The designer Fiona Romeo recently described exhibitions as being “more of a dance than a sequential experience” (quoted in Cornish, 2013), and I think she was onto something. By depicting museum exhibitions and visitors as dance partners, the metaphor captures the free flowing, patterned but not quite predictable interaction between the two. Furthermore, like dancing, visiting an exhibition is an embodied experience: we don’t passively watch an exhibition, we actively move through it, and it is only through our activity that the exhibition experience manifests itself. Which raises the question: how much can the dance of the exhibition visit be choreographed? How much should it be?

The choreography of the exhibition dance is usually described in terms of narrative or storyline; “Narrative” has become one of the holy grails of exhibition making, with whole books being dedicated to the subject (MacLeod, Hanks, and Hale, 2012). However, these discussions are often focused on narrative from the exhibition designers’ perspective, or narrative as a theoretical concept. In this article, I will explore some of the possibilities and constraints of design and the creation of narrative from a primarily visitor-centred perspective.

Exhibition “Storylines”

Theatre is another performative analogy that has been used to describe exhibitions (Yellis, 2010). Thematic sections are akin to acts of a play, exhibits as individual scenes (Rabinowitz, 2013). Indeed, over the past 20 years, exhibitions have had an increasingly theatrical quality in their attention to detail of design, lighting, and staging. But unlike the theatre director, for whom the audience’s sight lines and the sequence of scenes is (usually) a known quantity in the crafting of narrative, the exhibition designer has far less control over the manner and the order in which displays will be encountered. And like coming into a movie halfway through and trying to pick up the threads of character and plot, finding yourself moving through the exhibition the “wrong” way can be confusing.

Despite these inherent difficulties, exhibition development is still usually guided by an idealised “storyline,” albeit with the tacit acceptance that this storyline will be an approximation—at best—of the eventual visitor experience. Sometimes the subject matter lends itself to a particular storyline that suggests a certain layout. For instance stories with a clear beginning, middle, and end may lend themselves to a linear structure. Others might suggest a more organic spiral or possibly a hub-and-spoke structure: a theme having several subthemes that could potentially be approached in any order (Stenglin, 2009). Sometimes it’s a choice, possibly even a source of conflict during design. Linear, chronological storylines have been criticised in the museological literature for presenting an oversimplified or triumphalist perspective of history, the so-called “march of progress.” This concern, however, is primarily theoretical because so far research on how visitors interpret different narrative approaches is limited (Witcomb, 2013). On the other hand, thematic clustering presents its own navigability and narrative issues, particularly when considering the social dynamics of real-life visits, not the idealised single visitor-exhibit dyad often conceived of in the planning...
process (vom Lehn, 2013). The respective merits of linearity versus more free-flow configurations has attracted considerable debate and discussion of late (e.g. Rodley, 2013; Simon, 2013). So far at least, there is no evidence to suggest that one approach is inherently better from a visitor perspective. Often the choice will necessarily be a pragmatic one: exhibition designers need to make the most of the space available. The allocated space for an exhibition is frequently a fait accompli at the outset of the design process; alternatively for travelling exhibitions the layout will need to be tailored to a variety of different configurations. It often calls for compromise—as well as a better understanding of how visitors perceive and navigate museum spaces in general.

**Space Constraints**

For museums in repurposed buildings, or those with extensions that affect the spatial language of the original, the constraints of space are often all too apparent: floor levels between old and new that don’t quite align; rooms of awkward scales and juxtapositions. Navigational issues are compounded when exhibition spaces do not naturally deliver visitors back to a common reference point (Figure 1). In my own research, I have seen visitors exit a gallery, find themselves in an unfamiliar location, and decide to backtrack through the length of the gallery to get back to a navigational reference point they recognise.

One way of characterising different types of exhibition space is through space syntax (Hillier and Tzortzi, 2011), which defines spaces by the way they relate to one another. Two key syntactic measures of space are integration (the more integrated the configuration, the fewer spaces must be traversed in order to reach all other areas), and connectivity (the number of other spaces directly accessible from a given space). The concepts are better understood in terms of illustrative examples (Figures 2a-c). In these figures, each circle represents a room, and the lines denote routes of access. The ‘beads on a string’ arrangement of spaces shown in Figure 2a illustrates low integration and moderate connectivity: all spaces must be passed through to travel from one to the other with no short-cut route;
there are no dead-end routes but nor are there any highly connected nodes. The ‘grid’ arrangement in Figure 2b shows higher connectivity with multiply connected nodes and alternative routes. There is also high integration as most rooms can be accessed by passing through no more than one or two others. The ‘beads’ extreme is easy to navigate but constraining, whereas the ‘grid’ extreme has considerable flexibility but could be confusing to navigate and be sure you’ve “seen everything.” Traditional museum layouts tend to have a highly integrated navigational spine from which other spaces radiate (Figure 2c). These are idealised examples, but any building or series of spaces can be represented in this way to determine its level of integration and connectivity.

In general, highly integrated routes will become the museum’s traffic areas as they are the quickest way to get from A to B. Meanwhile, the level of connectivity helps define the overall feel of a space. Spaces with low connectivity and low integration feel intimate and out of the way (but are also easily missed). Higher connectivity offers choice and potential for exploration, but at the same time too much connectivity can overwhelm the visitor with choice, making it difficult to navigate (Hillier and Tzortzi, 2011).

Design as Choreography
Research by psychologists working in museum settings (e.g. Bitgood, 2011) has demonstrated that visitor behaviour is neither completely predictable nor totally chaotic, but rather that there are distinct patterns in visitor movement and behaviour. (That’s why I think the dance analogy is so apt.) And to some extent at least, these patterns in visitor behaviour can be influenced through design choices.

For at least the last 40 years, retail designers have been using design tricks in subtle (and not so subtle) ways to entice us to buy. A whole body of research known as atmospherics has built up around how the sights, sounds, and even smells of service environments can signal our subconscious and influence our behaviour. And as I have argued recently, atmospherics offers a useful framework for understanding the role design can play in museum visitor experiences (Forrest, 2013b). In this context, the exhibition environment can itself be considered an interpretive medium. Used judiciously, interpretive design features confer an overall character to an exhibition. When design and content are congruent, the visitor experience is enhanced. However, design intent does not necessarily correlate with visitor interpretation. I’ve observed in my own research that some design cues are too subtle for most visitors to notice—for instance subtle changes in colour palette...
or lighting effects may go undetected when visitors’ attention is primarily focused on objects and labels. This is not necessarily problematic in itself, although there is of course an economic argument for not spending a significant proportion of an exhibition’s budget on features that will be missed by a majority of visitors. More problematically, design features can be misinterpreted, such as a deliberately rough-hewn exhibit seen as being shoddy or unprofessional. This can create a sense of dissonance that can in some instances lead to outright rejection of the exhibition’s interpretive message (Brown, 2011; Roppola, 2012). Thus design approaches as well as an exhibition’s content should be the subject of evaluation.

**Narrative and Sense-Making**

When visitors enter an exhibition, they have to simultaneously make sense of the space they are in as well as the story being told within it. If too many cognitive resources are expended on the former, there will be precious little left for the latter. Therefore, understanding how visitors interpret their surroundings is an important facet of designing effective exhibitions.

The visitor journey through the exhibition has been described in terms of *channelling* (Roppola, 2012): spatial channels guide the physical journey; narrative channels guide the conceptual journey; semiotic channels guide visitors in their sense-making of different interpretive media. Seating slows visitors down, whereas long corridors tend to speed them up. Doorways, or even a narrowing caused by the positioning of display cases, tend to separate spaces both spatially and conceptually. This in turn influences visitor behaviour.

Narrative is a way of considering the exhibition as a gestalt: does everything hang together? Exhibit elements that interfere with each other or otherwise fail to coalesce in a coherent way can disrupt sense-making (repeat offenders in this regard: sound bleed between audio exhibits and labels positioned too far away from the objects they relate to). Furthermore, if a visitor is expecting a clear narrative, then the absence of one can be disconcerting and lead to an exhibition being dismissed as all mixed up, “all over the place,” “cluttered,” or having “no real point” (visitors quoted in Roppola, 2012, pp.204-205). But making a narrative too explicit or prescriptive can provoke resentment amongst visitors who don’t like the feeling of being dictated to (Forrest, 2013a). It can sometimes feel like it’s a fine line to walk between the two: one visitor’s reassuring guidance may be another’s annoying constraint. By way of illustration, compare these two visitor quotes from my own research:

“...it’s very difficult to choose where you’re going to go from here. You almost need like directions about where you should be starting...”

“...[the gallery] makes you wind around, which is probably intentional

![](image)

Figure 2b. “Grid” arrangement of galleries. This configuration offers maximum choice but can be confusing to navigate. Adapted from Hillier and Tzortzi, 2011.

**References:**


but, sometimes it’s nice to be able to see a big view and work out ‘yes I’m interested in one particular aspect I’m heading over there,’ whereas you are forced to wander around the gallery to find something.”

The first visitor clearly wants guidance so she can be sure she is on the correct path and has ‘seen everything.’ The second is more concerned with being able to follow his own interests with as few detours as possible. The two perspectives are in tension with one another, but are not necessarily mutually exclusive. Design cues including lighting, colour coding, and changes of floor finish can all help ‘chunk up’ spaces both physically and conceptually without necessarily constraining visitor movement. A well thought through hierarchy of interpretive signage can help those visitors who want to scan an environment for the elements that interest them the most.

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**Designing the Visitor-Exhibit Dance**

Visitor behaviour may be more probabilistic than predictable. Even so, design can be used to make some routes through an exhibition space appear inherently more inviting or logical than others. Enticing views of what lies beyond can help propel visitors along. On the other hand, visitors can be repelled by dark, narrow corridors or stairways that don’t obviously lead anywhere (no one wants the embarrassment of accidentally wandering somewhere they’re not supposed to be).

In closing, I would recommend the following for the designer-choreographer’s toolkit:

- Consider exhibition environments in terms of space syntax properties. Are there enough choice points? Too many? Are there integrated routes that can aid navigation?
- Pay attention to the attractive power of sight lines and juxtaposition of exhibits so that spaces appear coherent and organised, even if visitor flow need not be regimented.
- As design can be a tool for communication, it can also be a tool for miscommunication. Be aware that certain visual motifs might have unintended connotations in particular social, cultural or age segments. This might need formative evaluation.

Just as there is no such thing as “the” perfect dance, there is no perfect prescription for choreographing the visitor experience. The visitor-exhibit interplay is too complex for that. But it’s a complexity that rewards detailed research and discussion. And long may that continue.

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**References continued:**


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