



The power of Additive Manufacturing in the hands of artists: Public works to small batch production

The importance of, and connections between, the arts and Additive Manufacturing can be unclear. For AM, the greatest challenge is managing and capitalising upon the growing awareness of its role in industry and its impact on society and daily life. Major public works, like the MX3D bridge in Amsterdam, do more to shift public perception of the possibilities AM offers, than any number of industrial successes. Elizabeth Henry, principal and founder of Henry General Strategies, explores the relationship between the world of the arts and the state of the AM industry, and ponders what benefits can be found when the two are brought together.

Art and design – and the artistic approach to materials – possess the unique ability to both propel Additive Manufacturing into new areas, and to provide an eye catching, even awe-inspiring, demonstration of the applications of this technology. Additive Manufacturing is increasingly moving into the public eye, and high-profile public art projects bring wonderful attention to the industry by presenting new possibilities for the materials and processes involved, as well as by capturing the imagination of those within and outside our industry.

I was drawn to this industry initially through my arts background, which led quickly to a fascination with new materials and technology. Additive Manufacturing offers the impetus for large-scale innovation, where wholly new processes are developed, and existing paradigms are expanded and modified. New technologies are always disruptive, and manufacturing, as a huge and mature industry, has some segments that have stagnated, while others have just begun to take shape.

The key tenets of AM are still being defined and, while some attempts will overreach and be discarded, others will certainly become ubiquitous, and in a decade's time will seem an ever present part of the whole. Testing these possibilities from as many different angles – and with as many different ideologies as feasible – empowers

the market to both innovate and edit itself to produce a stronger, more efficient process.

Traditional paths of progress are certainly present in current Additive Manufacturing. That is to say that those who have been in manufacturing for some time, both persons and companies, look to the new materials and processes offered



Fig. 1 The MX3D Bridge designed by Joris Laarman Lab, seen from above in MX3D's workshop during production (Courtesy Joris Laarman Lab)