

Frequently Asked Questions about painting figure techniques

by the Andrea Miniatures Team

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2. INTRODUCTION

Generally known as military miniatures, or more recently historical miniatures, or just simply metal figures according to tradition, it remains true that small figures of one kind or another have fascinated man since antiquity as seen in examples dating back to pre-historic times.

In fact, the oldest known figures had a funerary purpose, and even among these a large number could be considered small works of art. However, even though many of these had votive origins, it is also clear that miniature soldiers or dolls were used for more practical purposes. It is precisely these soldiers that play a significant role in the history of miniature figures and, even if non-military characters can be dated as coming from the same period, there is no doubt these were a minority.

Military oriented figures made from all types of material have been discovered around the world. Among the oldest, and most famous, is a rudimentary mounted warrior dating back to 1000 BC that was discovered in Austria, a 35cm high bronze from ancient Greece, the multicolored wooden warriors found in Egyptian Pharaohs tombs, or the Roman terracotta figure fitted with articulated legs from I AD.

Romans must have been specially attracted to little soldiers -not surprising if one considers their warlike tendencies- as shown by the flat lead figures discovered in Spain, Germany, England, or even Abyssinia. These figures reveal a very high degree of detail and animation and, even if their exact purpose is unclear, it is very likely they were placed on sand platforms as a teaching aid for military tactics, very much like a primitive 'wargame'.

As the Middle Ages replaced the Roman Empire around 400 AD, the whole of Europe descended into a dark period where the Catholic Church remained the only civilizing force. Even though no artifacts have been discovered that can positively be identified as a military miniature emanating from the first centuries of the Middle Ages, neither can it be established that they did not exist.

Six centuries later, true miniatures made of tin, used by pilgrims and Crusaders alike as insignia or crests, developed as the first ancestors of today's commercial models. However, one of the oldest known miniatures, a medieval knight from the 14th century, appears to be more than a simple crest but rather a full model designed for play or ornamentation. It stands 6cm tall and probably represents the French saint Denis.

The militaristic society of the Middle Ages made possible the creation of a number of military figures. These evolved from flat models made of wood or bronze and used by royal offspring in miniature jousts.

It was during the Renaissance that the French developed the first prototypes closely resembling today's bulk soldiers. Miniatures such as these from the times of Henry IV can be seen in view at the museum in Cluny.

During this period, wealthy citizens commissioned the manufacture of exquisite pieces, made of precious metals and adorned with jewels, to be given as gifts and presentation objects. Miniature armies also appeared around this time, a privilege reserved for the upper classes until the end of the 17th century when mass production techniques opened a new chapter in the history of miniatures.

At the beginning of the 18th century, European royalty was still enamored with miniature soldiers. Later, in the early 19th century, Napoleon himself commissioned the services of the renowned goldsmith, J.B. Odier, in 1812 to produce a set of 117 standing gold pieces as a gift from the Emperor to his son, the young King of Rome. The set was delivered that same year.

It was in Germany, around the beginning of the 18th century that the first attempts to market mass-produced miniature soldiers was undertaken. The medieval Lead Workers Guilds of Nürnberg and Hapsburg situated close to the tin mines and, of course, the brilliant military achievements of Frederick the Great (Der Alte Fritz) spurred on the high level of figure production unknown until then.

It is generally accepted that Andreas Hilpert (1720-1822) of Nürnberg is the greatest name in the history of German flat figures. Hilpert and his descendants produced a wide range of famous contemporary figures as well as tradesmen, hunters, gypsies, farm scenes, herders, and numerous other civil themes before creating a series on military leaders where a likeness of Frederick the Great stands out as an unequalled example of the engravers art.

Other manufacturers soon followed Hilpert from Nürnberg, including Besold, Haffner, Stahl Gottschalk, and Amon, so that, by 1790, eight foundries were operating around the Furth area.

By the beginning of the 19th century, new foundries had been established in Berlin, Luneberg, and Württemberg. Figures from these foundries were cast in pure tin or amalgams with a high tin content. The vast majority of these flat figures were produced from intricate artistic designs carefully engraved onto two part molds that could be stored indefinitely under warm, dry conditions. In time, Hilpert's supremacy gave way to Ernst Heinrichsen, the most prolific flat and demi-flat figure producer of the era. The Heinrichsen Company's vast catalogue encompasses items all the way to the final pieces by Johannes Heinrichsen (1914-1945) of WWII figures.

As can be seen, the close of the 18th century saw the birth of a new kind of mass-produced figure aimed at a wider segment of the public than in previous centuries. By this time, established famous manufacturers could be found in Sweden (1760); Strasburg, with a regular industry prior to 1790 that would last well into the 1830s; Switzerland with a very active industry; Italy, where figures had been produced since the start of the 1770s; Denmark with activity registered around Copenhagen; Portugal, where flat figures were being made by the Frenchman, Simon Rouille; and Spain, where Carlos Ortelly, an Italian from Como, established a shop in Barcelona and later became the country's main producer.

The flat tin figure is, historically, a two-dimensional German creation. The hybrid variety, usually known as 'demi-flat', represents the interim shape towards the full figure and which became more popular in Germany than in any other European country. However, to discover the first full, three-dimensional figure, it is to France we must turn.

At the time when tin or lead figure production expanded throughout Europe, a French company, Lucotte, started operating around 1789. Sadly, no known model from this time has survived. Those that have, figures stamped with the famous Napoleonic Imperial bee flanked by the initials L and C, date from around 1850. Little is known about Lucotte, either the man or the company; when and where they operated is still shrouded in mystery. However, what is known is that, by the time of the French Revolution, someone named Lucotte produced lead soldiers. Through him, the first mass-produced and commercialized 3-dimensional figures appeared on the market. Manufacturing these figures required more metal than flat or demi-flat ones and soon new and cheaper lead-based alloys were introduced. These alloys, usually with a high lead and antimony content, had the advantage of being pliable which allowed simple changes in a figure's pose. More important, the use of lead made them affordable. It appears that by the beginning of the 19th century Lucotte had been absorbed by CB, Cuperly, Blondel, and Gerbau, who, around 1838, also bought out its fellow French company of Mignot. This latter still exists today as the world's oldest figure manufacturer with production spanning over 200 years.

Apprehensive about the proportion of the market seized by their French rival, German

manufacturers also began to produce 3-dimensional figures in an attempt to regain lost ground. Mignot's foremost competitor was Haffner who, between 1867-1886, produced excellent models comparable with those made by their French colleagues. By then German models were being exported by the thousands. In the forefront of the German manufacturers was George Heyde of Dresden, whose first known work dates from 1870 and who continued in production for 70 years until his factory, and city, was destroyed in the famous Allied air raids of 1945.

Just as the French largely succumbed to tough competition from German manufacturers, these in turn found it in England with the arrival of William Britain miniatures in 1893. He had developed a new and revolutionary foundry system where the molten alloy was poured into spinning molds forcing it inside the mold cavities and out through a small hole at the figure's head. This process turned out perfect hollow cast figures. This new system was simpler and more economical than any other one. Thanks to this technique, that the company acquired both prestige and the eminent position in the world.

In 1967, Britains ceased production of lead soldiers. This was due in part as a result of health claims against this metal being used in toys. Instead, Britain's turned to the new medium of plastic.

Without doubt, the pre-eminent importance of Britains in the history of miniatures remains unchallenged as the firm responsible for the wide diffusion of miniature soldiers in the 20th century by making them affordable to all. It is in the second half of the 20th century that a military miniature surge made possible the establishment of today's manufacturers whose pieces can be found displayed in the cabinets of enthusiasts around the world and it is the painting techniques for these figures that we will learn next.

Lee Preston

3. HOW TO USE THIS BOOK

WHAT IS FAQ?

For many years, military miniature figure painters have greatly increased their knowledge thanks to the readily available magazines and publications, especially in Europe and the US, that have revealed different techniques and their evolution over time.

Articles depicting the way an accomplished painter completed one or other miniature are a great motivation in establishing our own goals and to positively influence our work. However, until now, there hasn't been a single manual that the miniature enthusiast could turn to that clearly and concisely showed common basic techniques on a step-by-step basis and even some tricks to increase his artistic skills.

FAQ is the end result of a lot of hard work by a professional team tasked with the clear objective of filling this void. It brings together the answers to a mass of questions from the 'beginner' painter while, at the same, alleviates boredom for the proficient one seeking new materials without having to trawl through a mass of different articles to find the illusive answer.

BOOK STRUCTURE. INDEX

This book is divided into seven sections, beginning with a subject index where the reader can easily find the right questions according to chapters identified by a colors code that helps as a further reference throughout the book. In addition, purely technical sections are subdivided into specific subjects thus making any search much simpler.

INTRODUCTORY SECTIONS

Second and third parts (the one you are reading at this moment) are introductions and there is no need for further comment at this point.

MATERIALS AND TECHNIQUES

The fourth part is the most comprehensive as it encompasses the most common painting techniques and, as stated earlier, has been designed for enthusiasts at every proficiency level. Questions have been arranged, whenever possible, logically so that they follow from the beginning to the completion of a figure. They begin with an adequate working space, without missing those important details that, if not followed, are the cause of a lot of trouble like a proper body position and light source location over the workbench.

After making a thorough study of the basic materials required to work within a minimum quality standard, the reader will discover the preliminary steps required before painting a figure, such as part preparation and priming. Next, once inside a technique, you will find three kinds of answers for specific questions. Some of these will be nothing more than a few lines of text, some will be images requiring no text at all, while more complex ones will require both text and images.

ICONS

In some cases, even though we have tried to make both text and images as clear as possible, some pictures show different icons that help simplify the work by further clearing up details and setting apart the different techniques employed in each case. These icons appear at the end of this chapter along with a brief description of each.

COLORS

Regarding colors used for each example, you will notice that in all but a few exceptions,

no color chart is available. This is because all the techniques described are mere examples and not a full painting process like those described in magazines. The reader should apply the techniques learned from the answers and adapt them to his own miniature. Far from being helpful, providing explicit color charts would lead to confusion. For example, imagine painting a leather garment. With such a wide variety of colors and effects possible it is the painter himself who must choose the best combination that suits his technique, taste, or his imagination in the case of fantasy figures. On the other hand, whenever a question deals with a technique to be used for a specific paint type such as like oils, no paint specification is given unless used within a mixed technique where each and every step is mentioned.

COMPLETED WORK. CONSERVATION

The fifth section shows how to maintain the completed miniatures in good condition. It is not uncommon to look inside a cabinet and find wonderful examples of art in an dilapidated condition due to age or a miniature's worst enemy: dust.

CONTESTS

The sixth section takes us to different international contests and provides a number of hints revealing how to get your work noticed by the judges. Sometimes, even the choice of a good base can mean the difference between going home with an award tucked under your arm or with your hands in your pockets.

GALLERY





















Finally, the gallery section shows the work of some of today's most accomplished artists. All pieces in this section have been awarded gold medals at such important competitions as Euro-Militaire (UK), World Expo Boston (USA), Leon Rampante (Spain), or Golden Demon (France), the latter dedicated exclusively to fantasy figures.

WHAT KIND OF MINIATURE SHOULD I CHOOSE?

This is the great question! However, there is no answer as historical miniatures encompass every period in the history of mankind. Modelers today are fortunate, they can choose freely among many figures from the period of prehistory right up to current events, including civilian or science fiction characters. All it requires is the establishment of whether one wants to depict history as accurately as possible or to allow ones imagination to wander. In the case of the former, one needs to accept the use of a limited number of colors in order to paint a specific uniform and also carry out a lot of research into aspects of garment wear and tear where the chosen figure is to be portrayed in action. Obviously, it is quite different painting a private in the Africa Korps than, say, a Napoleonic grenadier during the Russian retreat. It is essential to know at least a little bit about the history of the miniature. This is, in itself, another interesting area of this wonderful hobby that some very privileged people have turned into a way of life.

On the other hand, if one chooses to paint figures without the restrictions imposed by uniform standards, then a fantasy figure offers the advantage of experimenting with effects never possible within the realm of the historical miniature. In conclusion, this is a difficult question with as many answers as there are painters in the world today, although it all comes down to that same passion uniting us all. We would be more than satisfied if this book helps to bear more fruit from this passion.

ICON REFERENCE

 Base color	 Dry brush	 Inks	 Oil
 Highlights or increases	 Outlining	 Varnish	 Pigment
 Shadows or decreases	 Tint or filter	 Priming	 Final touches
 Mid tones	 Blend	 Acrylic	 Airbrush
 Wash	 Water	 Enamel	 Brush <small>Only in mixed techniques</small>

PAINTS

AC	= Andrea Color
ACS1	= Andrea Color Flesh Paint Set
CI	= Citadel
GS	= Gunze Sangyo
HM	= Humbrol
LC	= Life Color
MC	= Model Color
WN	= Winsor & Newton

4. CONTENTS (TECHNICAL GUIDE)

4.1. WORKPLACE

LIGHTING. WORK SYSTEM

1. How should the work area look?

It is vitally important that the work area is comfortable, clean, well lit and ventilated. It doesn't need to be enormous, just enough to fulfill the painter's needs when working. The workbench should always be kept clean and unobstructed as much as possible as, for example, it is very annoying to have to search for a paint bottle among a mass of similar ones. The neat placement of paints and tools will help simplify the task. A clean area is essential in order to avoid contaminants like metal filings or even dust ruining the paint mixtures.

Adequate ventilation is essential, especially when using oil paints. Fumes from thinners and solvents will quickly fill a room making any kind of work both very unpleasant and dangerous while stopping other people entering to view the work in progress. Just as important is good lighting. It is this that creates the right environment for painting miniatures.

2. What type of light should I use?

The best light for painting miniatures is, without doubt, a blue tungsten one. This type of bulb can be found in most electrical supply shops or hardware stores.

Natural light is too harsh on the eyes and changes significantly as the day progresses. On the other hand, neon light is fine for painting will give eye fatigue after using it for a while. Low power white light is also available and very convenient especially during a hot summer because of its low heat transfer that, in turn, stops the paint drying too quickly.

3. How should my work light be positioned?

For the most part, it is best to work with the light positioned on our upper left side (upper right if left handed) so our hand won't cast a shadow over our figure. One can also work with an overhead light if one chooses that particular scheme (zenithal light) or even two lamps for more intense lighting. In reality, it all comes down to the lighting scheme you prefer.

4. What's the correct posture when seated at my workbench?

It is important to keep your back straight at all times to prevent back pain and further complications.

5. Which is the right way to work on miniatures?

Besides maintaining a correct posture, the workbench must be neat, clean and organized.

It is not a good idea to force oneself to work on a miniature or to establish a deadline to finish it. It is a wise man that puts aside his work at the first signs of fatigue.

4.2. TOOLS AND MATERIALS

1. What tools and materials are necessary?

The process of painting miniatures can be broken down into three phases. The first includes all the required steps before painting begins, like preparing the individual parts and assembly. For this one needs tools like knives, files, different grades of sandpaper for remove mold seams and flash. In addition, one requires modeling putty, sculpting tools and fiber brushes for applying, covering, and shaping the small imperfections between joints and also a suitable adhesive for the metal parts.

For the second phase, the actual painting, besides the obvious brushes and appropriate colors, one requires a suitable primer to prime the surface using either a brush, airbrush, or aerosol can. It is very important that all materials used are of the highest quality.

Finally, if it is decided to position the figure on a scenic base, different landscape essentials will be required such as artificial snow, moss, small branches, artificial grass, and, of course, a good base.

2. What kind of files will be required?

Before any paint is applied to a figure, the mold lines must be given a thorough cleaning. For this there are different shaped files: round, flat, triangular, etc. The best solution is to buy a complete set that allows the tackling of every shape that might be found on a figure. The most used ones are the round and half-round files.

3. What grades of sandpaper are best?

Sandpaper is superb for cleaning file work and rendering a fine surface finish. It is also excellent for polishing modeling putty applications.

The best sandpaper is the fine grain one, leaving the coarse work for the files.

4. What kind of knives should I use?

While the small handled, or hobby knife appears to be useful only for cleaning excess material or cutting parts, in reality it ends up being used extensively. Along with paintbrushes, it becomes an essential tool for any job, be it part preparation, painting, or groundwork construction.

It is advisable to always have spare blades at hand. The most used blade shapes are the triangular and round.

5. Are side cutters necessary?

Side cutters are extremely practical for cutting and removing parts from sprues or gates. While a hobby knife can be used for this, side cutters are more effective for this kind of heavy cutting and a lot safer than knives.

6. Are tweezers indispensable?

Not really, but they do come in very handy when painting and gluing small parts.

7. When should you use a steel rule and calipers?

Steel rules are useful when cutting plastic sheet like Plasticard, paper flags, adhesive masking, decals, etc.

Calipers are used when combining several kits during a conversion project to insure uniformity of scale. They are not, however, indispensable.

8. How do I use a small drill and drill bits?

It is mainly used when parts of a miniature are too heavy because of their volume. By using a small drill, electric or manual, small holes can be made inside a joint and then a small pin placed inside to help support the extra weight after gluing.

The advantage of owning a modelers electric drill is that there are a large number of accessories available that help simplify other tasks, like polishing and sculpting.

9. What type of glue is best?

It is very useful to have two different types of glue to hand depending on the size of the parts in the figure. For small parts, a drop of Cyanoacrylate or CA glue (superglue) will suffice. For gluing larger parts it is best to use two-part epoxy glue. For base ornamentation, white PVA glue is the best solution.

10. Is it important to use modeling putty?

Yes. Because of the flexibility of the molds used for casting figures, some of the parts might not fit exactly. When this occurs, modeling paste is great for filling gaps between joints.

There are a number of different brands of modeling paste but they all share, more or less, the same properties including pliability and a decrease in drying time when heated. They can also be easily sanded, carved, and filed.

11. What kind of tools do I need for working with modeling putty?

It will suffice to have small sculpting spoons, an adequate number of files, fine grade sandpaper, and both fiber and synthetic brushes.

12. What kinds of brush are necessary for painting figures?

Paintbrushes can be made from Kolinski sable or synthetic fiber. The former are best for overall painting, while the latter are great for modeling and working with putty during figure preparation.

The most important consideration in regards to a paintbrush is to maintain a good point because it is this itself that determines the quality of the trace. Always thoroughly clean brushes after use with soap and water.

13. How many brushes do I need?

Although a wide assortment of paintbrushes is not necessary, it is very important that those you have are kept in good condition. Remember that synthetic fiber paintbrushes are good for modeling while Kolinski sable ones are for painting. When the point finally splits, it is then time to consign them to other techniques like dry brushing or mixing color on the palette.

14. How do I keep my paintbrushes in good shape?

Cleanliness is fundamental in maintaining and extending the life of a paintbrush. Always use the appropriate cleaner, depending on the type of paint used, and then pat them dry on a paper towel or rag until all traces of paint have been removed. If acrylics are being used, the best cleaning medium is soap and water.

15. What types of airbrush are available?

Today, there are several airbrush types on the market. The best one is the double-action type because it has many advantages over a single-action one. Low cost plastic airbrushes are not recommended.

16. What are the main differences among airbrushes?

The single-action airbrush only allows control over air pressure when the trigger is depressed, while the double-action model also allows control of the paint flow thus making it more suitable for precision work.

The double-action airbrush is available with suction cups located beneath the airbrush or with a self-contained paint reservoir, also known as a gravity-fed model. The former has a higher paint capacity but is uncomfortable to operate and clean.

17. What kind of airbrush should I use?

Without doubt, if possible, purchase a double-action model.

18. How do I use my airbrush?

Always maintain control over the air pressure and paint flow. The airbrush must be handled gently from a distance approximately 6 inches from the object. Start and finish outside the painting surface in order to achieve a uniform spray pattern.

It is always advisable to carry out test runs before painting the figure.

19. How do I clean my airbrush?

Once all the paint has been emptied from the reservoir, add a little thinner to soften any dry paint remaining inside. Press the trigger for a few seconds and then, without releasing the trigger, cover the nozzle with a piece of rag. This will create a reverse flow forcing any paint left inside the nozzle back to the reservoir. Repeat this procedure two or three times, then remove the needle and wipe it clean with thinner and paper towel.

To remove any hardened paint from the reservoir use an old brush dipped in thinner.

Following the manufacturer's dismantling instructions, remove any paint residue from the needle chamber and the Teflon washers. For this purpose, you can use small dental brushes available from drugstores.

20. What type of air compressor is right for miniatures?

There are different types of compressors. Regardless of brand or model, it is very important that your compressor has the power to supply a constant pressure in the range of 1.5 and 2 kg depending on the airbrush model.

21. Can I use air bottles for painting?

They are not recommended for painting miniatures because the air pressure tends to be irregular during use.

22. Which is the adequate working pressure for an airbrush?

Less than 1kg leaves a rough surface unless highly diluted paint is used for fine effects. As pressure approaches 2kg, the end result is finer and better atomized paint although the risk for high pressure spots also increases. These spots are known as 'spider legs'.

23. Are there any other materials available when airbrushing?

Yes. The most common ones are masking tapes made by Tamiya that allow painting over previously finished areas. Liquid masks are also used for this task but their use is limited to small areas or round shapes like the eyes, where masking tape would be very difficult to apply. Liquid masks should be applied precisely over those areas we do not wish to paint. Clear masking film, previously cut with a knife, steel rule, circle cutter, etc., can also be used as a flexible mask.

24. What kind of paint is used for painting miniatures?

The most common ones are oils, acrylics, and enamels.

Other coloring mediums also used are watercolors, different kinds of ink, etc.

25. What is an acrylic paint?

Acrylic paints are made by mixing pigments with resins and acrylic binders. One of primary properties of acrylic paint is their quick, almost instant drying time. They can be thinned with water making them a very convenient and economical choice.

26. Can acrylics be mixed with other paints?

Yes, with any water-based paint.

27. What are enamels?

Enamels are oil-based paints usually diluted with turpentine or brand specific thinners. Their drying time tends to be slow.

28. Can I mix enamels with other paints?

Yes, they can be mixed with oil paints and render some amazing results.

29. What are oil paints?

Oil paint is a mixture of finely ground pigments and linseed oil. It is incompatible with water and their drying time is the longest of any kind of paint.

30. Can I mix oils with other paints?

You can mix oils with enamels, flat varnishes, and suitable drying mediums to speed up their drying time.

31. What are liquid watercolors and inks?

Both are easily handled paints. Very luminous and transparent finishes can be achieved with their use although they lack the covering properties of acrylics.

32. Can I mix watercolors and inks with other paints?

Yes, with any water-based paint.

33. What are varnishes and matt mediums?

They are additives for certain types of paint, including oils or acrylics, to eliminate their gloss appearance.

34. What are pigments?

They are finely ground dry colors useful for creating effects like rust or dust over previously painted surfaces. They can be applied directly or mixed with other products like varnishes, oils, or acrylic paint.

35. What are airbrush paints?

They are specially formulated paints designed specifically for airbrush use, eliminating the need to dilute the paints with thinners.

36. What are solvents and thinners?

Solvents are substances that will break down paint or material and are used for cleaning tools or removing paint from surfaces to be repainted. Thinners reduce liquid concentration while maintaining its properties. They are used to dilute paint for use in the airbrush.

37. What is priming?

Priming is a special paint base applied to clean figures in order to create a bonding surface for further paint application.

4.3. BASIC CONCEPTS

COLOR THEORY

1. How are colors classified?

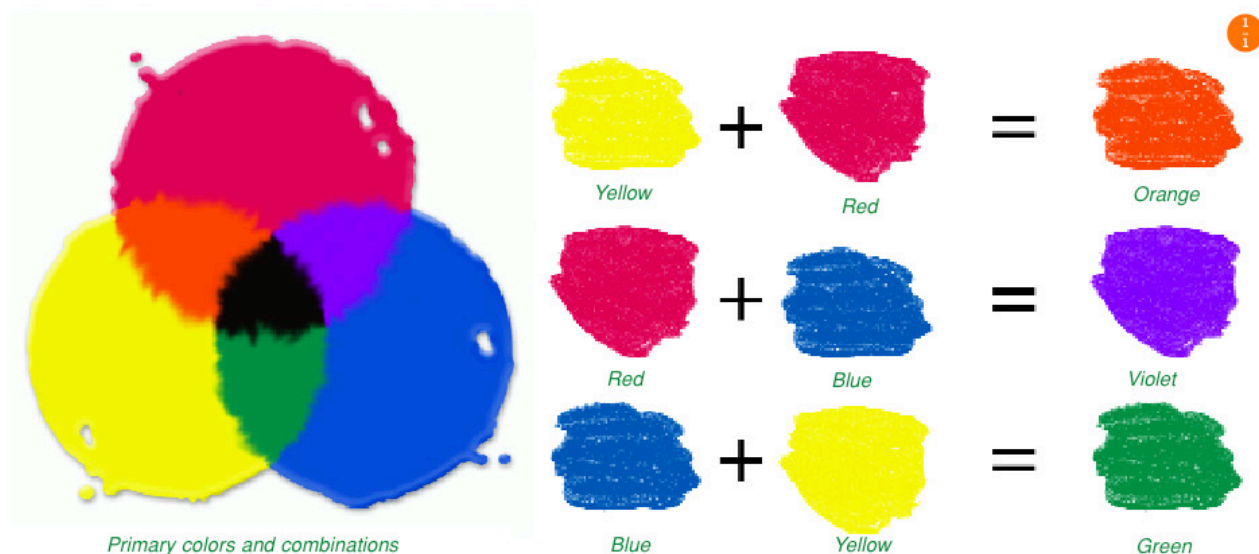
The study of color theory is paramount for any painter of miniatures or other kind of artistic expression, even at a basic level. In this way, it is possible to understand the behavior of colors within a given mixture.

Colors are generally classified according to their mixing properties, as follows:

1 - Primary colors: red, blue, and yellow. These are colors that cannot be made from mixing other colors. When all three are combined the result is a neutral brown gray.

2 - Secondary colors: orange, violet, and green. Although these can be obtained by mixing the primaries, in practice all good secondary colors are available from most manufacturers and are necessary for building an effective color palette.

3 -Tertiary colors: These are the result of mixing primary and secondary colors. In the same way as previously mentioned, brilliant tones can only be made through careful mixing because the use of straight primary colors tends to dull the color combinations.



2. What is a color wheel?

Color wheels are a somewhat old invention useful for developing color-mixing skills. Studying and practicing with it can attain excellent control over color mixing attained in a short period of time.

3. What is a warm color?

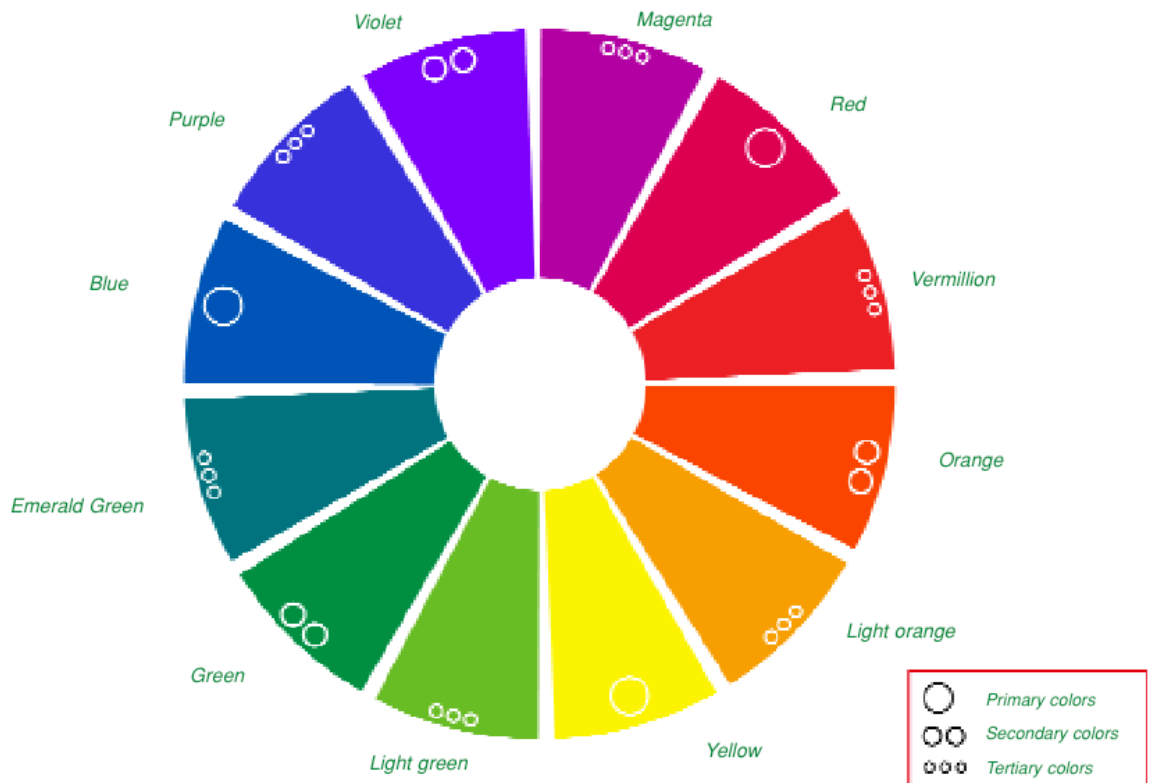
Warm colors are those related with the sun, desert, or fire like reds, yellows, oranges, etc.

4. What is a cool color?

Cool colors are those on the opposite side of the color wheel from where the warm ones are located. These are related to ice, water, snow, or winter skies: blues, greens, etc.

5. Which colors should I use on my miniature?

Color compositions that are based exclusively on warm or cool tones should be avoided. Color harmony is based on the correct balance between warm and cool colors.



BASIC TECHNIQUES

1. What is a base color?

It is the leading color that will remain constant throughout the final color of a figure. A base color is applied first in matt form and then highlighted, shadowed, and receive all kinds of effects as required.

2. What is a color increase?

To apply a color increase or highlight a figure is nothing more than applying lighter shades

of color anywhere light gathers over a figure in order to make it look more realistic. The easiest way to make the appropriate highlighting mixture is to add a lighter shade of the same base color to the initial mixture.

3. What is a color decrease?

Contrary to highlighting, color decrease or shadowing is done in the same way as highlighting, but using darker shades of the base color instead over the areas where light gathers the least.

4. What is a tint?

It is the application over a specific area of highly diluted paint in order to modify a surface color somewhat. It can be applied over highlights or shadows.

5. What is blending in regard to oil colors?

It is the application of two fresh oil colors where the transition between the two is softened by mixing, or blending them together.

6. What is a wash?

It is the application of highly diluted paint, allowing it to settle in crevices and deep areas of a figure. It is normally used for enhancing outlines.

7. What is dry brushing?

Opposite to a wash, dry brushing is using a tiny amount of undiluted paint that, using a flat brush, settles over the high areas of a figure. It is a very good technique for ground-work and other effects like dust or dirt.

4.4. USING DIFFERENT TYPES OF PAINT

ACRYLIC

1. How do I use acrylic paints?

First of all, vigorously shake the bottles for several seconds. Because of their composition, binders and pigments tend to separate when paint has been stored for any length of time. Next, mix the amount of paint you will be using with water. Then, unload any excess water from your brush by wiping it on a rag and continue by painting the required number of coats over the surface.

2. Which is the correct water paint ratio when using acrylics?

It depends on the effect you are trying to achieve. For more covering power, you will need less water and vice versa.

3. How do I apply a base color with acrylics?

By successively applying coats of paint until you reach a solid, uniform color. Never rush this operation. Each coat must be dry before the next one is applied. You should never paint over a wet surface or you will risk lifting the previous coat.

4. How do I apply highlights with acrylics?

Start by using a lighter shade of the base color and apply it over the most elevated areas of your figure or those required by your particular light scheme.

5. How do I apply shadows with acrylics?

Start by using a darker shade of the base color and apply it over those areas of the figure where light gathers the least.

6. How do I apply a tint with acrylics?

By using highly diluted colors, either light or dark ones, in order to soften the transition between areas of highlight and shadow.

7. How do I apply a wash with acrylics?

By using highly diluted paint, adding approximately 80% water, and allowing it to settle in the deep areas of your figure.

8. How do I dry brush with acrylics?

Start with undiluted paint on your brush; stroke it a few times over a paper towel to remove any excess. Apply it over the high areas of your figure where light gathers the most.

ENAMELS

1. How do I use enamels?

By mixing them with the appropriate thinner and applying them with short, loose brushstrokes. They work better when the paint is new and fresh.

2. Can I make enamels more transparent?

Yes. Depending on the amount of thinner used.

3. How do I highlight with enamels?

By applying a lighter shade over the base color and blending them together.

4. How do I apply shadows with enamels?

By applying a darker shade over the base color and blending them together.

5. How do I apply tints with enamels?

By mixing the paint with a large quantity of thinner until it becomes transparent, or with fresh paint by blending one color with another.

6. How do I dry brush with enamels?

Start with undiluted paint on your brush and stroke it a few times over a paper towel to remove any excess. Apply it over the high areas of your figure where light gathers the most.

OILS

1. How do I use oils?

There are two different methods of working with oils. The first one is to apply a first oil coat over an acrylic base and then blending it using a soft brush with any other color used. The second technique works through the successive application of highly diluted coats of paint, as with a tint, building up color until it reaches the desired tone.

The main drawback with this type of paint is its slow drying time. This is even true when using special drying agents. It has the longest drying time of any type of paint.

For the most part, oil paint dries with a gloss finish. This can be easily corrected by using matt varnish if required.

2. Can oil paint be thinned?

Yes, with thinner and cobalt dryer, the latter is also used to accelerate the drying time.

3. How do I highlight with oil paints?

By using the same procedure as with other paints although, in this case, blending is possible because of its slow drying time.

4. How do I shade with oils?

By using a darker shade of the base color.

5. How do I apply tints over fresh oil paint?

By using very fine coats of color over the base color and blending them together.

6. How do I apply tints over a dry base color?

Blending is not possible if the surface is already dry, so try using the same procedure as with the other paint types.

7. How do I blend oils?

Apply one coat of paint over another fresh one and then softly mix the edges together to soften the transition.

8. Can I use turpentine when painting with oils?

It is not recommended because some brands can be quite aggressive. It is better to use brand specific rectified petroleum thinners.

9. Can I dry brush with oils?

Yes, over a completely dry base.

10. What are drying accelerants and how do I use them?

These are products designed to speed up the drying time of oil paints such as cobalt dryer. They are mixed together with thinner and paint.

WATERCOLORS AND INKS

1. How do I use watercolors and inks?

Over a coat of acrylic in the form of tints and washes. Inks are also used for blending, modifying tones, or shading.

2. Can I mix watercolors and inks with other pigments?

Yes, as long as they are acrylic based.

3. Can I use water to thin watercolors and inks?

Yes, but keep in mind that the more water you add, the more transparent your paint coats will become.

PIGMENTS

1. When do I use pigments?

Pigments are very suitable for creating dust or dirty effects on a figure's clothing or for weathering groundwork.

AIRBRUSH PAINTING

1. How do I paint with the airbrush?

Start by mixing paint and thinner in the reservoir. Next, make several tests to ascertain that your mix ratio and air pressure are correct. Apply the paint continuously without stopping for too long at any point. It is best to apply several thin coats rather than a single thick one. Strive for a well-covered area and a smooth surface.

2. How do I achieve soft and transparent strokes?

With highly diluted paint and working from a short distance from the painting surface. The air valve must be completely depressed with the trigger slightly to the rear to release a very small amount of paint

3. What are the most common mistakes when airbrushing and how can I correct them?

Spattering and 'spider legs.

Spattering occurs when using the airbrush with a defective or dirty nozzle, incorrectly

thinned paint, or too low air pressure. Cleaning or replacing the nozzle, adding more thinners to the mixture, or increasing the air pressure, easily corrects these mistakes.

'Spider legs' are caused through a dirty or defective nozzle, too much thinner in your mixture, excessive air pressure, or spraying too close to the figure. To correct these problems, change or clean the nozzle, add more paint to the mixture, reduce the air pressure, and last, increase the working distance from the figure while maintaining control of the airbrush.

VARNISHES

1. When should I varnish my figure?

If your finish is too glossy try using matt varnish.

Using satin or gloss varnish will allow you to simulate effects like moisture or very smooth textures such as those of certain leather garments.

It is also a good idea to varnish your figures if they are going to be constantly handled, such as wargame figures. In this instance, varnish will protect the painted surfaces from wear and tear.

2. How can I apply varnish with a paintbrush?

Varnish is basically applied in the same way as paint, although it does need to be thinned a little because of its innate thickness, otherwise it will cover detail.

3. How do I thin varnish?

By mixing it with a large amount of thinner or, if acrylic-based, with water.

4. How do I apply varnish with an airbrush?

In the same way as any other type of paint, always maintaining control over the amount of thinner added.

MATT MEDIUMS

1. How can I apply matt mediums with a brush?

Matt mediums are added to the paint when mixing it with water or thinner.

2. How much matt medium should I add?

An excessive amount will give an eggshell appearance to the figure. It is a good idea to test beforehand the right amount for a particular mixture.

4.5. PREPARING A FIGURE

TYPES OF FIGURES AND MATERIALS

1. What types of figures are most common?

The most common ones are made from metal, plastic, or resin, with today's larger scale figures being predominantly made from the last material.

There are materials, such as vinyl, etc, but these are in less demand than the others.

2. What are the most popular figure sizes?

Among figure enthusiasts 54mm (equal to 1/32) metal and 1/35 plastic figures have more demand although, recently, 30mm fantasy figures made in either material have become quite popular.

3. Why do I have to prepare a figure before painting?

All figures, regardless of whether they are made out of metal, plastic, or any other material, will have small imperfections that develop during the manufacturing process and that have to be removed. Basically, these are mold lines, excess material (flash), pouring gates, and vent channels.

4. Are there any substantial differences when working with different materials?

No, once the figure has been primed, the remaining ensuing process is the same.

FIGURE PREPARATION

1. How do I remove excess material, mold lines, and gate marks?

With a scalpel, fine files, and sanding sticks.

2. Why is it best to wash all parts before painting?

The surface of a new miniature is covered with small amounts of mold lubricants and other products from the manufacturing process. This is why it is always advisable to wash them well before painting.

3. How do I wash the parts?

Easily, with soapy water and an old toothbrush.

4. When is it advisable to reinforce parts with metal pins?

Whenever a small surface has to support larger or heavier parts and glue alone won't be strong enough on its own in the longer term.

5. How do I glue metal parts?

It is fundamental that the surface to be glued is clean and dry and, if the part has already been painted make sure that all paint is removed from the gluing area.

6. How do I glue resin and vinyl figures?

With the use of cyanoacrylate (CA) or super glue.

7. How do I glue metal and resin or vinyl parts together?

With the use of cyanoacrylate (CA) or super glue.

8. How do I glue plastic parts together?

With the use of plastic glue.

9. When do I have to apply modeling putty and how?

Especially in metal miniatures, at any time when a joint is less than perfect. Gaps are covered with modeling putty that has been thinned with water and then allowed to air dry. Careful heating can accelerate the drying time for metal parts. This is not, however, recommended for plastic or resin parts.

10. How can I repair surface defects on my figure?

An ideal solution is to mix Tamiya putty, or a similar product, with industrial acetone into paint-like consistency and then applying it directly over any surface flaws. Never use nail polish remover acetone for this purpose. The mixture can also be used for priming. Once dry, it is easily sanded down to shape ready for painting.

11. What kind of holding tools can I use for painting?

Any device that keeps us from touching the figure and is also comfortable during the painting process.

12. How do I hold the figure?

The easiest method is to insert and glue small metal pins into the figure and then to pin them onto a small piece of wood.

13. What other kinds of holding tools can I use?

14. How can I prime my figure?

With the use of spray primer, airbrush, or paintbrush. The two former ones are the best methods.

15. What color should I use for priming?

Any color. Normally gray, white, with black mostly used for fantasy figures.

In the case of a large surface, like a 90mm brown horse, it is advisable to use the same color for priming thus facilitating the ensuing painting process.

This exercise should always be done with an airbrush in order to simplify finding the correct priming mixture.

4.6. PAINTING A FIGURE

HIGHLIGHTING

1. What kind of light scheme should I use for painting my figure?

That depends on our own personal taste. The accompanying illustrations show clear examples of overhead, general, and lateral light schemes.

2. Which is the most common type of light scheme?

The overhead (zenithal) light system has a large number of followers within the miniature world.

EYES

1. What should I look for when painting eyes?

Fundamentalmente la expresión pues es lo que dará personalidad a la figura. Un truco que puede facilitar la labor es pintar primero el Basically, the expression you wish to convey, as this will give personality to a figure. A good trick to simplify painting the eyes is to paint the difficult one first (the right one for right-handed painters) and then the other one will be much easier.

2. What kind of paint should I use?

It is best to use acrylics for their fast drying time, although you can also use inks or oils and still achieve great results.

3. What kind of brush should I use?

Size is not so important! However, what is really important is that the point must be in perfect shape.

4. How do I paint the eyes on a 54mm figure?
5. How do I paint the eyes on a 90mm figure?
6. How do I paint the eyes in a large-scale figure?
7. How do I paint the eyes on a small-scale figure?
8. Can I use varnish on the eyes?

Yes. Doing this will give your figure's stare a little glare and be more realistic.

FACES

1. How do I paint a face with acrylics?
2. How do I paint a face with enamels?
3. How do I paint a face with oils?
4. Can I paint a face with mixed techniques?

Yes, but keep in mind the actual drying times and properties of each paint used.

BARE SKIN

1. How do I paint bare skin with acrylics?
2. How do I paint bare skin with enamels?
3. How do I paint bare skin with oils?
4. How do I paint bare skin with mixed technique?
Airbrush and paintbrush.

CLOTH

1. What should I be careful about when painting cloth?

Basically, the texture of the fabric. Obviously, you cannot paint a lustreless cloth in the same way as you would a satin or silk one. Before selecting one texture or another, first carefully study the particular properties of the cloth to be depicted.

2. Is it important to work with a good reference?

It is fundamental, especially for historical figures. Good research will enormously improve the realism of our figure.

3. How do I paint plain cloth?

First, by applying a suitable base color followed by highlighting and shadowing in accordance to our chosen light scheme.

4. How do I paint colored cloth with acrylics?
5. How do I paint white cloth with acrylics?
6. How do I paint black cloth with acrylics?
7. How do I paint colored cloth with enamels?
8. How do I paint white and black cloth with enamels?

The procedure is similar to the one used with acrylics, just keep in mind the properties of enamel.

9. How do I paint colored cloth with oils?
10. How do I paint white and black cloth with oils?

Use the same procedure as with colored cloth. Be especially careful to keep gray tones to a minimum when blending.

DECORATED CLOTH

1. How do I paint heraldic designs?
2. What do I need to keep in mind when painting camouflage?

Camouflage patterns always have a dominant color and this should be used as the base color. The supporting colors or tones should then be carefully applied, according to reliable documentation, in order to achieve the required realistic effect.

3. How do I paint camouflage?
4. What do I need to keep in mind when painting Scottish tartans?

Just as with camouflage garments, the dominant color must be used as the base color and then paint all the squares maintaining the right proportion. You can help yourself by using a fine pencil and softly outlining the pattern. However, do remember to cover all these marks during the painting process.

5. How do I paint a tartan?
6. How do I paint other kinds of pattern?

The procedure is similar to the one used for camouflage and tartans. It all comes down to good planning before the first brushstroke is applied.

As a general rule, you should always begin by painting the dominant color followed by all the related patterns or decorations.

LEATHER

1. What kinds of leather can I paint?

Every kind. In every age, leather has been, and is one of the most commonly used materials in miniatures, from medieval jerkins to straps, belts, horse harness, or soldier's equipment.

2. What do I need to keep in mind when painting leather?

Leather can be painted in an infinite number of ways. To that end, it is important to determine the amount of wear displayed by the garment or accessory. Besides obvious color considerations, brown, black, or any other one if we want to depict dyed leather, it is important to research the degree of wear and grubbiness, as well as the tanning method. A new leather garment usually has a satin appearance, while a used and worn one is totally dull. The latter would also show lighter or darker streaks caused by scratches and wear. Painting leather items is a challenge that requires in-depth documentation.

3. How do I paint a leather garment with acrylics?
4. How do I paint a leather garment with oils?

In order to speed up the drying process, it is normal to start over an acrylic base as shown in the photographs.

5. How do I paint a leather garment with enamels?

The procedure is the same as with oils.

6. How do I paint worn leather with the use of mixed techniques?
7. How do I paint straps and reins with worn edges?
8. How do I paint other leather elements?

Carefully following your documentation and try to reproduce every effect using the most suitable technique for each case.

WOOD

1. What do I need to keep in mind when painting wood?

Basically the degree of wear and grime displayed. If the wood is old, it will have dents and these have to be painted differently than the rest. It is also very important to understand wood grain in the different kinds of wood. It is advisable to practice on test pieces before doing it on our figure.

2. How do I paint a wooden shield?
3. How do I paint a wooden rifle stock with acrylics?
4. How do I paint a rifle with inks?

In this instance, inks are only used to simulate and shade the wood grain.

5. How do I paint colored wood?
6. How do I paint other kinds of woods?

Always check your references and replicate the different effects according to each kind of wood.

METALS

1. What kinds of paint can I use for depicting metals?

Metallic acrylics and enamels for base colors; inks and varnishes for shading, tinting, and increasing highlights. Remember, inks can only be mixed with acrylics.

2. How do I paint the blued steel on a firearm?
3. How do I paint silver plate armor with acrylics?
4. How do I paint golden plate armor with enamels?
5. How do I paint bronze armor using the mixed technique?
6. How do I paint other kinds of metals or differently colored ones?

With the same procedures outlined earlier. In order to add color to metals, mix a little ink with your paint or use glass lacquer on completion. In this way, the whole surface will be evenly colored and looking very realistic. Before using this technique, paint some test pieces so you can assess if this result is what you are seeking.

7. How can I polish metals?

Results from polishing metal cannot be matched by any kind of paint. For this technique you don't need special tools. All you need are a piece of cotton rag, a washcloth, some fine steel wool, a burnishing tool made from needles or paper clips, and paintbrush handles. Finish by using Tamiya's or Gunze Sangyo's Clear Smoke. Polishing paste can be purchased at specialized jewelry stores or, in an emergency, you can also use toothpaste.

8. Which is the difference between polishing and burnishing metals?

Once the polishing stage is finished, the figure will still show some imperfections and the residue of the polishing compound. After washing and drying it, wipe it with a cotton cloth or burnish it if you want maximum brightness.

9. How do I paint polished parts?

In the same way Clear Smoke is applied. It is possible to obtain some different interesting results by varnishing with blue, yellow, or orange varnish. For example, a blue finishes will give an interesting finishes to swords, axes, or even whole suits of armor.

10. Can I paint metal without using metallic pigments?

Yes, this is a recently discovered technique giving outstanding results, although it lacks the sheen and reflection of polished metal.

It is an alternative instead of using metallic pigments.

It is recommended to start with a very light base color and have an ample margin to work the color more comfortably.

11. Can I get realistic effects without using metallic pigments?

12. How can I paint chain mail with acrylics?

Once the base color has been evenly applied, start painting in the same fashion as you would with normal cloth, being especially careful not to cover any detail.

The highlights are applied using a lightly thinned paint mixture. Just enough to avoid covering detail or running into deep areas.

For shadowing, use the same process as above but in reverse.

To paint chain mail, it is best to start with a heavily loaded brush.

HAIR AND BEARD

1. What colors should I choose according to each type of hair?

It is always best to use a slightly darker color as the base color. The highlighting process will lighten it considerably.

2. What kind of techniques can I use?

Any technique previously explained. Painting hair lets you use all kinds of paint and techniques as long as they are properly applied.

3. How do I paint hair with acrylics?

4. How do I paint hair with oils?

5. How do I paint hair with dry brush and washes?

6. How do I paint beards and moustaches?

Using the same method as for hair. However, be very conscious to your chosen lighting scheme.

7. How do I paint unshaven facial hair or hair growth in shaven heads?

8. How do I paint body hair?

FUR GARMENTS

1. What do I need to keep in mind when painting fur garments?

It is most important to keep in mind the fur's texture, the amount of grime on it, and the aging properties.

2. Which are the most common types of fur?

All those that imply fierceness, for example the lion, tiger, leopard, bear, wolf, etc.

3. How do I paint fur garments with acrylics?

4. How do I paint fur garments with oils?

5. How do I paint fur with mixed technique?

6. How do I paint other kinds of fur?

There is hardly any other kind of fur that cannot be painted with the methods described above. In the case of tiger fur, for example, you would use the same technique as with the leopard skin, but closely following the researched pattern. The particular technique to be applied depends entirely on personal preference.

4.7. SPECIAL EFFECTS

SKIN EFFECTS

1. How do I paint fresh wounds?
2. How do I paint dried blood on wounds?
3. How can I replicate sweat?

Try using satin varnish to give skin the wet appearance of sweat.

4. How do I paint eye bags?

Starting from a finished face, apply different tints over the area. Depending on the skin tone of your figure, these can be violet, gray, or even green.

5. How do I paint grime with oils?

EFFECTS ON GARMENTS

1. How can I depict wear on cloth?

With the use of lighter tones than the ones used for highlighting or color increasing. In this way, the painted areas will show the appearance of a worn garment. In order to reduce accentuated contrasts, apply a soft tint.

2. How do I paint spots?
3. How can I replicate dust with paint?

When you are ready to apply the final highlights, add a little ochre or sand color to the mixture. The end result is a slightly brownish color that looks just like dust covering the garment.

4. How can I replicate dust with pastels?

By sprinkling it over the area using an old brush. To secure the pastel dust while, at the same time, increase its depth, mix it with oil paint thinner.

5. How can I replicate dry mud on garments?

Mix your paint with sand, water, modeling paste, and then apply the resulting mixture with an old brush.

6. How can I make wet mud?

By mixing acrylic paint and gloss varnish.

7. How can I replicate wet garments?

Starting from an already painted surface, the wetness is reproduced by several tint coats and finished with satin varnish over the soggy areas.

Tint coats should be applied as an intermediate tone between the base color and the one used for shadowing.

8. How do I paint sweat marks on garments?

9. How can I create fallen snow effects on garments?

By using artificial snow mixed with white glue and a little white acrylic paint.

EFFECTS ON ACCESSORIES

1. How can I get realistic rust effects with the use of the mixed oil and acrylic technique?

2. How can I replicate chipped paint on metal surfaces?

Over an already painted element, apply 'chipped marks' with a dark rust color. Then, over these, randomly apply a lighter color. Next, using the base color, apply several tones in the form of tints. Finally, paint some final touches using a steel color over a few selected areas.

3. How do I use washes to paint gold lace?

5. How do I paint precious stones?

Because they not only reflect light but also refract it, precious stones have to be painted in an unusual way. Generally, with any other painted element, we consider that the area where light gathers the most is on top and the one where it gathers the least, at the bottom. However, in the case of precious stones this effect is the reverse.

6. How can I replicate chipped paint on wood surfaces?

7. How can I paint other effects?

In order to paint other kinds of effects it is first necessary to carry out some research, keeping in mind all the factors involved, like surface texture, gloss or matt finish, colors, and the appropriate techniques that best represent them, etc.

For the most part, painting techniques will be slight variations of the abovementioned ones.

4.8. COMPLEMENTS

Many figures include complementary items, including paper flags, transfers, photo etched accessories, and other elements. These can also be added to personalize a figure or to carry out a conversion of the original. With this in mind, the most common techniques for working with these elements are explained below.

1. How do I decorate shields using transfers?
2. How do I decorate garments using transfers?

The procedure is similar to the one used for a shield but with the difference that garments are always covered in folds and creases, thus complicating the technique. The trick lies in the careful application of the transfer, starting at one edge and slowly following the garment's shape while pressing the down the transfer. If any part of the transfer does not lay perfectly over the surface, it can be touched up later with paint. The next step is to paint over the transfer to achieve the same tones, illumination, and griminess of the rest of the figure.

3. How do I make paper flags?

Begin by cutting the form with a sharp hobby knife. Then fix it with white glue, and shape it using a brush handle or rod. Once the folds are set, apply all the highlights, shadows, grime, etc.

4. How can I make flags from metal foil?

Begin with a good illustration of the particular flag and thoroughly prime the foil's surface. Use tracing paper to copy the flag's design and, using a fine needle, prick the outline of the design. Place the pattern over the tin foil and hold it in place with paperclips. Use a finely sharpened pencil, mark through the outline dots. The resulting dot marks then become our guide for painting the flag's design. Trace the design and, with the help of a couple of brush handles, shape the flag as required. Next, use a darker pencil and go over the design once again. Apply your corresponding base color, highlights, and shadows.

5. How do I work photo etched parts on my figures?
6. How do I paint photo etched parts?

Once primed, any photo-etched part has the identical properties of any other surface.

7. How can I make a tight bowstring?

The basic material for this simple job is stretched plastic sprue.

8. Can I use wire or other materials to make a bowstring?

It is not recommended, as they tend to hang loose and look unrealistic.

4.9. GROUNDWORK AND BASES

GROUNDWORK BASIC PAINTING TECHNIQUES

1. How should I paint groundwork?

Always following the same lighting scheme as your figure. The selection of colors and techniques depends on personal taste and the particular terrain features you wish to reproduce. If you need to add snow, wet mud, or water, keep in mind there are commercially available products designed for these effects that we will review later.

2. What kind of terrain is the most common?

It cannot be said that there is a 'common' variety of terrain. In general, when placing a simple figure outside of a specific terrain, like deserts or snow-covered landscapes, we resort to uncomplicated earthy groundwork using different shades of color and sparse vegetation. This kind of terrain looks quite good and is acceptable for most figures.

3. How do I paint groundwork and foliage?

4. How do I paint a sandy landscape?

5. How do I paint rocky landscapes?

BASES REQUIRED WORK BEFORE SECURING THE FIGURE

1. What kind of base should I use?

One that adapts well to the size of the figure and, if possible, try to find a base whose material or form coincides with the figure's time period. For example, a root base is ideal for 'Old West' figures.

2. What kinds of bases are available?

Practically anything you can imagine, and made from chipboard, wood, marble, resin, etc. You can also manufacture your own bases, although this is more in the realms of craftwork than modeling.

3. Can I adapt or transform a base?

Of course! Anything done to improve our miniature is a positive move.

4. How can I expand terrain built onto a base?

5. How can I make mud?

6. How can I make snow?

There are specifically made products available for this. They are economical and produce excellent results.

If you wish to depict dirty snow, just add a few drops of paint to the mixture.

7. How can I make vegetation to improve my groundwork?

8. How can I add artificial water to my groundwork?

URBAN PAVING AND INTERIOR FLOORS

1. How do I paint cobblestones?
2. How do I paint marble floors?
3. How do I paint wood floors?
4. How do I paint treated wood floors?

SECURING THE FIGURE TO THE BASE

1. How do I affix my figure on a base?

SETTINGS

1. What kind of settings can I use?

Any that adapts to the historical era of our miniature and is compatible to the scale.

2. How do I paint these settings?

In the final analysis, settings are composed using different elements like wood, stone, and metal. Painting these is no different from the explanations given earlier. We only have to make sure the whole ensemble is well balanced and same lighting scheme as the one used for the figures is applied.

5. FIGURE CLEANING AND CONSERVATION

5.1. FINISHED FIGURE MAINTENANCE

1. How do I keep a figure clean?

The best method is to keep them in closed displays or cabinets.

2. What kinds of display cabinets are best?

The most adequate are those with rubber seals around the frame that prevent dust from entering.

3. How can dust affect figures?

It settles over the whole of the figure's surface, even in deep areas, and dulls the colors.

4. How can I clean dust from my figures?

By gently removing it using a completely dry No:7 or No:8 brush. For more complex areas, it is best to use an airbrush with the air pressure set at approximately 3 bar and do so in short bursts.

6. PRESENTING YOUR FIGURES IN COMPETITION

6.1. COMPETITIONS

DIFERENT KINDS OF COMPETITIONS

1. What kinds of competition are there and in which ones can I enter my figures?

There are many different kinds of figure competitions. From small local ones organized by a specialist shop, miniature modeling society, or even a local government, to those at national and international level. Of course, the latter are the most prestigious and are attended by the recognized masters. The competitions in which to enter your figures depend entirely on the quality of your work. However, do not underestimate the smaller contests, as these are a first step for most beginners and are part of an important learning curve due to the fact that one of the most attractive parts of any competition is the knowledge exchange among the participants.

2. How do international competitions work?

Depending on the host country, competition rules vary considerably because there is no universally established set of rules for miniature competitions. There are those where a host of medals are awarded, with six or seven gold medals in each category, while there are others where the number of medals is limited and are thus more appreciated by participants. Some competitions award a prize for individual figures so a participant might be eligible for several medals, while there are others where there is a single award for a modeler's overall display if the judges deem it appropriate.

A good piece of advice is to learn as much as possible from a specific competition in order to avoid unpleasant surprises.

3. What categories exist within a competition and under which rules do they abide?

There is also nothing written concerning categories and rules, but in general the former are established by the miniature's properties or age and experience of participants. In the first case, categories are normally divided in 54mm foot figures, 54mm mounted figures and so on for larger scale figures, vignettes, dioramas, busts, etc.

In the second case, participants enter as Beginners, Intermediate, and Advanced categories, although competitions under this scheme tend to combine with the previous one.

FIGURE PRESENTATION

1. What can I do so my figures are more attractive when presenting them in competition?

For any competition, the miniature must be considered as part of a whole with the main character being the figure itself, albeit but not the only one. The correct setting, a good base that suits the figure's personality or time period, complete with an attractive nameplate featuring the miniature's title and historical data, add up considerably and make it more attractive.

If you miss these details, you can be sure that your work will go unnoticed both to the public and, of course, the judges.

2. How can I make simple nameplates?

The procedure is quite simple. You will need a laser printer and transparency paper available at any office or computer supply store. Ink printers will not work for this purpose. In

the case of you not having access to a laser printer, try making a photocopy on transparency paper.

3. Is it best to present your work in a display setting?

Yes, this will be more appealing and will attract interest to your work. If your goal is to earn a prize, a good presentation will certainly help. This could, in a way, be considered as more of a marketing operation than modeling, but it works.

4. How do I transport my figures?

The most efficient and easiest method is by a travel box. This type of container can be found in many good hobby shops. However, you are constrained by the set size of the container and your figure might not fit. However, why not make your own from wood. The advantage of doing this is that it is cheap, lightweight, and not easily damaged. To fix your figures inside the box, you can use double-sided tape or a more secure method is to screw through the bottom of the box into your figure's base.

JUDGES AND AWARDS

1. What criteria are followed by judges when giving awards?

Just as in any other endeavor, in the miniature world there exists what we name as 'living legends' that, fortunately, have the good taste not to participate in competitions but, instead, act as judges sponsored by the organizers. This ensures that the judging criteria will be variable. People involved in scratchbuilding and painting are able to judge such work better than they would a commercial piece, and pure painters will bypass such important aspects as the overall setting and some others will value painting styles that resemble their own work and discard those that don't.

It is then, a very subjective opinion but, once tied together with other votes, the result is a wide range of different opinions on the diverse techniques applied on each work. This is why high award winners are those participants with the best work presentation. At times, we see entries that we consider gold medal work leave empty-handed. These things happen, even in international competitions where the amount of talent is just overwhelming, and judges do make mistakes and sometimes overlook a wonderful piece, usually, unfortunately, from an unknown participant. Judges, like us, are only human after all.

2. What kinds of awards can I receive?

The most usual awards for the best works in competition are gold, silver, bronze, and certificates of merit. There could also be figure manufacturers present who will give an award that is usually one of their flagship kits or a trophy designed with their logo. The top competitions in the world will also present a single 'Best of Show' award recognises the best work on display. This is the award that most participants aspire to receive anywhere, as it is a direct ticket towards the world of the 'chosen few' and, quite likely, an invitation for the following year to be a judge. Is this the greatest goal for any figure painter? Surely not, but this is something only each one can answer.

3. Is it interesting to display my work in competition?

Of course, though not necessarily with the purpose of receiving awards, this is only secondary and will happen in time. The best part of displaying our work is the chance to meet with hundreds of people sharing the same passion and is more than willing to reveal their secrets to anyone that asks and listen to those who can add something new to their own techniques. Besides, most competitions today offer free demonstrations where you get the opportunity to learn from the very best exponents of this art form.

Displaying our work should not be seen as vanity, but as the means to receive constructive

criticism that help us improve our painting. Occasionally, you will come across someone so overcome with envy and will try to drag you down with all kinds of ridiculous and weightless arguments. Pay no attention and take it as part of the show. The camaraderie of these events, friendships made and cemented, a lot of fun, are always guaranteed at this events and become, by far, the finest trophy that any participant can take home.

7. GALLERY

The gallery section shows a small catalog of the works of some of today's foremost miniature painting artists. All the displayed figures have been awarded gold medals at the latest international competitions and they are named here as the author requested. This is the reason behind the different languages and is done as a demonstration of respect towards these great artists whose work, even if minimally represented in these pages, reveals what can be done using the right techniques, patience, and dedication.

Celt, 323 A.C.
54 mm
Juan Carlos Ávila Ribadas

33rd RGT. Highlanders Lucknow, 1857
54 mm
Juan Carlos Ávila Ribadas

Napoleon & Pauline Foures. Egypt, 1801
54 mm
Allan & Marion Ball

German Assault troop
75 mm
T. Basilikos

The Cimmerian
75 mm
Pietro Balloni

Oddone Frangipane
75 mm
Pietro Balloni

Captain Phillipe, 1811
54 mm
Adrian Bay

Dick Winters
120 mm
Adrian Bay

Swiss Alberdier, 15th Century
54 mm
Mike Blank

Dragoons Officer. English Civil War, 1654
54 mm
Mike Blank

Grallapoussah de Barbacis
54 mm
Jérémie Bonamant

Marissa Von Sonhan
28 mm
Jérémie Bonamant

Edmund Hilary
54 mm
Julio Cabos

Gepetto's dream
54 mm
Julio Cabos

Officier de Chasseurs de la Garde Impériale, 1812
90 mm
Julio Cabos

Probyn's Horse
54 mm
Danilo Cartacci & Mariano Numitone

28th Light Company
54 mm
Danilo Cartacci & Mariano Numitone

Saint George
54 mm
Danilo Cartacci & Mariano Numitone

Spanish Line Infantry, 1813
54 mm
Cannone Brothers

Marina Inglese. Sebastopol, 1855
54 mm
Cannone Brothers

La Retirada. Rusia 1812
54 mm
Blas Cueva

Manfred Von Richthofen
54 mm
T. Faniel

Brigadefürer SS, 1942
54 mm
Diego Fernández Fortes

Sergeant 93rd Highlanders, 1854
1:10
J. J. Fernández

Tambour, 1794
54 mm
Diego Fernández Fortes

Mario Fuentes
54 mm
Mario Fuentes

Highlander 79th
54 mm
Mario Fuentes

Officer Guard Infantry, 1870
70 mm
Pepe Gallardo

French Lieutenant, 1870
90 mm
Pepe Gallardo

Enrique VIII
70 mm
Jesús Gamarra

El Pollo de la Extrema

54 mm

Jaques-Alex Gillois

Sargento del 17º Reg. de Alphant

28 mm

Alfonso Giraldes

Soldado del Pacto Sangriento

54 mm

Alfonso Giraldes

Primus Pilus

75 mm

José Hernández

Teutonic Grand Master. XIV Century

75 mm

José Hernández

Chasseur à Pied

54 mm

Bill Horan

Westphalian Jäger

54 mm

Bill Horan

Samurai, XVI C.

70 mm

V. Konnov

Woman Samurai, XVI C.

70 mm

V. Konnov

General Palafox. 1er Sitio de Zaragoza

54 mm

Luis Esteban Laguardia

Zouave de la Garde. Crimée, 1854

54 mm

Luis Esteban Laguardia

Officer 2nd Regt. Danish Hussars, 1780

54 mm

David Lane

French Officer of Dragoons, 1870

54 mm

Tosiichi Matsuoka

Chasseur Officer, 1st Italian Light Infantry, 1807

54 mm

Tosiichi Matsuoka

Captain Souter. 44th Gandamak, 1842

120 mm

Román Navarro

The Tramp and the Kid

54 mm

Román Navarro

Edward the Black Prince

54 mm

Luca Oliveri

Kawanakajima. Siglo XVI

90 mm

Salvador Ortigosa

Teutonic Knight

54 mm

Luca Oliveri

Space Wolf

1:8

Joaquín Palacios

Chevalier Français. Crecy, 1346

90 mm

José Manuel Palomares

A Nice Place to Camp

28 mm

José Manuel Palomares

The Last Daymio

90 mm

José Manuel Palomares

Dall Alpi alle Piramidi

54 mm

M. Pasquali

Chinese Commander on War Elephant

54 mm

Maria Pavlova

Viking Warlord

54 mm

Alfonso. Prado

Elf Archer

54 mm

Alfonso Prado

Heia Safari. Afrika, 1942

54 mm

Pedro Ramírez

Hoplita Greco-Romano

54 mm

J. M. Rando Chacón

Brother Bellanus. Ultramarines

70 mm

David Rodríguez

Inquisitor
28 mm
David Rodríguez

Samurai Warrior
90 mm
Diego Ruina

Roman Legionary
75 mm
Diego Ruina

Dick Winters
90 mm
Diego Ruina

Laner Officer, 1813
54 mm
Al Safwat

Officer Grenadier, 1815
54 mm
Al Safwat

Napoleon
90 mm
Al Safwat

Missed the Boat
54 mm
B. Snaddon

Viking C. 950
70 mm
Young B. Song

Polish Winged Hussar
70 mm
Youbg B. Song

Medieval Knight. 14Th C.
Autor
Young B. Song

Guide de Bonaparte
90 mm
Gianfranco Speranza

The Guardian, 1520
90 mm
Gianfranco Speranza

English Demi-Lancer
54 mm
Gianfranco Speranza

Janissary
90 mm
Galina Suchova

Butler's Ranger, 1779

70 mm

Andrea Tessarini

Survival of the Fittest

54 mm

M. Van Gils

A Hurried Descent

54 mm

M. Van Gils

Templar With Banner

54 mm

Michael Volquarts