Impact of technology on graphic design

In our society technology is the dominant industry. In this essay I plan to look at how technology has impacted not only western society but in particularly graphic design since the digital revolution. We in the field of graphic design are particularly affected by technology although the digital age has increased possibilities for designers; it has also had a number of possible negative effects. I plan to look at both sides of the argument in detail and give examples of how they contrast with one another and yet in the right hands can be used together to create visually engaging pieces.

In western society, we are in the middle of a technological revolution. As the world has become increasingly digital, there has been a change in the way people communicate, the way that they purchase items and the way that they socialize. This digital revolution has also contributed ti changes in graphic design over the last decade. Before the amalgamation of programs such as Adobe Photoshop, Quark Express and Autodesk Maya, we would never be able to see digital pieces of the complexity that we can currently see today.

Not only has technology altered the way that work is created, it has also completely changed the way that we present our work. Today most designers have at least one form of online presence; be it a Facebook fan page, a twitter feed, a blog where they share their thoughts or even just a portfolio site where their work is showcased, many designers use the internet as their main source of publicity. It is due to the ability to show things, such as moving animation work or interactive multimedia pieces and the fact that designers can share a higher percentage of their work without limitations of size or quality makes using digital technology so appealing. "

With a traditional paper portfolio, it is rarely possible to accommodate all our work…. with a laptop we can take everything" (Shaughnessy 2010)

The use of portfolio sites has gained a great deal of attention in the world of graphic design. Although on one hand they are responsible for many artists gaining helpful critiques and exposure to a new audience, there is also a huge problem of plagiarism in the online community. One example of how websites like DeviantArt. com are abused is the case of Lara Jade. A photographer who published a selection of her work online, for others to enjoy. This was all very well until a viewer of her work messaged her to tell her that one of her self-portraits, taken at the age of fourteen was being used on the cover of a pornographic DVD.[1]actual refeerence It took three years of legal action for the distributers of the DVD to stop using her image as the cover, even after they were made aware of the copyright and the age of the cover ' star'.

Sites such as DeviantArt. COM are facing a backlash from their loyal supporters who have got to a stage where the amount of plagiarism has taken away the joy of uploading work. Many designers are simply not willing to let their work be stolen in exchange for a brief exposure to a website with 37% of their members being between 18-24. " With so many members, DA is destined not only to be a target of plagiarists, but also a home for them." (Bailey 2007)

Technology is also used predominately in the designing and creation of work in the graphic design field. Since the digital revolution, we have seen a massive change in the way that, for example, motion graphics is created.

Programs such as ' Adobe After Effects' have increased productivity in the motion industry as it allows designers to create animations in an extremely short amount of time compared to when they were traditionally analogue created. An example of this are the classic Disney animations such as Snow White and the Seven Dwarfs, Beauty and the Beast or The Lion King, all of which were created using traditional stocks cell animation,[2]with each frame having to be individually drawn. [Need to Expand] Looking further afield than at motion graphics specifically, we also see how other digital programs have increased workflow for many designers. Whereas before the digital revolution, many hours were spent with pencils arranging compositions, design mocks can now be created in a very short amount of time by sketching straight onto a computer using a tablet input alongside an image program like Adobe Photoshop. By drawing straight onto the computer, cutting out the paper stage, we also see how sketches can be sent directly to our clients through e-mail or FTP[3]this allows our clients to see work in progress and for any changes to be made instantaneously. Look at eco benefits -you don't waste paper!

The success of the Internet has also changed the way that designers find inspiration for their work. Where before the digital age designers scanned through history books for inspiration they now can type the theme that they are searching for straight into Google and instantly be given a wide selection of results. This has also led to an increase in the aforementioned plagiarism cases as search engines allow ideas to be easily seen by many, increasing the opportunity for them to be stolen with no concept of ownership.

Another aspect of graphic design, which has changed with the increase in technology, is the way designers publicize pieces. Where before success relied heavily on word-of-mouth for designs to become popular and to be seen by people, nowadays there is the use of websites such as DeviantArt. COM, Linkdin. COM or Behance. NET instead. Websites like these have allowed artists on the other side of the world to view our work, which in turn has led to more commissions. QUESTOINAIRE EVIDENCE these websites have also incorporated people not usually associated with a particular field to become integrated within design. EXPLAIN we are seeing, even outside of design, an increase in sharing sites such as Flickr and stumbleupon. These websites load pages whose contents are rated by the viewers, who are given this information randomly. If your page is rated highly enough you will get more views from people interested in the same genres is that you are.

Even in today's digital age the process of creating design usually still starts with pencil. QUESTIONNAIRE as proof these pencil sketches are primarily used to create compositions usually to be reworked each time to experiment with new ideas. From there the pencil sketches are usually scanned into the computer then moved to Photoshop to clean up lines. Using brush tools, the image is occasionally coloured from the Pantone selection then it is transferred to the printer where finishes can be applied to the piece.

We have seen many designers who have incorporated both traditional and digital mediums into their work. The first designer to truly utilise a computer in terms of layout was April Greiman. Eskilson (2007) stated that Greiman was one of the first graphic designers make use of the powerful tools in a computer. He notes that Greiman did not view the computer as simply a

functional tool but as something that had led her to experiment in a way that opened up new avenues of design. Expand As she started to gain popularity we started to see the origins of the techniques that we still used today. In her work she uses techniques in a way that creates chaos on our screens. The images look slightly intentionally like they purposely " contain mistakes" as a way of creating a sense of energy that was not seen in the other work of that time. Anaylse a piece of work, unpack moe layering of information enabled by the computer

Today we are seeing an uprising against the over digitalized style work. We are seeing a rise in the popularity of traditional print-based media as designers are striving for the type of imperfection that was commonplace before the digital revolution. This can be seen today in many sources. Just one look at designs from today's creative area gives you the opportunity to see an abundance of textures and overlays used to create the implied use of traditional media. The problem of doing this is that creative directors can then why would a designer not just create traditionally?' Instead of overlaying texture that leaves the viewer to believe that the image was screen printed why not just screen-print the image in the first place? EVIDENCE

Don't let your perceptions of the what seems to be a " tradition" in the design community (or any other community for that matter) dictate how you go about your work" (Ward 2010)

In graphic design today people do not want to see lifeless art that looks digitalised. No longer does Western society want to see photorealism in

design. QUOTE the creative industry is actively looking for a personal touch in each bit of design that is viewed which can be seen... Products are also seen gaining popularity in the design world, this is due to the unique hand rendered quality that gives the ability to touch the product that is paid for, rather than just being sent a digital imitation of the original file. With work in the digital age, there is no essence of work. It is lost with the lack of physical hard copy of each piece.

" In other words, the unique value of the ' authentic' work of art has its basis in ritual, the location of its original use value. This ritualistic basis, however remote, is still recognizable as secularized ritual even in the most profane forms of the cult of beauty." (Benjamin 2008)

With work created in a digital environment there is no such thing as an original. We can never be in ownership of an original copy of the digital piece of work, as it does not technically exist, but is simply a digital file. Replicas can be made extremely cheaply with digitally created work, all it takes is a printer connected to a computer to create a copy of any print that you create. The fact that work can be made quickly and cheaply makes art open to the masses. It leads to a less hieracial and more democratic art ownership. An example of this is Andy Warhol and his work with the portraits of Marilyn Monroe. He used a famous image of Monroe, by Gene Korman for the film Niagara, as the basis for a series of silkscreened images. Although Warhol did create his own work, he used the language of repetition to show how art can be mass produced. Although his work is produced on a huge scale, the work he creates is very rare and expensive. EXPAND- can print on many materials

One of the most important developments of the digital age is communication. As designers we receive most of our work through electronic means be that e-mail, portfolio websites or just through forums. The use of e-mail has completely changed the way that designers communicate. WHY? Before the popularity of e-mail grew, designers were completely at the mercey of their clients. If clients telephoned, with regards to work, a company and no one answered the phone they would probably lose the commission. This contrasts today where a client can just send an e-mail to the company and it will be read, maybe not instantaneously but it means that the company had not missed work. With emails, we have the options for things like ' Out of office auto replies', which makes the client aware that it may not be responded to straight away but has been noted. One contrast about e-mails is that in this age they are not considered as a personal way of communication. We have lost the interaction with the client as it is hard sometimes to portray your point or opinion through text. This could lead to confusion due to a piece of work not being to the specifications that the client could not express through typing.

In Western society, many artists have utilised both traditional and digital mediums. These ideas show people how both mediums can come together in harmony to create an exciting pieces. One such artist is look at positives and negatives

When we look at the digital revolution and consider how it has affected technology, we must look at the impact change has had on the digital side of graphic design. One area that shall be focused on, that is actively changed, is the area of motion graphics and animation. We have seen the art of the

title sequence change over time. From its humble beginnings as a way of simply crediting the people who have been involved in the project, all the way through Saul Bass's reinvention of titles being a way to introduce the story, to Kyle Cooper today creating visually stunning pieces that both incorporate and link to the main story. One title sequence that specifically stands out is that of the HBO TV series ' The Pacific.' This title sequence takes us through charcoal drawings of the main characters, which in turn visually transform into live-action sequences of the character. This represents the change that the characters face throughout the series but also from a visual point, shows how traditional and digital mediums can come together to create exciting visual experiments.

Typography has also been reinvented with the use of motion graphics, we are now seeing static images of text being thrown across a screen in TV adverts and information broadcasts. The example of ' The Pacific' is used so that the viewer can be taken through a journey from the chalk drawings to the live-action sequence. This may subliminally give the audience a connection between the past and present. The design of a title sequence such as ' The Pacific' couldn't use digitalized work due to the context of the piece.

The area of 3D graphics is another part of graphic design that has been reinvented by the emersion of digital technologies. " From the very beginning of that change creativity and design was infused with the power of technology." (Hession 2010) Before the digital revolution 3D models were sculpted by hand and in films we had the use of puppets in place of what is today created by computer aided design. In films such as the original Star

Wars, all the aliens and creatures were hand held puppets. These puppets were then held by different animators in the position the director wanted. Today it can be seen how the models have changed. Now it is common to see, in different companies across the film world, several designers in front of their computers using software such as ' 3DS Max' or ' Maya' to create the type of artefacts that would have never have been possible if created by hand. QUOTE although some hand created designs are exceptional pieces, by utilizing 3D software designers are able to manipulate the character in ways never before possible. Models bigger than ever before-> Pixar work

In other areas like computer game art, we see the necessity of 3D modelling software. To create interactive worlds and destructible environments designers rely on computer technology. WHY? Objects created with digital programs are a lot easier to create and control. Finding a location in real life where you can control the elements and lighting to create an atmosphere would be an impossible task. In computer games, designers need to create a whole world for the player to interact with… By using 3-D software that designers can repeat visual items to save time and space on the disc. EXAMPLE The video game market is one of our society's highest grossing industries.

" Video games, once thought to be a fad, have worked their way into the fabric of international culture. At present, Sony has shipped more than 80 million PlayStation's worldwide and Nintendo have sold more than 110 million game boys.

When you look at the humble beginnings of the video game, from its Japanese playing cards roots to today's multi-million dollar industry we see how the digital revolution has changed the way millions of people interact with their computers. This is another example of the way the digital age has inadvertently changed the thinking of humanity forever. No longer are we restrained by our 9-to-5 jobs, when we can take on a second life in virtual reality. If a person has had a bad day at the office they can now load up the ' PlayStation3' and use it to take their anger out on people around the world by playing a first person shooter game.

The area of illustration is one that although touched by the digital revolution, hasn't been changed completely by it. Quote it is still viewed as a ' traditional' medium by artists due to the fact that most images are still hand rendered using inks and pencils. We do see digital illustrations but these make up a much smaller percentage of illustration when compared to the traditional illustration styles. One example is in the area of concept art. Here drawings are created loose and freely, by hand, as it easier for other artists to develop their own ideas onto a hand drawn image than it is to draw, scan and then email digital files. They can be jotted down on paper and simply handed over to another designer. It is after many changes and redrafts that concept art is then placed onto a computer and developed digitally from there. We see this technique with animated film from picture houses such as DreamWorks and Pixar and to an extent Disney animations. Images are drawn during brainstorming and if they are approved they are developed further by hand until they are passed onto the 3D development team. By

using this process designers can make little changes to animations quickly and easier than it would be to render a whole scene using 3-D software.

Even in this digital age there are many specialised traditional mediums in the forefront of design. In the area of print, such as mono-printing or silkscreen printing, there is currently an uprising in popularity in both traditional and hand rendered designs. By using techniques such as collaging we are seeing designers using a hands-on style of working. By working by hand, it allows designers to create one-off pieces or to create many individual unique pieces that add value when being resold. Example. The physical ownership is one of the main factors in purchasing of art. Mediums such as sculpture or paint still cannot be accurately replicated in the digital world, even with the recent advancements; there is no way for designers to be hands on with the medium they are using to create their piece.

Interactivity is one of, if not the main benefactor of the digital revolution. We are now able to create pieces where people interact with the things they see on screen. This has opened up a whole range of ways that designers can involve the viewer in the piece. For example on a website now people can be made to click on the specific area that they want to see, if you want to see football results you could click on the football on a webpage and be taken straight to that specific site. Not only are people looking at work online, now they are actively involved in the piece. Saffer (2006) states that the reason for interactive design is to enable connections between people, that interactivity has made easier communications between themselves and the world.

By looking at the sales figures of software like Adobe Flash we can see how popular interactivity has become. There are many websites and tutorials dedicated to flash-based gaming, as well as applications and advertisements and with their popularity we can see exactly how interactivity has become a pivotal part of graphic design. We are also seeing interactivity being spread to our mobile phones with the ' Android Marketplace', the ' Apple App' store as well as brand specific mobile applications shops. It has been another source of revenue for interactive designers. " Most interaction designers work on software, websites, and other technology like mobile devices. But interaction designers can also design services which have little to no technology in them. By services, I mean processes and ways of doing activities." (Saffer 2006)Talk about change

Today, designers still look at illustration as a traditional aspect of design. It hasn't changed much over the last few years and more specifically since the digital revolution as much as other mediums of design have. We still see designers using traditional mediums such as paints and pencils to create their work where in the digital age it is all mouse and keyboard. There are good points to both traditional and digital illustration…

In the area of illustration, in one instance being comic art we are still seeing traditional illustrators and colourist being hired to produce their work on an international scale. One such artist is Sean Phillips, an illustrator and colourist who has worked for Marvel as well as his own independent books, which have been sold worldwide. Phillips still uses traditional mediums, such as watercolour paints, in his work this being unusual for a colourist. This gives him a unique selling point as many comic book colourists strictly stick

to digital mediums due to a wide range of colours availability. Also ease of reproduction previously mentioned

As a viewer of today's digitalised graphic design medium a question could be asked. ' Could design go back to a traditional media? Would today's illustrators be able to make a name for themselves without the digital media? Could designers who solely use e-mail as a source of communication be able to survive? Instead of using Adobe illustrator pen tool, would designers be able to manually trace objects before putting them on the final piece? Would designers be able to survive without the ' undo' command?' answer these questions

One aspect of the digital age that is usually overlooked is the opportunity for designers to work anywhere in the world. No longer are designers stuck behind their desks working. With the growing popularity of laptops, and to a smaller extent notebooks, we are seeing designers being able to work anywhere in the world and still communicate with their home office. There are a number of freelance designers working on beaches or in the park without losing any commissions. This greater level of opportunity for designers to work in their own space has meant that no longer do companies need to hire in-house designers. This in turn has had a good effect on the industry as it means less money is being paid out to temporary workers who work in house at the company (quote)

One question that must be asked with the arrival of the digital age in relation to graphic design is, ' has the Internet made a universal style of graphic design through the world?' Whilst looking at digitally created work on the

Internet, it is extremely hard to see the national style of the designer. When we look, for example, at architecture there is a difference between buildings made in Spain against those made in the UK. We see the different building materials available to the region at the time of construction play an important part in the building process. That is how we define individual buildings in one town from another; and in succession creates regional differences. This is not seen in graphic design as throughout the world everyone has the same tools. If a graphic designer in Argentina wants to create a piece using Adobe Illustrator they will have access to the same tools that a designer would have here. This means that although the actual idea may be involved in the designers culture its tools may not necessarily be so. Maybe as designers we have to look past the tools that are used. Builders create their style not only in the materials they use but the designs that building adhere to. A builder uses bricks but can create many different outcomes. Do designers use the constraights of software to cover the lack of originality in their ideas? Quote this is also due to postmodernism

We are seeing a universal style throughout many areas of design not just limited to illustration. As Adobe has become the worldwide industry standard in design software, everyone is using the same programs to create their work, a question must be asked ' Are we restricted to the software limitations whilst creating?' Have we lost individual artistic flair, as designers are unable to replicate the styles they use in digital software? Although we are starting to see traditional brush tools being produced in software such as Corel Painter since CS5 Photoshop, they are nowhere close to being able to

create the same textures and brushstrokes that we can when using real brushes.

In graphic design we see styles come and go like fashion. Every few years we see a cycle of designers coming from art school re-inventing certain styles. Recently design has left the photorealistic style of images replaced with a retro style bringing aspects from the 1980s with designers utilizing neon colours and strong polygon shapes.

" Today's illustrators wear their respective styles like an overcoat, and unless major changes in fashion occur overnight, they tend to keep that coat for many seasons, while adding accessories that keep you up-to-date." (Wiedemann 2010)

We often see video game style art in this cycle. where the smoothed elements of the piece replicate a " perfect world." It is in instances like this that digital arts is often seen as similar to traditional art where styles gain and lose popularity over time. These stylesin art are also a theoretical approach to understanding culture of a particular time. Individual styles can become movements, with each one developing and advanceing our understanding, not just visually but also the context of a piece.

In western society use technology in everything we do. Listening to music at a train station on the way to work, checking the news on your phone in case anything interesting has happened. If we do not know something, we Google straightaway Wikipedia has replaced the encyclopaedia due to its instant results, which can be updated by the user. As technology advances we replace the old things with improvements. MySpace is not used due to the

popularity of Facebook. Images are not held in photo books like they used to be but will be uploaded to Facebook profiles. The same with music now we download instead of buying physical items these are then stored on a hard-drive but what happens if a computer is broken down or stolen. We lose our paths, our memories and personal identities all are on the hardware that we have on our desks at home. Have we given our computers our personalities? Have they become more than just a storage solution? do we depend on technology to match? Kids can't even spend a day without their mobile phones. tv show evidence psychologists are saying that Next Generation has addiction to technology quote surely it doesn't help stress levels in our society to be able to be spoken to at any point in time. When do we get a chance to turn our brains off? With companies requesting their workers to use blackberry's it means that we have no time to ourselves as we are in contact with work 24 seven. It is not that we leave work at 6 PM anymore; it follows us on the way to our homes. Your boss will not hesitate to call you because you are on holiday. If you are sick you are still expected to work from just because you sneeze does not mean you cannot type on a spreadsheet!