

MetalWork - An Ancient Art

Metalworkers range from ship builders to bridge construction workers and from fine jewellery makers to producers of intricate parts for electronics manufacturers. So how did it all begin? Metalwork is an ancient art - go to any historical museum and you will find countless metal objects, both functional and decorative, from hundreds, even thousands of years ago. Tools have always been needed for farming and warfare - the discovery of metals was a big step in making these more effective. And precious metals became popular materials to make finery and personal adornments. The precise date when metalworking became commonplace is unknown, but it is thought that as early as 6,000 BC copper smelting was a known process in what is now the Middle East. All metals, other than gold, are found in ores (metal bearing rocks) that require heat to extract the metal. Discovering and then refining this process was a big step. Gold is found in nature in nuggets and doesn't need to be liberated from ores. For that reason it is believed to be the first metal to be discovered. It is malleable and easy to work with, but too soft to produce useful tools. The first metals to be extracted from ores, using heat, were probably copper and tin. But copper is also relatively soft and was not effective for tools or weapons. That's when bronze was born - a mix (or "alloy") of copper and tin that is strong and can be made to have sharp, durable edges. This probably first occurred in what are now Iran and Iraq. Exactly the same processes were developed independently in Britain, China and Japan at various times, hence this broad period of history (from 4,000 BC to 700 BC) is known as the Bronze Age. Later came the Iron Age when iron started to be smelted from iron ore and was widely used for tools. This first began, again in the near Far East, in around 1200 BC, and much later in Europe in around 600BC. Bronze declined because copper and tin are more scarce than iron, but it was still made by some metalworkers as iron needs considerably more heat to be produced. Later carbon would be added to iron to produce steel. As metalworking developed, processes became more sophisticated and the objects produced became more refined and complex. At the same time the precious metals such as gold and silver were highly prized and their use for decorative pieces, finery and jewellery became greatly valued. Metalsmiths, or Smiths, had high social standing which may explain the prevalence of the name Smith in English and its equivalent elsewhere, for example Schmidt in German. Even now "smith" added to a word implies someone with great skill and expertise e.g. a "wordsmith" who is gifted at writing. Metalwork is now one of the broadest of industries. It is used by engineers to produce vast structures including bridges and buildings, by ship builders, tool makers, vehicle manufacturers, white good manufacturers and by electronics firms to produce minute microchips. It is often used by sculptors and artists for fabulously imaginative creations. And of course every jewellery shop is full of delicately crafted tokens of love made from precious metals. Metalwork is a trade involving all sorts of different training and experience depending on which field the metalworker is involved in. And it is vital to every economy in the world, spanning all cultures and civilisations. It has ancient roots and yet is still vital to every society in the world today. So next time you pick up your metal saucepan or drive over an iron suspension bridge in your metal car think back to around 6,000 BC when some bright spark first extracted copper from its ore...

About the Author

Expert metalworker India Cooper explores the ancient art of the metalworker. To find out more please visit <http://www.ratedpeople.com/find/metalworker>

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