

The ambiguous typology of the gallery

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The art gallery is well known as a building type, but because its purpose is to display and call attention to a separate collection of objects it highlights the distinction between the building itself and how it is filled. Is it the spaces or the objects that define the architecture? Which of these constitute the building type? On one hand the gallery has seemed, particularly over the past century, to be a blank canvas in which art objects play the dominant role, against anonymous white, warehouse walls; surely our experience of visiting such a space, and our chosen path through it, is guided by the placement of these objects to which we are drawn. Yet evidence suggests, even here, our movement is actually determined by the building's spatial organization; Turner and Penn's (2002) Space Syntax analyses of the Tate Gallery predict real movement through the building with no reference to what is hung on the walls. Such contradictory views might question our notion of typology itself. Is it possible that the type of the building might change when objects are placed within it? Can the placement of objects make one type appear to be another?

By one notion of type this should be impossible. Typology is the identification of elements as belonging to classes, notionally quite distinct. Traditionally, we might follow Plato in assuming each has an essence, and define each class by example, assuming an ideal form or archetype to which all real examples compare. We might follow Linnaeus' taxonomy of species linking observable traits to distinct natural kinds. Or we might follow linguists like Chomsky in assuming rules that generate the well-formed examples of a type, as in Koning and Eizenberg's (1981) shape grammar for Frank Lloyd Wright's Prairie Houses. In each case the implication is that the type is immutable, united by common features, a priori and distinct.

It may be more fruitful to recall that type is a label we impose upon the world, which is itself a continuum of variation. Consider the looser relationship Wittgenstein (1958) describes as "family resemblances", as in the example of games: not all games are competitive; not all games have rules; yet we can clearly identify an instance of the type. In this sense, the categories we assign to things only come after the fact, as useful labels to make sense of our experience and to communicate it. They are

by no means the only legitimate ones. From one language to the next, we divide the world differently by our choice of words, and even by the sounds used to express them. The five Greek vowels that gave rise to our alphabet correspond to 12 different sounds in English, and more than 30 in Danish; yet whatever the number, languages naturally distribute these chosen sounds uniformly throughout the space of possibilities the human voice is capable of producing (Oudeyer 2006). The particular placement of words and phonemes is an artifice that allows us readily to distinguish them, and to understand the language we have learned, but in reality these are only points within the continuum of meanings and sounds.

A shift from the first to the second view of type has occurred in computational approaches to cognition and artificial intelligence. Symbolic computation of the mid-20th century, in which types of object were fixed and meaning was assigned by the programmer, has given way to machine learning in the 21st, in which the computer clusters and labels the continuous space of real-valued data. Machines too can now define types quite clearly, not as an abstract model to be copied, but as a quantifiable region in a space of features (Hanna 2006). This shift has occurred within Space syntax as well. Where the foundations of early work (Hillier and Hanson, 1984) emphasised structures like the "beady ring" as distinct types, defined by a grammatical structure and expressed in diagrams, the subsequent quantitative measures like integration, used in the work in this volume, treat differences between spatial arrangement as statistical. Under the new paradigm, typologies need not be inherently distinct, but matters of degree. Like the sounds and meanings in different languages, they may change depending on how the building is viewed. The spaces defined by walls may be of one type, and the spaces defined by objects within may be another.

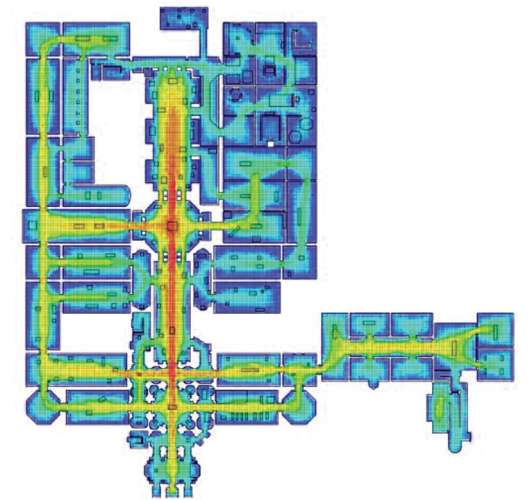
In her Jewellery Museum project, Alexandra Watson has sought to capture the difference between the spaces defined by the building and those defined by objects in the hypothetical paths of observers attending either to one or the other. The building itself is dominated by a main circulation hall, onto which are attached a set of independent linear galleries; each of these latter are less visited if the access integration analysis of the floor plate

in isolation is to be believed. But two things are evident on further study. Visual integration of the entire space, based on our being drawn to where we can see, rather than just where we can walk, gives far more prominence to these gallery rooms. Rather than being narrow, linear passages, the placement of objects at least suggests that our route through these has a finer scale pattern of loops, pauses, and rooms divided more by experience than structure.

Another Jewellery Museum by Hafsa Siap initially looks very different. Superficially, the building plan is a single sequence of small gallery rooms, each semi-permeable and leading to the next. But again, the placement of tiny objects changes our likely movement through these galleries, particularly by display cases that selectively obscure and reveal views of the jewels, and almost become rooms in themselves, entered visually if not accessed physically.

It may be that these two very different buildings generate nearly identical experiences of movement: both a variation of four visually permeable routes branching from a common corridor. If not, it is certainly possible that there exists a modified placement of the exhibits in each that could. There is also a familiar similarity between the topology of routes in these and what we seen in more traditional neoclassical museums such as the Tate gallery, and so it is possible that Watson, Siap and others have approached a familiar museum type by other means. Even though the buildings themselves are superficially so different, type is maintained by the placement of objects.

We are still left with the initial ambiguity over typology. Type does not seem fully determined by a building's function of "museum", or even "jewellery museum". And the type may seem to be one thing for a building in isolation, and yet another when objects are placed inside. The tools of Space Syntax and other analyses help us to quantify and compare some of the experiences of the architecture, but it is likely that new, different tools and methods will be needed to provide more detail. Work in this volume begins to speculate what these might be. The ambiguity may never be resolved completely, but this is just as well, as this is what gives the designer room to explore.



Agent based simulation of movement the Tate Gallery, London. Image: Alasdair Turner.Hillier B and Hanson J (1984) *The Social Logic of Space*. Cambridge University Press.

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