ABSTRACT

Prehistoric people would have used natural objects to paint the walls of the caves. To etch into the rock, they could have used sharp tools or a spear. The paint or color that they probably used was from berries, clay, soot, or charcoal. The tools used to apply the paint could have been made by attaching straw, leaves, moss, or hair to sticks. They might have used hollow bones or reeds to spray the color on, similar to an airbrush technique. The desire to create unique things and give free rein to one’s imagination served as a powerful impetus to the development of digital art and design software. The commoner was the use of computers the wider variety of professional software was developed Digital painting has gained acceptance as a two dimensional art form, paralleling major traditional forms of painting in the art world. However, this aspect of the visual arts, rather underexplored, has not received the same degree of global acceptance and recognition accorded to well-known fine art forms such as sculpture, painting and drawing. Computer as a multi-media apparatus for expressivity in Fine Art Painting that can foster idea development and enhancement of techno-aesthetic values in studio painting practice.

Keywords: Technological Art, Digital Painting, Software based Art

INTRODUCTION

It is the easiest medium for to creation out of nothing. Human mind constantly works on creating something that has never existed before and does not now exist. This is the approach with which any professional creator of Digital Art, or in other words, creator of design will gain success. Digital culture is neither new nor determined by technology, but rather that technology is a product of digital culture. The term "digital" originally referred to data organized in discreet units in any system, linguistic, and numerical systems included.

Since the use of computers became an everyday occurrence the wide variety of software has been emerging to assist designers. From the simplest and primitive up towards professional graphics editors computer software has undergone the complicated evolution and development.

Computer users to stimulate painting on a computer screen. Users also employ a computer mouse or a tablet stylus to simulate various sizes of paintbrush, select colours from a colour palette to retouch photographs, adjust the contrast. The experience of the French painters of the 18th and 19th centuries who executed and exhibited works in their individual techniques and styles, in opposition to the laid down conventions in painting by the great masters of the renaissance is similar to these critical judgements. Their works were rejected by critics of the day, with some branded as lunatics. Today the technique and styles of those French painters have helped to shape the fine art painting profession. It is inspiring to note that, these studio-painting techniques have also formed the bases of the painterly
effects incorporated in most image editing software including Photoshop, which users employ to assign desirable finishes to their digital paintings.

**OBJECTIVES**

1. Identify and explain the use of the various tools in digital painting software
2. Demonstrate a proficiency in the use of a digital tablet
3. To understand technological expression of art

**WHAT IS DIGITAL PAINTING?**

Digital painting is an emerging art form in which traditional painting techniques (such as watercolor, oils, impasto, etc.) are applied by means of a computer, a digitizing tablet and stylus, and software. I work with a Wacom tablet, Corel Painter, Adobe Illustrator and Adobe Photoshop.

Digital painting is a type of digital art but it is not computer-generated art, in that it does not involve the computer automatically generating an image from mathematical models created by the artist. In digital painting, the artist uses painting techniques to create the image directly on the computer.

Digital painting is also distinct from digital manipulation of photographs, in that it is an original construction from scratch. While photographic elements may be incorporated into digital paintings, they are not the primary basis or source for them. In some of my images, there are no photographic elements at all and in other images I may use dozens of distinct photographic elements.

My images are the result of conceptualizing an idea and then implementing that concept as a digital file from one or more original elements that I acquire or create, primarily with a pen tablet, a digital camera or scanner and software tools.

The original artwork is a digital file and is not normally seen or sold. Limited edition prints are made from the digital file for exhibition and sale.

**TYPES OF DIGITAL ART**

**Digital Photography**

The artist uses a digital or conventional camera. The photographs are digitized and translated to the computer environment where the artist uses image editing and special effects software to perform darkroom type manipulations.

**Photo painting**

This combines the disciplines of photography and painting. The artist uses image editing and paint software to go beyond dark room techniques to add further expression to the image.

**Digital Collage**

This is a technique of combining many images from varying sources into one image. This is most commonly achieved by the use of layering techniques in image editing and paint software. The artist may also use images from x-rays or radar to produce images that the eye does not normally see, which expands the realm of human perception.

**Integrated Digital Art**

This is the “mixed media” of the digital art world. Artists combine any number of the techniques to achieve unique results. The digital environment is much less restricted than conventional mediums in this type of integration and manipulation.

**Digital Painting**

2D: The artist creates 2D images totally in the computer virtual environment with the use of painting tools that emulate natural media styles. Sometimes referred to as “Natural Media”. 3D: The artist uses
3D modeling and rendering software to essentially sculpt in virtual space. This method also makes use of all of the other methods.

**Vector Drawing**

The artist uses vector drawing software and creates the image totally in the virtual environment. This makes use of shapes which are outlined and can be filled with various colors and patterns. This tends to produce a harder edged or graphic look.

**Algorithmic/Fractals**

This is art produced exclusively by mathematical manipulations. This is the so-called “computer generated” art. The art here lies in the invention of the mathematical formulas themselves and the way the programs are written to take advantage of the display capabilities of the hardware. The art also lies in the creative intentions and subsequent selections of the artist/mathematician.

**ESSENTIAL ELEMENTS FOR DIGITAL ART**

**HARDWARE & ACCESSORIES FOR DIGITAL PAINTING**

1. **Intuos Pen and Touch Tablet (Small).** Formerly Wacom Bamboo, Wacom Intuos Pen and Touch tablet is perfect for digital artist wannabe to discover the world of digital painting.

2. **Intuos Pro Pen and Touch Tablet (Small).** Intended for the experienced artist, Intuos Pro is built with 2048 levels of pen pressure sensitivity and better control panel, and with the purchase you also get a set of nibs that mimic traditional brushes.

3. **Cintiq 13HD Pen Display.** Wacom surprised the world months ago by releasing Cintiq 13 HD, the most affordable luxurious graphic tablet with interactive pen display, allowing artists to draw on screen like they do on paper.

4. **Cintiq 22HD Pen Display.** Cintiq 22HD is the dream of every digital artist. Not only does it have all the features of the Intuos and Cintiq family, this gigantic tablet also allows you to adjust its position for your comfort.

5. **Bamboo Feel Stylus.** Unlike most affordable stylus, the best thing about Bamboo Feel stylus is that it comes with pressure sensitivity, allowing you to draw and paint dynamically on the tablet surface.

6. **Wacom Inkling Digital Sketch Pen.** This magical pen has the ability to let you draw on paper, then transform your physical sketch into a compatible digital format, but mind you, it’s purely intended for sketching, so its accuracy is not up to production standards.

7. **Bamboo Stylus Mini.** If you prefer mobility over all, Bamboo Stylus Mini could follow you everywhere. You could even attach it to your tablet or smartphone’s audio jack – that’s what its strap is for!

8. **Sensu Artist Brush and Stylus.** Imagine painting on a tablet with a… brush! Sensu can make this a reality for you.

9. **Jot Touch 4.** You deserve a great product if you are willing to fork out a premium price. Jot Touch 4 features 2048 levels of pressure sensitivity, and a palm rejection feature which ignores hand movement on the touchscreen.

10. **Pogo Connect.** Promoted by Procreate, Pogo Connect is a Bluetooth-enabled pen that lets you draw with different line widths on the iPad and yes, it comes with pressure sensitivity. With a few extra bucks you could even get 4 extra tip options including the brush tip.

11. **TruGlide Duo Stylus Pen.** Want to draw traditional and digital artwork with the same pen? TruGlide Duo Stylus Pen makes it possible. Ink refill is possible too.
12. **TruGlide Pro Paintbrush Tip**. Yes, you can equip a paintbrush tip onto TruGlide Pro Stylus, then paint like a boss.

13. **Nomad FleX Paintbrush Stylus**. Here is the Nomad FleX stylus that promises an all-synthetic brush tip, with flexibility as its advertisement tagline.

14. **12” Wooden Male Figure**. Made of seasoned hardwood and stuck firmly to a stand, this wooden guy is ready to pose any way you like for your reference.

**SOFTWARES FOR DIGITAL PAINTING**

1. **Adobe Photoshop CC**. Besides photo editing, Adobe Photoshop CC is also a perfect painting software with highly customizable brush settings. It includes all professional features of its predecessors.

2. **Adobe Photoshop Elements 12**. Photoshop Elements 12 excels in post-processing including level, contrast, saturation, etc.

3. **Adobe Illustrator CC**. If you love making icons, or are of the hardcore type that takes account where each pixel lands, Adobe Illustrator CC is good for it.

4. **Corel Painter X3**. Painter X3 is known for its power to mimic most traditional brushes, textures, wet and dry media to an amazing level of perfection.

5. **Painter Lite**. Painter Lite still keeps the realistic natural-media painting feature (it behaves like traditional art tools).

6. **Clip Paint Studio PRO**. Though it’s originally intended for manga drawing, Clip Paint Studio has evolved far enough to be used in industry-standard digital art production. Its tool customization is the killer feature.

7. **Paint Tool SAI**. It is the de facto standard of painting software for most professional Japanese Anime artists. It also comes with line correction feature for a smooth drawing experience.

8. **Autodesk Sketchbook Pro**. Sketchbook Pro makes painting a relaxing and enjoyable journey, and it is specially designed for pen tablets.

9. **ArtRage 4**. Its surreal painting tools and, a whole bunch of features to make your painting life easier.


11. **Poser Pro 2014**. The key to good art is correct perspective and posture, and Poser Pro 2014 lets achieve them with less effort.

**APPS FOR DIGITAL PAINTING**

1. **Adobe Photoshop Touch**. Photoshop Touch offers a slew of features for quality photo editing and adjustment. On top of that, you could share your proudest results to social networking websites.

2. **Procreate**. Procreate truly lives up to its name with this professional interface design, its brushes, performance, and an up to 4096×4096 canvas size! No wonder it won the Apple Design Award.

3. **Inspire Pro**. It’s not just about painting, but also how fast you can paint. Inspire Pro allows you to paint as fast as possible with its performance-based painting engine.

4. **ArtStudio for iPad**. ArtStudio certainly has its edge in the mobile painting world with its 450 high-quality brushes and 21-layer blending modes, and 40 filters!

5. **ArtRage for Mobile**. Since there’s no Corel Painter for iPad, ArtRage for mobile is your best bet for a realistic painting experience.
6. **Paper.** Paper is designed with mobile interactivity in mind, so it has no complicated interfaces that mess up your painting process. Its ink engine even tracks your movement and optimizes its tools for a better outcome.

7. **Handy.** If you need a 3D sculpture to draw better body parts, you have to try Handy. Pose or change the perspective of the sculpture or shine a light on it to get great color and depth observation that will help you create more realistic paintings.

**BOOKS AND MAGAZINES FOR DIGITAL PAINTING**

1. **ImagineFX.** ImagineFX could be one of best investments as it comes with inspiring artworks, aspiring artist profiles, premium brushes and software. Also included, professional tutorials in both written and video format.

2. **2DArtist.** 2dartist will keep you improving with its collection of techniques, tutorials, reviews and galleries, all jam-packed in each issue.

3. **Fantasy Artist.** Fantasy Artist will not only make sure you got plenty of wild resources to inspire great ideas, it will also show you the ways to handle painting tools for even more fantastic production.

4. **Digital Art Masters 8.** Just as its name suggests, the book showcases the best artworks from art masters around the world. Plus a sweet bonus: detailed tutorials explaining how each image is done!

5. **3D Artist.** Seeking enlightenment in digital sculpting? 3D Artist is the magazine where masters share their tips and techniques for you to improve.

6. **3D World.** Modeling, animation, showcase, software, you could discover the entire world of 3D in this magazine.

7. **3DCreative.** Are you ready to take your modeling technique to the next level? 3DCreative has the resources you need.

8. **Advanced Photoshop.** The more you know, the better the artwork you could produce. Advanced Photoshop uncovers all Pro techniques and secret features of Photoshop for more efficient post-processing works.

9. **Computer Arts.** There are times when we need to look more into design cases and business tips, and Computer Arts is published for these purposes.

**DIGITAL PAINTINGS IN DIFFERENT SOFTWARES**

Digital Painting in Coral Painter X3  
Digital Painting in ZBrush 4R6
Advantages of Digital Painting

Digital painting has numerous advantages over traditional artwork. Images can be produced at any time, in any lighting, simply by using the computer, with minimal set-up and no need to clean tools afterwards. There are also minimal requirements to purchase equipment: laptops and graphics tablets rarely need replacing, unlike their traditional equivalents of paint and canvases. Images can be produced on the computer with various effects, filters and layers, then sent to the client directly via email or FTP. Any requested alterations are then easy to perform, as the whole piece will not need to be redrawn in a new copy but can simply be overwritten on-screen. Theoretically, this increases the productivity of the artist and could therefore allow them to earn more money by taking more jobs.

Disadvantages of Digital Painting

On the other hand, there are also disadvantages associated with digital artworks. First and foremost, there is no original piece of work. Art is easily replicated digitally, meaning that once a piece is created it is easy for the original artist to lose track of where it is being displayed on the internet and, in some
cases, for copyright infringement to take place. There are also the risks of computer problems causing workflow disruption: data can be corrupted by viruses, by error messages and glitches or simply by hardware failure. It is also necessary to work at a computer screen for long hours, with the need to use screens of at least 22”. Moreover, the reputations of digital artists are made on the internet, where there is enormous competition. Few digital artists expect to make themselves famous or to become names which are still known in 50 years’ time.

CONCLUSIONS

The present study presents a concise review of historical development of graphic editors with the particular consideration of the most representative examples. The comparative approach to the most powerful graphic editors that represent two different, in principle, branches of software - free (Paint.NET and GIMP) and commercial (Adobe Photoshop) revealed that potentialities of commercial software is still leading on software market due to its advanced and newest features that satisfy the most refined aspirations of professional users. Professionals prefer Adobe Photoshop; however, the amateurs may be well satisfied by Paint Shop Pro, Photopaint, or the GIMP. The last but not the least point is that when making a choice for a particular digital art and design program one should remember the rapid progress of this kind of software and the abilities that used to be pertinent to expensive commercial products now are the characteristics of more simple free software products.

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