Award Winning Designs: The Student’s Journey

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Motor Vehicle Design for Rural China

Magnus Goransson’s concept vehicle for rural China has been on display at the 2004 Detroit Motor Show. Magnus, who has just graduated from the Master of Design at Griffith University, designed his vehicle as part of his studies. His design won the Michelin Challenge Student Design Award. This award was established to bring forward and display innovative automotive designs that would not normally be shown at an international venue. The six-person international jury reviewed more than 125 entries from 40 countries before selecting the 17 finalists.

Magnus said “I think it is bad ethics not even trying to build a light sturdy, environmentally sustainable vehicle adapted to the rural community, when it actually might be possible. Who says it still can’t look like something from the international car shows.”

“It is time for me to try and find another vision of an umbrella; it is time to rethink the concept of the car again. What is its purpose? What would its purpose be on the Chinese market? Who are the users? What kind of possibilities do they have? Or put in other words: What kind of vehicle does the emerging vehicle market in China need?”

Magnus carefully studied the demographic requirements for his design. This resulted in the vehicle being designed to fulfill the needs of farmers and rural workers of China, where sealed roads are a luxury and a vehicle has to be all things to all people. Responding to his research the vehicle:

• Handles large amounts of different sorts of cargo like people, animals such as boxes of chickens and the odd pig or two, sacks of grain, and bamboo
• Is cheap and gives good value on the investment, through qualities such as a long life span
• Is simple and robust as the bicycle and the tuk-tuk, and is easy to repair locally
• Is easy to understand without manuals
• Is adaptable to the terrain, ruts, dust and dirt
• Is reliable as a ‘best friend’; making the user’s life better
• Is possible to repair with local materials and resources
• Minimises the impact on the environment
• Is fuel efficient
• Allows easy modifications

To avoid some of the problems associated with rutted roads, the four wheels are distributed in a triangular configuration, with the two driving rear wheels fixed very closely together. A basic motorcycle-type handlebar arrangement is used to steer the vehicle.

Other features include its lightness, fuel efficiency, good ground clearance and suspension with a chassis protected by a large metal plate. There are four main cargo areas for storage, some lockable, with the front grill able to be flipped down for easy access and loading. The vehicle requires only 3 wheels to drive with the second wheel at the front being able to be used as a spare. The body panels are made from interchangeable recyclable thermoplastic, with most dents being able to spring back. The fuel tank is large and is detachable with a handle to allow it to be transported for refueling. Further development includes a loading crane being incorporated into the structure of the vehicle.

The success is due to the simple vehicle design with a futuristic touch that uses some traditional connections.

From his computer aided design files, (as shown here), a 1:10 scale model was fabricated for display in Detroit. This was produced by Arrk Silhouette at Calamvale, Queensland.

Using Rhinoceros 3D modelling software, Magnus created his digital model of his rural Chinese Vehicle in eight weeks. Every part was digitally created to be exported as a stereolithic file to be manufactured.
Nonetheless, Roz said the competition was Northern Hemisphere at $388 a pair. ‘People always think I’m staying at them, but really I’m just looking at their glasses,’ she said.

Her design partner Francesca, said the win was ‘a little out of left field’ for an interior designer but she was keen to pursue any opportunities it opened up. She said the original design of the sunglasses was slightly more unconventional than the end product.

After hearing people complain about nose pieces on sunglasses, the creative directors designed a pair which wrapped back around the head instead of joining at the nose. ‘Apart from the fact they’ve added a nose-piece, it’s very, very true to the original,’ Francesca said.

Ustick & Mao

Renowned Italian design house Alessi has also taken Alexander’s designs on board including bowls and chopsticks for the less dexterous among us called Ustick. Two other Italian companies, Magis and Fratelli Guzzini, have also commissioned some of Alexander’s designs.

His remarkable talent has been recognised with numerous design awards including the Design Institute of Australia’s prize for Best Design Student for his innovative and experimental use of material. Months after graduating Alexander was one of 24 Australian designers selected by a discerning group of Italian designers and journalists to exhibit at Milan’s prestigious Salone Satellite, the annual showcase for new design talent.

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Sunglasses Design

Francesca Chipp and Roz Babridge were delighted with the sunglasses they designed for the Opus International Design Awards contest. The Brisbane duo exploited some shady new connections to launch an international career in sunglasses design. They collaborated on a pair of futuristic sunglasses which were chosen for manufacture from more than 1500 entries submitted.

Only five entries in the Opus Design Awards were picked up for commercial production by the contest’s Japanese Awards were picked up for commercial production by the contest’s Japanese

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