered for an evening to discuss its relevance to

their work and interests and to react to the data from the T&T and CQ findings which had been shared with them in a preliminary report before the meeting. Notes from the advisors' forum are incorporated into the findings from the other evaluations in this report.

### **Findings from the Furniture City Visitor Studies**

To what extent is Furniture City "working"? Does it attract, communicate, and engage audiences in the way the museum intended? What data or evidence do we have that support the existing goals—for audience, education, or engagement--of *Furniture City*?

Overall, the exhibition attracts the intended audience, and, in general, can communicate the main ideas to visitors. The level of most visitors' engagement with the exhibits, however, is very low.

### **Target Audiences**

Furniture City is attracting the intended audience.

- In the visitor studies conducted in July 2009, there were people who worked for or had a family member who worked for the furniture industry.

*I have worked for several office furniture manufacturing companies.*

*My boyfriend is a furniture designer.*

- There were people with training in furniture design.

*I attended Kendall and received a B.A in Furniture.*

- There were both tourists and locals who "had no idea" or "didn't realize" Grand Rapids' furniture history.

*We are from SC and have really enjoyed our visit.*

- No one identified themselves as associated with a labor organization.
- Most people were not first-time visitors, they had been to the museum and to the exhibition before.

*We love this display, our kids love it too--and as a civics teacher we hope to bring students here from Whitehall.*

*This is one of my favorite parts of the museum.*

- The community members at the forum represented visitors who had special interests, knowledge, and training in the furniture industry.

*I'm a old furniture weenie.*

## **Educational Goals**

Almost everyone showed some evidence of understanding why or how Grand Rapids became the Furniture City. They understood that the process and products of the furniture industry have changed over time, and that Grand Rapids of today is in many ways the result of the historic furniture industry. More than 80% of the visitors who filled out the questionnaire could elaborate to some extent on these ideas. An example of a fairly complex answer:

*The exhibits showed examples of the craft and skill impact on our city, the planning, development, economy, culture, and changes over time. It gave people a better understanding of the history of the GR Furniture industry/market and how it has shaped our city. The twice-yearly market had an impact on the local hotel/entertainment economy. Perhaps a future component would be the current impact that our furniture makers have made/make on a global level with regard to design and manufacturing.*

The other 19% gave more simple, but correct, answers. An example of a simple answer:

*The exhibits are about the history of Grand Rapids, the history of furniture.*

Many people commented about lives of the people who have been and still are affected by the furniture industry. For example:

*I don't always put enough thought into all the lives/people involved in creating products--especially quality products/craftsmanship. My furniture doesn't just come from a store. People are involved.*

A few people named the combination of resources that led Grand Rapids to become a producer of furniture. Such as,

*I didn't know why the industry originally started in GR--because of the river and the West Michigan forests.*

There were many words mentioned more than once to describe the content and purpose of *Furniture City*, including:

Furniture -Industry -Grand Rapids -History -Local  
Change -Make -Evolve  
Roots -Identity -Origins -Impact  
People -Workers -Employees -Owners -Strike -Struggle  
Hard work -Important -Beautiful -Craft -Skill

In fact, there were so many words that it seems to suggest that different people were focusing on different aspects of the exhibits, and that there was no one clear overall thesis or “big idea” of the exhibition.

### **Levels of Engagement**

The degrees of visitor engagement with the exhibits can be measured by observing and recording the traffic patterns in the exhibition and the places where people stop and how long they spend.

### Flow

The majority of visitors did not go to all the sections in the exhibition. See Figure 3.

- Few people stopped at the entry mural, which seemed more like an advance organizer for the exhibition (i.e., Will we encounter the people and figures shown in the mural?), but it needs facilitation to explain its meaning—something few visitors stopped to explore at the beginning.
- The most common flow pattern through the exhibition (watching people who entered at the entryway and Beginnings section #2-#7) was to visit the Factories, Furnituremen, Furniture Market, and Showrooms but to skip the New Industry section (#57-#71) and to exit the exhibition through the entryway (32%). Another 9% left through the entrance after going through all the sections, and another 9% left through the entrance after skipping several sections. Thus, half of the people used the entrance as the exit.
- The second most-common pattern of flow was to follow the intended pathway (as above) and to exit the exhibition after the New Industry section (29%).
- About 17% left through the exit, but skipped part of the factories and all of the Furnituremen section.
- Five visitors who walked into the first section and stayed for less than a minute or didn't stop at more than one exhibit were dropped from the sample.

The use of the entrance as the exit by many visitors may have the unintended but desirable impact of reinforcing the ideas in the first part of the exhibition (exhibits #2-#8) about the

origins of the industry by immigrants to the Grand Rapids area because visitors went past them twice.

One idea that came up in the community forum was the idea of reversing the historical flow of the storyline—starting with the present day and working backwards. That is, start with what is more familiar to the majority of the audience, and certainly children, and go back in time.

### Time and Stops

Most people did not stay long in this 9,600 square-foot space and did not stop at many of the 70 exhibits. Data collectors commented more than once about the rapid pace of visitors through the exhibit. Kay Hoytenga, the docent in the Advisors' Forum, noted that few visitors linger unless the lathe operator is there.

- The average time spent by tracked visitors in the exhibition was 12 minutes; the average number of exhibit stops was 13. See Figure 4.
  
- The longest amount of time spent by one visitor was 64 minutes who watched videos. The shortest amount of time was one minute, by a visitor making two stops. (People who stopped only once or did not stay more than a minute were dropped from the sample.)
  
- Visitors who went from the entry to the exit, passing through all sections, averaged the same amount of time--13 minutes--as visitors who left through the entry after skipping the last section. (These were the two common patterns mentioned above in Flow.)
  
- The exhibit stopped at by the highest number of visitors (53%) was #7 Why Grand Rapids. No other exhibit was stopped at by half of the visitors. See Figure 5.
  
- Nine exhibits were stopped at by 30% to 49% of the visitors:
  - #18 Centennial Platform
  - #5 B. Meerman #1
  - #48 Century Showroom
  - #8 No Loafing (a nonfunctioning interactive)
  - #17 Birds Eye Grand Rapids
  - #16 Factory Model
  - #38 Furniture Temple
  - #55 Creating the Modern Antique
  - #52 100th Market

- At twenty exhibits, fewer than 10% of the visitors stopped.

Community advisors pointed out the disjunctive storyline: “The main parts of the story were only told in the beginning. Ending didn’t connect. Not a clear transition of the wood to steel concept. More office furniture is made here than anywhere else, by a long shot, but the connection is not made.”

### Visitor Behaviors

A majority of people read labels, listened to a Meerman<sup>1</sup>, and talked about the exhibits as they visited Furniture City. Roughly 30% of the visitors used an interactive or watched someone else use one. Twenty-one percent of the people called someone over to look at something, and 17% read a label out loud to someone. Two people were seen talking on their cell phones.

Reads label	64%
Talks	58%
Listen to Meerman	42%
Used interactive	29%
Call over	21%
Reads out loud	17%
Take collector card	13%
Takes photo	5%
Talk on cell phone	3%

- While the furnituremen collector cards were popular—a point made strongly by the advisor and visitors (“My sons love the cards!”)—they were also used inappropriately, as an exhibition staff person pointed out when he dumped out 20-30 cards that had been deposited into the openings in the spinning graphics panels (#32, #33, #34). One of the community advisors commented, “I’ve been here with students and the center part about the strike with the cards always seemed to be silly because the students went around collecting them, but didn’t read them and it just became something to do. Same with the circles that spin – they became toys, rather than informational tools.”

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<sup>1</sup> Four period-costumed male figures, each with a 1-2 minute audio telling about his job in the furniture business

- Community members and staff noted the unintended visitor behavior of people who were startled or shocked by sudden triggering of the Meerman audio (“They literally jumped”), and those who tried to sneak by without breaking the beam that started it talking.
- Visitors craved interaction. Even the broken time card machine (exhibit #8) attracted many people who attempted to use it.

#### Audio-Video Stops and Stay Times

There were 10 audio-visual elements: 4 Meerman, 3 Production videos, and 3 other videos-- Strike, Market, and Steelcase. Average number of AV stops was two. Range was from zero to 9.

- Forty-two percent of the visitors stopped at least one Meerman.
- The Meerman attraction rates (percent of tracked visitors who stopped) decreased from the first one to the fourth. See Figure 6.

#5 Meerman 1	49%
#15 Meerman 2	32%
#36 Meerman 3	28%
#70 Meerman 4	14%

- Three people stopped at all four.

*I didn't realize that "John" was the same guy over and over.*

- The Meerman holding times (time spent at a stop) decreased from the first one to the fourth. The longest time at a Meerman was 1 minute 45 seconds (at the first one). Longest time at the second one was 45 seconds; 20 seconds at the last.
- A data collector noted on one of the tracking sheets, “Person in party said 'blah, blah, blah' to Meerman #1 and 'yah-dah, yah-dah, yah-dah, yah-dah' to Meerman #3.”
- Of the people who stopped at a Meerman and those who didn't, there were the same percentages of family visitors.

- All three furniture Production videos attracted about 20% of the visitors; at least one person watched each one all the way through (not the same person). See Figure 7.
- The two large theaters attracted 18-20% of the visitors. One person watched almost all of the Market video; no one watched more than half of the Steelcase video. See Figure 8.
- Most visitors (83%) spent less than 2 minutes watching any video.
- One community advisor made the important point that videos need to be labeled with their topic and run times visible to people who come to them mid-program: "Information placards for on-going videos would be helpful. I wasn't sure what I was watching."

### **Findings, Questions, and Recommendations**

The data from the visitor studies in Furniture City told us who is coming, what they found engaging, and what they learned. There are many implications from these data, and from the advisors' comments, as to how the exhibition might be changed. The following findings, questions, and recommendations take a visitor-centered point of view to discuss the issues. Further answers to the questions and recommendations can be found in the last section, under "Further Thoughts...."

- Finding: Cued visitors spent, on average, longer in the exhibition than uncued visitors (who were tracked unobtrusively):

Average time for T&T sample = 12 minutes

Average time for CQ sample = 17 minutes

But even 17 minutes is not a very long time considering the size of the exhibition.

Question: How long should it take to "see it all?"

Recommendation: In a database of more than 100 exhibitions, the average time, regardless of the size or topic, was under 20 minutes. Make exhibits that take this normal behavior into account.

- Finding: Most of the visitors in the cued questionnaire sample have been to *Furniture City* before. See Figure 9. But repeat visitors spent less time on average than first-time visitors:

Repeat visitors average time = 15.9 minutes

1st-time visitors average time = 21.5 minutes



Question: How does a repeat visit differ from a first-time visit? Do people re-visit favorite places or see the things they missed before? The data suggests that repeat visitors may have felt like they'd "seen it all before" whereas first-time visitors were motivated to pay more attention.

Recommendation: To increase stay-time and raise the level of engagement for all visitors, the exhibition should stress appeal and accessibility for first-time users. For them it may be their only opportunity to visit. Exhibits should be made with high re-visit potential (highly social, open-ended, interactive, fun) for repeat visitors.

- Finding: A majority of the visitors to the exhibition are in groups with adults and children (families). See Figure 10.

Questions: Are there enough things for children to do in "Furniture City"? What kinds of interactive exhibits would appeal to adults as well as children (ages 6 to 12)? What can people DO in the exhibition besides look and read?

Recommendation: To increase stay-time and raise the level of engagement for all visitors, the exhibition should stress appeal and accessibility for visitors without any prior knowledge of the furniture industry in Grand Rapids. Interactive exhibits should be designed to engage visitors of a broad range of ages, i.e., children and adults should find the interactive exhibits interesting and meaningful.

- Finding: The overall approach in the design and content (number of exhibits, number of informative texts) favors a more specialist audience, i.e. people with prior knowledge, and the advisors were curious about ways to present more information (e.g., through computer terminals, audio tours, take-away bibliographies), but the current low rate of stops and fast sweep rate suggests that many visitors are already feeling overwhelmed or confused by the vast amount of content already presented.

Recommendation: Exhibits need to convince visitors to repress their constant urge to leave. Exhibit environments are complex and confusing; anything that contributes to visitors' feelings of incompetence will encourage them to go elsewhere to seek enjoyable, engaging, reinforcing, and meaningful experiences. See "Criteria" in the Appendix.

- Finding: Most of the visitors (75%) to the exhibition do not have any special interest or knowledge about the furniture industry in Grand Rapids. The special interests that 25% of the people had included hobbies, employment, family history, education, and general interest.

Question: Who should the target audience be for this exhibition?

Recommendation: The exhibition should be for the widest range of audiences as possible, reflective of the population of Grand Rapids and other Michigan communities it serves--in terms of gender, cultural background, race, age, class. As such the exhibits should inform the lives of these audiences by combining the unknown with the familiar, the extraordinary with the ordinary.

- Finding: Many visitors were reminded of seeing furniture in their grandparent's homes.

Question: Adults remember old furniture, but how can the younger generation relate to it? How can we keep it from becoming obsolete?

Recommendation: Use visitors natural inclination to be interested in antiques to link them to their knowledge of old furniture. Use references in the popular media for where they may have seen or encounter old furniture, besides a grandparent's house.

- Finding: Visitors understand that this exhibition is about the history of the furniture industry in Grand Rapids (and Western Michigan), how it shaped the city, how it changed, and how people's lives were impacted. Yet many people admitted that they didn't realize the extent of the impact or took it for granted.

Questions: What would make this furniture industry story more meaningful to more people?

Recommendation: Tell how Herman Miller, Steelcase, et. al. have influenced and inspired production systems, material inventions, and usage, not only in the furniture industry but beyond (architecture, living, accessories, music, culture). How can these influences be linked to the visitors' daily lives?

- Finding: Visitors were aware of many social issues and injustices--such as strikes, child labor, immigration, limited resources, and war--as factual parts of the furniture industry story.

Question: How can these issues be balanced with other human emotional concerns such as hope, pride, creativity, and the ways that furniture creates or influences interactions between people?

Recommendations: Start with affect. Human emotional concerns are potent ways to involve the individual visitor in the story of furniture, furniture production, and its use.

- Finding: The current exhibition (9,600 square feet) is underutilized. Visitors in the tracked sample did not stay long or stop at most of the exhibits. The average time spent in the

whole exhibition was only 12 minutes. Many people skipped or missed some of the sections. On average, people stopped at only 13 of the 70 exhibits overall. In fact, *Furniture City* is one of the least-thoroughly used exhibitions, compared to other museum exhibits. See Figures 11 and 12.

Question: Is *Furniture City* too big? How much smaller could it be?

Recommendation: Consider maybe making two or three smaller exhibitions instead of one, big, comprehensive one. Make them each have a very different approach, look-and-feel, purpose, or topic. Satisfy the urge to show tons of stuff in some places, and be very focused in others. Show the objects that are most likely to resonate with the most visitors excited to see the real thing. You have the book, *Grand Rapids Furniture: The Story of America's Furniture City*, that tells the whole story in a beautiful and scholarly way for those who want lots of details. Objects can be interpreted through the story of and meaning for the maker, the client, the user, the culture, the curator, and ultimately the museum visitor. This format offers the possibility for visitors to add meaning in addition to receiving meaning, to their experience in the exhibit, while the museum opens itself up to learn from the visitor.

- Finding: Although visitors did not stay long and often stopped at fewer than 20 of the 70 exhibits (data from tracking study), they thought *Furniture City* told an important story and said positive things about it (questionnaire feedback).

Question: How much more thoroughly would visitors have used the exhibition in the first few years after it opened?

Recommendation: Even when new, the exhibit warranted major editing, from curatorial completeness to educational effectiveness. Less is more. There is a trend for smaller exhibitions to have visitors using them at slower sweep rates to investigate more of what's there.

- Finding: Visitors in the questionnaire sample who had a special interest in the furniture industry had an average time longer than visitors who didn't:

Yes = 19.5 minutes

No = 16.6 minutes

It seems that special interest had less of an impact on visitors' time spent than if they were first-time visitors. Visitors who had a special interest *and* were making their first visit were in the minority.

Question: How many museum exhibitions are unconsciously targeted for first-time, highly motivated, special-interest-driven visitors who are in the minority of the audience?

Recommendation: Make it a goal to have the majority of the exhibits appeal to the 75% of the visitors who do not have a special interest and who are on a limited time budget.

- Finding: Visitors' negative comments included mentions about the confusing layout. While Furniture City is mostly linear, only the introduction and "Beginnings" up to exhibit #8 and "A New Industry" are one-directional. "Furniture Men" as a room reads as open-flow to some extent. The other theme areas are linear but bi-directional. The path suggests open flow to some extent, but doesn't make it easy to find out if you've seen everything or not. Question: Does a linear presentation or a more open, free-choice flow work better?

Recommendation: The decision for linear vs. open depends of many factors. It does not cost more to make an exhibition with a comprehensible layout and easy wayfinding, whether it is linear or more open, but it does require more conscious, visitor-based decisions and, at best, prototyping and remedial design modifications where necessary.

- Finding: Visitors and community advisors mentioned the need for more information about the current state of the industry and where Grand Rapid's influence can still be seen.

Question: How permanent do you expect a permanent exhibition to be? If it is about history, how could it respond to changing conditions?

Recommendation: A "permanent" exhibit in some museums is, as a rule of thumb, developed for a period of seven years. In year four a review of content, applying updates, and a physical sprucing up are a great way to renew the exhibit and the audience interest in it. If the exhibit is about history, a space dedicated to changing displays within the exhibit may be worth exploring. This can be supplemented with the voice of the community. Beware, however, of the pitfalls of a changing-topic area that needs updating, because those exhibits tend to fail when the person responsible for keeping them timely doesn't do it.

- Findings: The advisors agreed that the exhibition was very relevant for their interests and uses. They applauded the excellent use of photography. They agreed on the need for updating and a more cohesive storyline. They noted that the strength of Furniture City was its good job of incorporating difficult material and an incredible amount of research. This was also noted as a low point: FC's attempt to cover too much material. (For other recommendations from the Community Advisors, see the notes from the meeting on September 25, 2009.)

Final recommendation: Consider setting the bar high for the summative evaluation data for the next iteration of Furniture City in terms of the exhibition's ability to attract and hold visitors' attention. GRPM's exhibition "Habitats" was very successful in having a slow sweep rate index (SRI) and a high percentage of diligent visitors (%DV), which placed it in the database as one of the exhibitions in the lower right-hand quadrant on the meta-scattergram. Refer back to Figure 12 and see Figure 13 for another comparison of exhibition evaluation data and measures to shoot for.

### **Further issues and ideas, for the fun of it**

The thoughts expressed below are largely by Erik Schurink, Director of Exhibits at the Long Island Children's Museum, who conferred with Serrell in person at the Visitor Studies Conference in St. Louis in July 2009 and communicated by email during the preliminary findings and analysis stages of this project. He has degrees in furniture design and art and has years of exhibition design. Schurink and Serrell share some common values in visitor-centered exhibit planning, design, and evaluation.

#### *Some ideas about interactive exhibits*

"Environments and systems" features could be about office systems. If so, it could have a table with Abstracta tubes and connectors or similar building systems, or springs and other hardware to try things out with. "Materials Interactive" could invite visitors to explore and compare materials by touching, bending, weighing, or even build something. "Ergonomics" could be similarly interactive. This topic could be much more prominent. What kind of tests were conducted by Herman Miller or Steelcase? How could prototypes and tests inform an integrated prototyping/testing activity or educational program? How did Henry Dreyfuss' research evolve in service of furniture design? An activity for kids could be to match up 4 chairs with 4 tables (desk, dining, coffee, picnic) and try out both the matches and mismatches. Adults would enjoy it, too. Could be done with 2-D materials, e.g., cut-outs on Velcro. Show links about where furniture designers got their influences and inspiration, e.g. Marcel Breuer rode his bike (looking at the handle bar) when he thought of designing his first tubular metal chair.

#### *Incorporating art*

Art, especially interactive sculpture, could facilitate great conversations. Alan Wexler comes to mind ([www.allanwexlerstudio.com](http://www.allanwexlerstudio.com), [www.sprayblog.net/spraygraphic-interview-with-artistarchitect-allan-wexler/](http://www.sprayblog.net/spraygraphic-interview-with-artistarchitect-allan-wexler/)). His sculptures-many are public art-are often inspired by

furniture. He challenges our expectations about furniture, its function. His art makes those who interact with it aware of the intent through altered context. One piece of his is inspired by conference rooms. At first sight the installation appears like a conference table with chairs, all in black. A closer look reveals that none of the chairs are identical, and that the conference table is cobbled together from several different types of tables. The black paint unifies the chairs around the table like suits transforms and standardizes individuals, their personalities and voices into corporate decision makers. Installations like this one could become great conversation starters, especially if one can sit down.

### *Exhibition layout and themes*

Judging from the floorplan and the number of exhibits, a lot of material is presented in ways that don't allow great overview. The exhibit is very curatorial in character, giving an as complete as possible picture of all that can be shown and told, diminishing the educational value for the average visitor, beyond the scholar. A more open layout with theme pods separated by 'negative' space, rather than theme spaces flowing into one another, might help in presenting themes more effectively, while it would allow for making connections between themes more effectively. Having an educator and a visitor advocate on the development team in addition to the curator and designer can add great value for all audiences, and floor staff. Rethinking the themes and the number of themes may be a valuable exercise. Some ideas for theme combos:

- Creation-Production-Function (through the POV of designer, maker, end user), or
- Function-Status-Marketing (centered around an overarching theme of meaning & importance), or
- Craft-Industrial Revolution-People (centered around an overarching theme of history & culture)

### *Final Thoughts*

Museum exhibitions often assume pre-requisite knowledge, often curator driven. It is important to consider "exhibit" its own medium, just as a book, television, a newspaper, a poem, a website are their own medium. Each medium offers its own possibilities and restrictions, do's and don't. What does the medium "exhibit" offer that no other medium offers? How can you cultivate the exhibits medium's inherent qualities to the best of its potential for the museum, the subject matter, and most importantly, the visitor. How can you capitalize on the walk-through aspect of the exhibit medium even more actively, in

service of the visitors' learning by doing, so he'll take more ownership of the subject presented in the exhibit, and beyond--in daily life.

### **Thank You**

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To Chris Carron, who was largely involved in the creation of *Furniture City* for having the idea to do these studies and to listen graciously to the criticisms.

To all the visitors we watched and talked to.

*NOTE: This report is a draft intended for in-house use only and has not been edited or reviewed for publication to the museum field at large. Any version of this report to be shared with a wider audience should be approved by GRPM and Serrell & Associates.*

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