



## Interactive architecture

### Description

How interactive is architecture? These days, networked computer systems, tablets and smartphones seem to exemplify interactivity amongst people, and between human beings and objects.

Perhaps architecture participates in this interactive milieu in so far as it embraces concepts such as virtual reality (VR) and 3D worlds, game design (including 3D games, platform games, and arcade games), mobile computing, ubiquitous computing, smart/intelligent environments, location-based and context-aware services, augmented reality, and, most recently, mobile augmented reality, notions of proxemics/proxemic interaction, device ecologies, and at architectural scale interaction design for smart buildings, interactive architecture, and even smart cities and urban computing.

Mikael Wiberg provides this list at the start of an interesting article [Interaction design meets architectural thinking](#), published recently in [Interactions](#), the [ACM](#) magazine. It's worth exploring at least one other thread connecting architectural thinking with (computer) interaction design: the thread is *agon*.

### Computer gaming and contest

Computer gaming is highly interactive. I'm drawn to the word (*agon*) as one of the game patterns identified by Roger Caillois in his book *Man, Play and Games*. Theorists of computer game design have certainly picked up on Caillois' writing. There are games of vertigo (rushing about, spinning, jumping), mimicry (dressing up, avatars), chance (rolling dice, taking risks), and *agon* (battles, fights), and of course any game may have these in combination. *Agon* is

a question of rivalry which hinges on a single quality (speed, endurance, strength, memory, skill, ingenuity, etc.), exercised, within defined limits and without outside assistance, in such a way that the winner appears to be better than the loser in a certain category of exploits (14).

I think the case for *agon* in interactive computer gaming is easy to make. But if we can establish a role for *agon* in architecture then that might provide a good theoretical basis for thinking further about interaction design and architecture an interactive architecture.

## Contested places

In an essay in a new book, *Phenomenologies of the City*, architectural theorist Wendy Pullan draws attention to the role of *agon* in understanding architecture and the city. (I should say, she makes no reference to interactive computer games.) She explains the ancient term *agon* as used by Aristotle, and from which we derive the words *agony*, *antagonism*, *antagonistic* and the less familiar words *agonism*, and *agonistic*. By her reading, cities, and the architecture of which they are composed, are at their best when they are *agonistic*.



Certain contested and/or divided places, such as Jerusalem, Beirut, Nicosia, Sarajevo and Belfast bring the agonistic city into sharp relief. But she argues that conflict is embedded in any city, as part of the 'urban order' (214). She's keen to distance *agon* from the conventional view that it inevitably involves antagonism between factions that have entrenched positions. Nor do cities with *polarised* populations present the best examples of the agonistic city.

Pullan emphasises the *constructive* aspect of city conflict. In ancient Greece, *agon* was most often associated with the polis and the city state. She identifies notable 'agonistic practices' that still incorporate and spatialise conflict in the city:

'ancient cults of sacrifice; Dionysiac theatre; the division of Italian towns into rival *contrade* (quarters) that still culminate in ritualised competitions such as the biannual Palio horserace in Siena; widespread and elaborate hunting procedures; military ceremonies that supplant fighting, as in the daily border rituals between Pakistani Lahore and Indian Amritsar; and sports of various

sorts, especially football.â?•

She also notes that courts, assemblies and parliaments, are â??based upon agonistic principles and practicesâ?• (215).

## Play spaces

There are resonances here with the idea that [play is ubiquitous](#) in all human affairs as argued by Johan Huizinga â?? and in this case, agonistic play. Contrary to the assertions of some theorists of conflict, Pullan is keen to point out that there really are no rules for agonistic play. Identification of the protagonists, their differences and causes are fluid, contingent and subject to the workings of [interpretation](#), and rightly exercised, debated and worked out in public life. So an architecture that provides space for public life is crucial for the working of *agon*. She concludes:

â??Place, by being structured in everyday activities rather than regulatory systems, can begin to open a territory where the necessary flexibility of *agon* can exist, with all of its paradoxes and ambiguities. It is in the combination of the two, rooted in both the everyday life and political possibilities of cities, that agonistic practice may find a homeâ?• (222).

This for me this is a good place to start thinking about â??interactive architecture,â?• to which networked digital technologies can provide assistance. Itâ??s an architecture that gives space to public life and the workings of *agon*.

## References

- Caillois, Roger. 1961. *Man, Play, and Games*. New York, NY: The Free Press of Glencoe
- Huizinga, Johan. 1955. *Homo Ludens: A Study of the Play Element in Culture*. Boston: Beacon Press
- Pullan, Wendy. 2015. *Agon* in urban conflict: Some possibilities. In Henriette Steiner, and Maximilian Sternberg (eds.), *Phenomenologies of the City: Studies in the History and Philosophy of Architecture*: 213-224. Farnham, England: Ashgate.
- Wiberg, Mikael. 2015. Interaction design meets architectural thinking. *Interactions*, (22) 2 (February), 60-63 (<http://doi.acm.org/10.1145/2732936>).

## Notes

- The first image above is of the border crossing between the Turkish and Greek parts of the city of Nicosia. Iâ??ve processed the picture with the iPhone Waterlogue app to conceal identities.
- The second image below is an old sentry box on the Greek side of the city.
- Some of the ideas in this blog post have since been published as

Coyne, Richard. 2015. Places to play. *Interactions Magazine*, (22) 6, 54-57. Online at <http://interactions.acm.org/archive/view/november-december-2015/places-to-play>



### Category

1. Architecture

### Tags

1. architecture
2. city
3. conflict
4. interpretation
5. play

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