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Architects — material & conceptual choices

FLW G.

Practice — intentions  
choices  
actions

Gehry G.

ARM — RMIT  
AAM.

Contexts  
histories.

The art of architects is shaped by the world around them and the technology available to them. The conceptual choices include the social and political issues and challenges of the time. The material choices involve obviously the materials and technology available. Frank Lloyd Wright's Guggenheim in New York (1956) broke the rectilinear grid of the city as this organic structure was built from the inside out. Half a century later Frank Gehry's Guggenheim in Bilbao Spain, (1997)

exemplified the nature of postmodern culture whilst employing "unorthodox" materials and radical construction techniques. Ashton Raggatt and Macdougall, an Australian architectural firm employed similar construction techniques for the Australian National Museum on the Acton Peninsula in Canberra. Also by ARM, ~~the~~ <sup>Storrey</sup> Hall at RMIT on Swanston St is a direct reflection of contemporary culture containing layers of current contexts as well as the parody of past authorities. The intentions, choices and actions of all of these architects has been shaped by the material and conceptual choices. They all challenge the viewer to remove the stigma barrier between art and architecture blurring the boundaries between both.

~~From~~ Joseph Paxton started the modernist

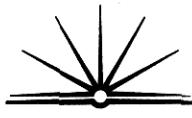


theory of architecture with his Crystal Palace in 1856. Modernist architecture is described by its focus on plan, structure and functionalism. Frank Lloyd Wright's practice of the Guggenheim is shaped by this modernist concept. His building retains the holistic design principle whilst also showing little ornamentation. He put a "unique stamp" on modern architecture as he produced an organic building that resounds the circle throughout. He believed in "form follows function" as he stated "A museum should be one extended, expansive well proportioned floor space from top to bottom... no stops anywhere." His conceptual choices put a whole new view on what a gallery could be.

The conceptual choices demonstrated were only made possible through the material choices as America moved from an

agrarian to an urban-industrial society the technological developments were instrumental. Wright used a lightweight steel framework with reinforced concrete that was also cantilevered and therefore resisted mass. He employed also of glass tubing and glass blocks also ensured the intentions of Wright were possible. He employed ~~an~~<sup>a</sup> ziggurat design concept from ancient Mesopotamia made possible by the use of reinforced concrete. Wright's intentions, choices and actions of his work were determined by the material and conceptual choices of the time.

Frank Gehry's Guggenheim in Bilbao is a symbol of the city's future prosperity as was Utzon's Sydney Opera House a century earlier. Gehry employs pliability, organic forms, heterogeneous elements and



incongruous juxtapositions to prescribe the post-modern era. The materials used are in direct response to his time and place. He used titanium instead of lead copper as it reflected the Spanish sunlight and turned golden during rain. This "unorthodox" material was mined in Russia and Australia and is quite malleable. The titanium replicates the scales of fish as the Guggenheim is placed next to the Nervion River, making it site-specific. Gehry as used <sup>CATIA</sup> ~~CATIA~~, a computer program designed for the French aero-nautical industry. It deals with the collaboration of sketches as well as polynomial equations involving interlocking polygons. This ensured that the application of materials was far more accurate. The building quotes regionalism as Gehry employs the use of Spanish limestone as well. Like a tree



postmodern architect, he ~~would~~ uses the limestone in an ironic manner through double coding. Spanish limestone is associated with heavyweight construction and traditional architectural practices. Gehry used the limestone to clad a lightweight steel frame and therefore gives the illusion of being heavyweight. The purpose of this double-coding is to challenge and extend the existing ideas and practices in an attempt to respond with integrity to the conditions of time and place.

This double coding is a rejection of the modernist principles of minimalism and thus shows conceptual choices. The sculptural quality of the building mimics futurist artist Boccioni's "Unique forms of continuity of space." Gehry is an eclectic architect who reflects the industrial past of the building whilst describing



its potential. The incongruous juxtaposition of organic and rectilinear forms is a reflection of the plural nature of contemporary society. The range of collectors including International, Spanish and Basque artists shows the multiculturalism and hybrid nature of Gehry's world. The actions of Gehry are demonstrative of the essence of post modern culture as conceptual and material choices are a rich fabric of the building.

Ashton, Raggatt and Macdougall are Australian architects who challenge stereotypes and past conventions in their work. The Australian National Museum employed CATIA in its construction as well as anodised aluminium and painted steel. Norman Day described it "as a theatrical effect, more like a Luna Park

Tunnel of Love experience than the virgin white nondescript galleries most curators prefer." The design concept is of Australia as a tangled vision. The building is a diagram of that tangle. It exposes political issues of "Sorry" as well as the "Uluru line." It challenges viewers to see Australia's history from a different perspective by deconstructing history and making it relevant to today, thus recontextualising. The conceptual choices are clearly based on the plural nature of postmodern culture and Australia's reassessment of the past. The building is paradoxical; both comfortable and relaxed as well as austere and caustic. The intentions of the architects is clearly based around Australia as a post-colonial nation and the technology available.

The practices of Wright, Gehry and AKA are all in response to their respective periods. The material and conceptual choices are shaped by the technology and political and social issues of the time. Both modernist and postmodernist principles are evident through their respective works. As an american postmodernist architect Robert Venturi said, "Less is bore."<sup>11</sup>