

The New World of 3D Art Built through Digital Language

- The Artwork of Jung, Ryungjae

As diverse programs founded on digital technology is developed and distributed, the utilization of them is also rising in the art world. Among them, the production of objects by way of digital printing is complementing or substituting the manual technology production methods of before and is becoming a new method not only for reproducing design products but also for single article production of artwork or craft work. In the field of craft, where the application of manual skills was an absolute condition in its production process, the appearance of digital printing transcends being an extension of processing method and also demands to newly establish the identity of the field. This is because by complementing the limits of traditional handwork in the making of a relatively subtle and detailed object, it not only elevates the productivity and economical efficiency but also has the effect of creating new sculptural languages that could not be pursued before.

Artist Jung, Ryungjae who majored in computers in undergraduate school and metalwork and jewellery in graduate school, is creating craft work shaped by 3D design and digital printing. The jewellery which he has been intensively making recently offers a new level of form that would be difficult to realize through existing handwork and is being greatly noticed not only in Korea but also abroad. He received top prize in the Italian international jewellery competition 'Gioielli in Fermento' in 2018 and his work has been among the works in various major exhibitions and international fairs in Europe, which proves of the creativity of his recent work and the sensation that it is.

The technology that Jung uses is 'SLS printing', which takes thermoplastic resin in the form of powder and melts it with a laser beam to create a particular cross section and a three-dimensional product is born through the stacking of these sections. A separate support is unnecessary since they're formed directly from a powder and due to this one can attempt to make a much more diverse range of shapes. In addition, the materials used in this case is polyamide, which is a type of nylon, that has the benefits of being lightweight and holds strong against wear, has an elastic texture, and can express a wide variety of primary colors, allowing it to be an ideal material for jewellery.

In his early 'stool series' the body of his works were formed with tessellation patterns, which bore various geometric shapes as unit elements and were structurally combined with iron, brass, and wood. They are strongly of an experimental nature which explores the size, weight, and production time of molding through printing. His jewellery series, which were founded on the experience of such furniture-making, have a more polished quality and can be noted as a developmental leap toward a new level on all aspects of form and visual image. The unit elemental chain structure is especially original. The replication of circles, ovals, and square chain links and their evenly proportioned connection has a delicate quality that is inevitably limited with the use of manual work and thus provides justification in the use of digital printing. The shape of

the cascading chains is quite reminiscent of waterfalls, providing a visual brilliance, and should the polyamide chain bunches, which have an elastic quality, be worn, they would react sensitively to the constant physical movement and gravitational change and give a rhythmical effect. It may be stated that this is a point where the original wearability and ornamentality of jewellery are newly manifested through new technical and material dimensions.

The reason the recent work of Jung, Ryungjae, who is pioneering a new sculptural realm by researching digital printing, is grabbing much attention is relatively clear. In the field of jewellery, this technique, which has been mainly enforced for industrial or economical reasons, he is showing the possibility that this technique may also be a valid method for the individual work of studio crafts people, and through his latest series he is particularly showing a new dimension of shape and structure and creating visual images through them which would be unable to be realized with manual methods.

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