

Spazio e Forma

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Recent times have shown how the world continues to rapidly develop through intensified climate changes and global pandemics; architecture, too, develops to meet the requirements and needs of 'the future'. Fighting climate change through sustainable development and design has never been deemed so relevant. These issues helped to craft the thought and purpose behind my body of works and established a concept that would remain relevant throughout my works.

My design brief was to design an environmentally friendly home, within the constraints of a 927m² suburban block of land in the Adelaidean inner-city suburb of Glenunga. Developing a piece of land, I was required to investigate its characteristics, understand the ecological and aerodynamic features of the property. I also analysed current global strategies that are being implemented to reduce carbon footprints in global cities.

Through extensive research, I investigated several architectural styles. Neo-modernism and minimalism became relevant themes throughout my research into sustainability, largely due to their simple designs and clean aesthetics. Sustainable architects, Norman Foster and Ken Yeang were researched, and their architectural methods analysed, thanks to their ability to design modern and functional buildings that had little impacts on the environment. Ideas and concepts from their designs were then implemented and applied to my designs. Sustainable materials were also explored and selected based on their relevance and suitability to Adelaide's climate. Weather patterns and sunlight movements were researched and analysed to ensure my building design would best utilise natural light to warm and light the house, but also to best protect the home from periodic weather patterns.

A floorplan of a suitable house with several sustainable features was then designed for the chosen property in my design brief. Conceptual ideas were developed, and constraints established; a survey was sent to my school's staff, collecting data on how many specific rooms were deemed *necessary* in a suburban home and what the dimensions of these rooms should be. This feedback was useful, as my design was family-orientated and helped to form the basis of my house design.

Design processes included sketches, floorplans and continual editing and developing of ideas on the program SketchUp. Reflecting my Australian identity, common architectural features from Australian homes and common materials were incorporated into my design. A gabled roof, operating in a butterfly manner was designed as a distinctive architectural feature, reflecting a common design feature. The choice of concrete floors, rammed-earth walls, corrugated iron roofs and large outdoor entertaining areas reflected the essence of Australian culture and common design, whilst also emphasising the importance of connecting the indoors with the outdoors through these natural materials. Large north-facing windows enable the constant flow of natural light and large outdoor spaces to the north and east of the home sanction the integration of outdoor and natural living. Outdoor space was also dedicated to fruit trees and vegetable patches, reiterating the importance of sustainable and organic food production.

An 3D architectural model was constructed post-completion of my house design to provide physical representation. My design shows that function and design do not have to be compromised for sustainability; design, function and space can be well utilised in an environmentally friendly way. Current ways of life were challenged in the design; the lack of a garage discourages the use of vehicles, and large open spaces encourage integration with the natural environment. A sustainable lifestyle is encouraged through the self-production of foods and renewable energy and energy-efficient products are depicted to power the home. The purpose of my design was to illustrate how sustainable living can function in a suburban setting.

Continuing with my body of works, I decided to design a logo to market the company that had designed my sustainable suburban home. Using a mind-map and considerable thinking, the interconnectedness of my love for language and travel were linked to extensive architectural design throughout history – my love for Italian culture connected to the historic relevance and construction of architecture in ancient Rome and throughout Italy. Thus, after careful consideration, the name '*Spazio e Forma*', meaning 'space and form' in Italian (two important architectural design principles) were chosen, reflecting my own connections. My designed logo has a gum-leaf (or) olive coloured background; this colour reflects Italian food and connected to my identity as Australia through this more muted earthy colour. The logo is geometric, but minimal, referencing elements of my house design. The cityscape design feature above the words on my logo reflects the Italian pronunciation and intonation '*Spazio e Forma*'.

Finally, business cards, stickers, a facemask and a tote bag were designed and printed with the '*Spazio e Forma*' logo. These products were carefully selected, reflecting common items that may be needed in an architectural firm. They are also products that can easily be distributed for marketing purposes.

Remaining with the Italian theme through the connection of my logo, the 20th-century Italian artistic style of *Futurismo* (Futurism) was used as inspiration. This artistic style was then digitally applied (through Adobe Photoshop) to design two posters of different natural environments.

The first poster, reflecting Australian soils and trees, provides an insight into the need to protect the land. Its natural colour palette reflects this environment and highlights how sustainability is relevant and necessary when protecting these landscapes. The second poster, a reef design, is a diverse and contrasting environment, and the poster elucidates the need to protect natural environments from developments and pollution – the production of plastics has caused such damage to the health and biodiversity of the oceans, thus sustainable design aims to highlight the need for change and preservation. These posters were designed to enhance the marketing of the brand, '*Spazio e Forma*' as a sustainable company, but also helps to convey the importance of the natural environment and the need for its conservation. This is a common message throughout my works: sustainability is necessary to protect our natural environments and we need to take climate action now.

'Sustainability is treating ourselves and our environment as if we are to live on this earth forever' – Arron Wood