

Taiwanese swordmaker rekindles a legacy

Drawing inspiration from martial arts novels and mysticism

By **MATHEW ROBERTSON**
Epoch Times Staff

TAIPEI, Taiwan—While Chen Shih-Tsung sits on the couch of his apartment in the south of Taipei, tens of thousands of dollars of high-alloy steel sit on the wooden racks behind him, each one his own creation. He's the only person on the planet who makes these swords.

Chen is famous in the Chinese-speaking martial arts world. Growing up on martial arts novels, the Chinese equivalent of knight errantry, he slowly developed the wish to become a real-live sword maker. It took eight years and an enormous sum of money for Chen to realize his dream. He is the first person in modern times to recreate the kind of swords that are thought to have been used in ancient China. He is now passing the art to his sons.

At over 60 years old, tall, lanky, and animated, Chen sits on the edge of his couch, gesticulating and explaining his life spent pursuing the legends passed down through martial arts novels.

A mystical search

Chen spent long years working at a used car dealership, quietly amassing a fortune. At the same time he was reading voraciously and travelling extensively in search of the swordsmith's tradition. Legends speak of buried manuals detailing the construction of infallible sacred swords. Travelling throughout Taiwan and then China, he found little; the communists burned many of the books documenting such traditions during the Cultural Revolution. Nevertheless, he learned much, and as the years went by, he slowly began experimenting with sword-making himself.

Listening to Chen's story is like entering one of the martial novels he used to read. At some point during his travels he discovered that ancient swords were all smelted from meteorites—doing so now is impossible, since not enough fall to the earth now and modern man doesn't know how the ancients turned them into swords. He also says the swords he makes are imbued with special powers, and that he was first taught how to make them from celestial beings who visited him in his dreams. The

first entry in his book reads, "Words from the Purple Hermit of Hao Yuan Celestial School." The Purple Hermit regards the process of casting swords as one that can "startle the universe and move the gods." According to the Hermit only masters can unlock the magic powers hidden within them.

Before he succeeded with his first sword, Chen had an extremely vivid dream. Lights, deities, and celestial beings unfolded before his eyes in a display of brilliance. They communicated with him wordlessly, showing him how to make the swords. That wasn't the last vision he would have. According to Chen, deities have appeared by his side and given him instruction while in his workshop. He is reluctant to describe the scenes further. "Most modern people won't believe it," he says.

Unlike the swordsmiths of feudal China, Chen's output is considerable. He'll usually make ten swords at one time; while one is cooling he'll move to the next. When the steel of one blade gets too hot from the grinding wheel, he'll move on to the next blade.

It takes a special combination of high-quality steel for Chen to make his swords. They need to be extremely strong—at least 58, but up to 65 on the Rockwell Hard Scale. The Rockwell Hard Scale, developed in the United States in the early 20th century, is a common way of measuring the hardness of metals. A regular chisel or axe may be between 40 to 45 on the scale. This gives an idea of how hard Chen's swords are. They can split rocks in half.

The prohibitive cost of raw materials and producing the bars are some of the factors that make Chen the only caster of such swords. Other swordsmiths may make their works by manually heating materials and then hammering them into shape, either by hand or with the help of a machine. Swords made through this method are no match for what Chen produces.

It took Chen eight years to master the formula for his swords, and he hasn't modified it since. The sword needs to be both extremely strong and highly flexible (during the interview Chen pulled a sword from the rack and flexed it past 60°). Those that can be manually heated in open



Chen demonstrates how he grinds the steel bars into swords in his workshop. It is a long and arduous process. The slightest of errors can ruin the blade, which would otherwise fetch thousands of dollars. MATHEW ROBERTSON/THE EPOCH TIMES

flame and then hammered into shape aren't as strong as Chen's, forged as they are in the high-tech furnace of a modern steel factory.

Internal landscape

In making the swords, one's heart has to be incredibly calm, explained Chen. He sits in meditation for an hour before starting a grinding session. Casting swords of this kind has an irreplaceable human and spiritual element. One of the most labour-intensive steps in the process is grinding the blades with the help of a spinning grinder.

The grinding is all done at his shack in the countryside. Like an artist running on pure inspiration, he'll work for 20 hours straight. At that point everything relies on "hand feeling," something which can only be achieved through experience.

The entire process also needs to be completed at one time. Once the feeling is lost, the craftsman will never be able to get it back.

Grinding the steel bars into swords requires incredible precision. If the spine isn't exactly in the centre, or not exactly straight, if one of the edges is cut too deeply, the work is ruined. Heat can also imperil the blade.

Grinding a piece of metal on a spinning stone makes it very hot, and heat causes steel to expand; if the bar expands too much it will deform and be useless. The human element is essential here too, because there's no formula for dealing with thermal expansion in sword making. It relies on skill and experience that takes years to develop.

Once a sword is ground, polished, and given a handle and scabbard,

another process begins. This is what transforms a valuable sword into an invaluable one.

Each day the swordsmith needs to rub the sword with a cloth. This generates heat which causes the molecular structure of the steel to change. After two to three years of wiping every day the structure of the steel becomes stable. Blue rays start to deflect off the surface. At that time, the sword will never rust again, and further maintenance is no longer needed.

The rubbing works due to a simple chemical principle. "Iron and steel materials rust when they come into contact with the air because the air contains moisture," Chen explains. "The moisture in the air is absorbed by the metal through pores and then combined with metal crystal, resulting in a chemical change that causes oxidation and rust. To put it another way, iron and steel materials won't rust if they don't have pores."

The only way to get rid of the pores is to rub the steel until it gets hot, forcing the slight amount of aluminum in it to melt. Since aluminum has a low melting point, it will come to the surface and melt, blocking the pores. It takes years to fully achieve this.

Chen is in the process of teaching his sons how to grind swords, and it is on their shoulders to carry on the tradition.

The tradition of sword casting is enormously significant to Chen. "The value of a masterpiece sword can never be calculated in money terms," he explains. "It is an invaluable treasure which ought to be an heirloom for future generations to admire and cherish."



Chen Shih-Tsung, over 60 years old, explains the chemical reactions crucial to successful swordmaking. MATHEW ROBERTSON/THE EPOCH TIMES

A sumptuous repast: Dutch Masters at the Vancouver Art Gallery

By **CHRISTINA FERRERO**

For the next four months at the Vancouver Art Gallery, Vancouverites will have the unique privilege of viewing works of the Dutch Masters—paintings, drawings, etchings, and decorative arts from the "Golden Age" of the Netherlands.

The works come from Holland's Rijksmuseum, and members of the Dutch Royal Family were guests of honour at the Dutch Master's Ball, a gala fundraising event that marked the opening of the remarkable exhibit on May 9.

In the 17th century, the emerging Dutch Republic saw the establishment of a wealthy merchant class, increased trade, and a blossoming of art that produced unquestionably great painters such as Rembrandt van Rijn, Frans Hal, Johannes Vermeer, Albert Cuyp, and Pieter de Hooch.

Indeed, the work of Vermeer has not been shown in Canada since the 1950s, and original paintings by Rembrandt are seldom available to the public. The exhibit is thus a rare and wonderful opportunity for art-lovers to acquaint themselves with this spectacular body of work.

The pieces in the exhibit can be appreciated not only individually but in their

inter-connectedness, and the curators have done an excellent job of pairing objects referenced in the paintings.

The well-researched captions that accompany the paintings and art objects are clearly addressing the individual creators, at the same time explaining the way in which they inter-relate: master and student, father

and son, husband and wife, friend and friend. It is how we come to understand the "art scene" of 17th century Holland.

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Three films are screened, dealing with the quality of Dutch light, the renovation of Rembrandt's family home (now a museum), and the artist Vermeer. The gallery has also set up a "camera obscura," complete with a darkened room in which we see a still life, reminiscent of the highly symbolic and moralizing pictorial references of the times. A skull, a crystal ball, a quail and quail's eggs, roses, pomegranates and grapes are laid out in vivo and reflected through a lens that shows the reversed and visibly altered scene.

While it is impossible to cover every aspect of the exhibit here, the main areas are drawings, etchings and watercolors; oil paintings on canvas, copper plate and board; and the decorative arts—faïence, tapestries, glass, and silver. Most of the pieces in the latter category are marked "artist unknown," with the exception of some silver pieces, one porcelain painter and one glass artist, which were uncommonly good.

The work of delft pottery painter Frederick van Frytom (1632-1702) is a fusion of Italian and Dutch tech-



From a commissioned "tulip book" by Jacob Marrel (1614-1681), this illustration shows four tulips about to reach full bloom, caressed by the presence of small insects. VANCOUVER ART GALLERY AND RIJKSMEUSEM MUSEUM

niques in pottery glaze. It was included as a solitary plate (circa 1680), painted in the center and framed by an unadorned white rim. The painting shows two figures, one on horseback, crossing a bridge bordered by trees with a Church tower in the village as background. Although these plates were often displayed as decorative pieces in the home, it must have been uniquely gratifying to eat

out of such a dish.

Another fabulous piece in the "low art" category is a silk tapestry whose four borders represent the four elements. Fire is depicted by two men welding a hammer and an anvil as they weld metal, out of which shoots flames. Air is depicted as two children playing with kites and blowing bubbles, as well as birds in flight and a windmill.

The sea is present in the border, alongside two men fishing near water-lilies against a background of naval vessels. Earth is seen in the ever-moralizing perspective of the times, an hourglass atop a skull, beside which a figure digs a grave. The middle space is a free-fall of floating blossoms. Exquisite.

The most delightful discovery for me were the small works on paper—the architectural drawings, the etchings and delicate watercolors, particularly the botanical ones, such as the simple, understated beauty of a single illustration from a commissioned "tulip book" by Jacob Marrel (1614-1681).

The illustration shows four tulips about to reach full bloom, caressed by the presence of small insects: a bee, a beetle, a ladybug. We understand right away that this is an instant in time. They will not be there for long, so beauty, movement and impermanence are implied in this

small artwork that moves the human heart, without artifice or moralizing.

Similarly, two etchings depict the City of Amsterdam during and after two great fires. Jan van de Hayden (1637-1712), dubbed "the Leonardo Da Vinci of the Netherlands," became fascinated with fire and firefighting, to the point of re-designing equipment and fire-hoses.

His engineering efforts were no less important than his work on paper, as the pieces attest to great technique and a distinct style. In particular, he claims in his journal that "Fire in Amsterdam, July 27, 1674," was drawn during the fire itself. He said it is "depicted from life," and one can almost smell the smoke and feel the heat of the flames. The chiaroscuro effects—the black silhouettes of the burning bones of the buildings—are spectacular.

Pieter Jansz Saenredam (1597-1665) made accurate pen and brown ink, and brush and grey ink drawings on paper of buildings about to be demolished (or designed but not yet built), to keep up with the changing skyline. A good example is "Hartogenbosch Town Hall," circa 1644.

Next week, I will give you a taste of the paintings this period is internationally renowned for, mainly oil paintings executed on stretched canvas, board, or copper plate. Thematically and stylistically, they can be grouped as portraits, landscapes, still lifes (including tableaux and florals) and naval or marine paintings.

"Vermeer, Rembrandt and the Golden Age of Dutch Art: Masterpieces from the Rijksmuseum" will show at the Vancouver Art Gallery, 750 W Hornby, until September 13.