# Studio Pottery:

## History of Pottery:

Pottery is the definition for any object made of fired clay. The types of pottery you are most likely to come across are earthenware, stoneware, porcelain, china or raku and these can all be found in an enormous variety of designs and styles. The art of making pots is thought to date back as far as 18,000 years ago[i], and because pottery is so durable we are still finding fragments of these early pots today. Pottery serves many functions and throughout history the majority of them have been essentially practical. However, the cultural methodology, design and decoration of these pieces has varied so much that it has become possible to correctly date and place many items just by looking at them.

Since the Industrial Revolution pottery has been just one of many items that we have been able to mass produce and it is now possible to buy pots of any size, shape or colour comparatively cheaply. Why then, do we still have studio made pottery? How do these items differ from their mass produced counter parts?

## Introduction to Studio Pottery:

Studio Pottery, as the name suggests, is made in a studio by a craftsman. Unlike the potters of the past, these people are not journeymen or industrial workers but ceramicists; people that bridge the gap between artist and craftsman and designer. Most of the pieces that they make are unique, some may be made as a run, and all involve a multi-step process of preparation.[ii]

Most ceramicists will work on a wheel, in a process called throwing,

Watching a ceramic artist is mesmerizing, as the wheel turns, a pot begins to emerge from the most delicate and sensuous touches of the artist, a slight pressure of a finger and lines and spirals begin to undulate across the pots surface.

As well as the shape of a piece, one of the most fundamental parts of ceramic works it the surface decoration.

The only distinction between Studio Pottery and what people think of as Art is that most pottery still retains at its core a practical function, despite the trend in Britain since the 1980's to move towards non-functional ceramics[iii]. Pottery is tactile, and for those who appreciate it, the very process of handling an object adds to the appreciation of it.

## Earthenware[iv]:

Earthenware is the most commonly found clay in nature and the first clay ever to be used to make pots, it comes in many colours dependant on the quantities of metal oxide present. This clay has a lower mechanical strength then other clays and pots are normally made thicker to compensate. They are fired at a much lower temperature then most other clays, so after the first firing the clay is still comparatively soft and may be cut with a knife. Another by consequence of this low temperature firing is that the pots do not undergo vitrification, or “melting”, as a result, when fully fired the pots will still be slightly porous and coarser then other ceramics. These pots are therefore often used for planters and flower pots. Earthenware pots are also commonly glazed to try and overcome their porosity.

## Stoneware[v]:

Stoneware pottery originated in China as early as 1400BC during the Shang Dynasty. It is a very popular clay among ceramic artists as it is so versatile. It is less course then earthenware and is fired at a higher temperature, this causes vitrification and results in pots that are much less porous. A glaze is not needed for the structural integrity of stoneware in most cases, but stoneware is receptive to a wide range of glazes and they are usually added for decorative effect. Stoneware lends itself especially to ash and salt glazes which are added to the kiln during later stages of firing to produce once-fired pieces, with no bisqueware intermediate.

## China[vi]:

China derives its name from the clay used to make it, which is called china clay and is rich in koalin. The South West and Cornwall are the only places in the UK that produces china clay because of specific characteristics provided by the large quantities of granite in the region. The most local quarry being on the south-west fringe of Dartmoor National Park. There are two types of chine, fine china and bone china. Fine china is very bright white and slightly softer then porcelain, it is also fired at lower temperatures. Bone china, as the name suggests, contains up to 30% bone as a fine ash, this gives bone china a softer, yellow colour then fine china.

## Porcelain[vii]:

Porcelain clay also contains a lot of china clay, but it is mixed with other fine particle clays which increase the plasticity. This mixture results in a dense, translucent white clay body known as porcelain. This can be skilfully manipulated into very thin and delicate pieces that are fired at high temperatures. Porcelain is known for its translucent, pure white colour and its hardness. This hardness can present a problem when glazing as the glaze can easily run. However, most glazes can still be used with porcelain ceramics.

## Slips[viii]:

A slip is essentially a suspension of clay particles in water. They can be used to attach things like handles to unfired, or greenware, pots. They can also be used decoratively by the addition of metal oxides. The slip may be applied by dipping the pot or paining the slip on. The resulting diversity of textures and colours that can be achieved is affirmation of the complexities of studio pottery.

## Glazes:

Most ceramic works have a glaze coating which serves the duel purpose of protecting the piece and making it water tight, as well as often being very beautiful.

A glaze it essentially a mixture of silica, metal oxide and aluminium oxide. When the glaze is applied to a pot and heated in a kiln the silica in the glaze melts and forms a glass coating over the pot, making it water tight. The presence of metal oxide is known as flux and lowers the melting point of the silica and aluminium oxide prevents the glaze from running too much. Into this basic mix colourants such as iron oxide and copper carbonate can be added to produce coloured glazes. However, The final colour of the glaze is determined by the amount of oxygen present in the kiln during firing.

Most ceramic artists develop their own glaze recipes as the exact ingredients and proportions needed to achieve a certain effect depend as much on the type of clay and kiln they use as it does on the ingredients of the glaze. Glaze making is therefore considered a great skill in it's own right.

## Shino Glaze[ix]:

Shino glaze originates from Japan. It is a thick, white glaze made almost completely from feldspar (minerals containing silica and alumina, $SiO_2$), with ash acting as a flux.

It is a notoriously difficult and unpredictable glaze to use, its colour is very effected by the underlining clay body and can range from soft pink to iron red or dark orange. Cracking and running of the glaze is also common, giving very distinctive crackle effects. Shine is the favoured glaze of the tea masters of Japan and can produce very striking results.

## Ash Glaze[x]:

Ash glaze is one of the oldest forms of glazing, it is thought to have originated in China during the Shang Dynasty, around 1500BC. The ash is mainly sourced from wood but some ceramic artists prefer to work with volcanic ash or ask made from paper, seaweed or straw. Still one of the favourite methods of glazing, ash glazing produces a highly polished, translucence glaze that highlights the underlining texture of the clay and is often using in conjunction with other glazes such a salt.

## Salt Glaze[xi]:

Salt glazing dates back to 15th century Germany and likely originated from using salt soaked wood to fire pots. These glazes are achieved by throwing salt into a kiln at high temperatures. The sodium vapour released by the salt adheres to the pots and acts as a flux, forming a translucent, dappled and very shiny glaze known as an orange peel effect. This form of glazing is also known as “vapour glazing”.

## Raku[xii]:

The term Raku (meaning ‘enjoyment’) originally came from Japan and is associated with the wares made for the Zen Buddhists tea ceremony. However in the West, especially in the last 20 years, it has become a generic term used by potters to describe smoke fired ceramic techniques. This is a very exciting process, which creates random cracking, reduction and smoking. The process of raku firing differs from other firing methods; the pots are removed from the kiln at their maximum temperature causing it to undergo thermal shock (rapid cooling). This can only be done with more porous clays as they act as a shock absorber. These glazes often fracture, known as crazing, which produces there very distinctive crackle effect which is often enhanced by smoking post firing. Due to the porosity of the clay used, these pots are not water tight and are usually decorative.

i http://www.sciencemag.org/news/2009/06/worlds-oldest-pottery

ii Bernard Leach; *A Potters Book,* Faber and Faber, 1940, ISBN: 978-0571109739

iii Emmanuel Cooper; *Ten Thousand Years of Pottery*, British Museum Press, 2000, ISBN: 0-7141-2701-9

iv www.claytimes.com/referenceguide/clay-basics.html

v http://www.visual-arts-cork.com/ceramics.htm

vi www.devon.gov.uk/text/mcs_chinaclayfactsheet.pdf

vii http://www.lagunaclay.com/classroom/guide.php

viii http://pottery.about.com/od/potterygloassary/g/slip.htm

ix http://www.pottery-magic.com/pottery/glazes/shino_glaze.htm

x http://pottery.about.com/od/diyglazes/tp/ashglaze.htm

xi http://robertcomptonpottery.com/Method-of-Salt-Glazing-Pottery.htm

xii http://robertcomptonpottery.com/Method%20of%20Raku-Firing-Pottery.htm