



王 荔 主编

新媒体·新观念·新生活

NEW MEDIA NEW IDEA NEW LIFE

— 2008

◆ 全国新媒体艺术系主任(院长)论坛

COLLECTION OF CHINA NEW MEDIA ART DEPARTMENT DEAN FORUM ESSAYS



同济大学出版社
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王 荔 主编

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——2008 全国新媒体艺术系主任(院长)论坛

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艺术科学的新征程

有人质疑:新媒体艺术还是艺术吗?问题的本身恰是说明新媒体艺术的技术与艺术合二为一性,也即技术与艺术的交融已成为新媒体艺术创作的主要方面。还需进一步强调的是:这里所指的技术与艺术是以数字技术为核心支持下的艺术创作。计算机及计算机软件就像是画家原来手中的纸、笔和颜料,所有的媒介均发生了变化。除此之外,艺术家还获得了能够超越人类感官极限的能力,当然,这是由科学家提供的各种视听等传感器起到了很大的作用。在新媒体艺术的创作过程中,艺术家会遇到以往在传统艺术创作过程中不曾遇到的挑战,即是将新技术不断磨砺为新艺术的过程。由此来看,新媒体艺术的王者必是属于能够融汇艺术与科学、创意与技术的整合与创新者。

新媒体艺术和技术在创意文化产业中要开发的主要方面有以下两大应用领域,也即当前国际上数字内容产业的热点领域和前沿领域:①数字动画与特效;②交互媒体设计。前者包含了计算机二维与三维动画、影视特效及影视包装;后者则包含了三维交互式游戏、多媒体交互以及硬件界面交互等分支。从这两大领域里,我们足以了解“the Screen”媒介的典型意义和特征。这是20世纪以来艺术与科学之间最大的合作与共享,即从未有过的数字图像技术对于艺术文学语言特殊的影响和作用。数字图像技术可以对时间和空间的存在方式不再是线性的和单一的重现,而是可以根据叙述需要进行非线性的重组、穿插、倒叙和剪辑等,完全可以对文本进行视觉和听觉上的蒙太奇组合,给以文字符号图像化和立体化,提供视频信息所特有的生动与丰富。极大地拓展了手工平面设计的局限,艺术家的创意因此而有了无限延伸的空间。除了获取由非线性编辑带来的编辑自由之外,影视后期特效加工的技术又使艺术家的创作从“复制”或“再现”的限制中解放出来。影视画面可以根据剧情需要“无中生有”,可以让历史场景“重现”,这使得在现实中无法再拍摄到的镜头通过加工便能获得。大量的文化演绎视频产品的出品,极大地满足了观众的视觉诉求。

交互媒体设计更能体现出受众的自主性和参与性。21世纪以来,在跨媒介艺术创新的语境下,交互艺术形式的作品越来越多。作者主要利用各种电子感应装置及各种传感器、数字图像技术、网络技术、虚拟现实技术、人工智能技术以及这些技术的综合使用获得创作目标。在欧美国家的一些高校新媒体艺术学科的课程中,设置了一门专业基础课:PHASIC & COMPUTING,可意译为“现实与虚拟的交互”。该课程讲授如何借助数字虚拟世界驱动现实中的物理媒介并与之互动。这样的艺术创作,无论从形式到内容都与传统的艺术创作有明显的不同。艺术家可以利用“电脑”将人脑的记忆、逻辑推理和审美活动予以体外的延伸和拓展。通过仿生手段即模拟人类各种感官,诸如红外线视觉传感器、听觉传感器、温度和湿度传感器等高精密仪器,以实现获取人类感知极限以外的信息,从而达到“交互”的目的。“交互”可以是人与机器界面、界面与界面之间。总之,这种复合电子技术已成为支持创作交互艺术作品的核心技术之一。交互艺术还能让观众获得某种“沉浸感”和“现场感”,直接感受大自然被严重污染后的氛围,或者来到宇宙天际中才能感受到的宏大与神秘。总之,与你交互的是经由艺术家或科学家想象和创意创造出来的虚拟世界,但虚拟中却反映了创

作者对现实社会、对人生及人赖以生存的自然环境等的哲学思考。

从中国出版科学研究所公布的《从传统走向现代的国人阅读——第五次全国国民阅读调查综述》^①显示:报纸是阅读率最高的文字媒体,读书阅读率止住连续下滑趋势,网络阅读率继续大幅攀升。近两成有读书习惯的国民阅读电子书。手机报和电子杂志的读者规模均超过 200 万人。在动漫产品类型中,动画片/动漫影视的接触最高,网络游戏和单机游戏紧随其后。在多媒体时代,影视和游戏这类运用影、画、声、光等多种手段而成的、动态的、表现丰富的动漫作品更受青睐。与之相比,漫画书和动漫杂志等静态杂志作品阅读人群比例较低。该调查综述以大量最新调查统计数据证实了我们所处的跨媒体时代现实状况和变化趋势。

新媒体及新媒体艺术的先进性和超越性,不仅是就本体而言,而是还能将纸质等其他传统媒介赋予新的生命及活力。文献资料、文物资料、建筑文化遗产及非物质文化遗产等都可以通过新媒介的途径和手段将其记录和保护、存储和传输。总之,发现新媒体和创造新媒体,就是为了解决传统媒体所无法解决的问题,将人类视为珍贵的所有图像和音像信息资料永远保存下来,尤其是视觉、听觉在传播过程中对人所起的震撼与感染作用是无法用其他方法取代的。新老媒体之间的关系并非是一种取代关系,更不是互相排斥的关系,而是一种互补共享的关系。新媒体形式的不断变化和更新,对于传统媒体形式而言,永远只是做加法,而非做减法。

今天人们对于时间、空间、距离等概念又有了与以往不同的新的认识,不知不觉地减弱了对时间、距离、场所等固有概念的感受,甚至将许多时间花费在游历“虚拟空间”上。“虚拟空间”已成为当今最重要的媒介或载体,承担着各项信息资源的存储和传输。克服时空障碍对人类来说已是势在必得,矛盾的主要方面已转向对于“虚拟空间”的如何开发、利用、占有及控制。“虚拟空间”在为今天多元化的跨媒体传播环境创造了良好条件的同时,也给日趋全球化的经济发展、产业转型带来新的压力和问题,挑战和机遇。面对“跨媒体传播”,受众与从事媒体经营的业界会有不同的感受。受众乐于接受并从中可以进行选择的丰富多彩的传媒形式,而业界却经常要为满足受众的需求而作出困难的抉择。比如出版社和印刷公司,既要保留传统纸质媒体产品出版和印刷方面的人力、财力、物力方面的资源,又必须培养和吸纳能够从事数字出版方面的新一代人力、财力、物力资源;又比如高校对艺术人才的培养,仅用传统的手工技艺式的培养方式是远远不够了,必须加入数字或电子艺术的教学内容,才能使获得相对完备的知识体系。如何对接传统教学?又如何对接市场人才与产业需求?已成为培养艺术新人重要的课题和最迫切需要解决的难题。

新媒体艺术作为一种新型的艺术表现形式在北京奥运会的开幕式上得到了很好的应用。呈现在“鸟巢”中央的那幅中国写意画卷式的巨大电子软屏,不仅展示了中国的历史和文明,还昭示着艺术科学时代的已经到来。北京奥运会的开幕式向我们传递了这样一个信息:大力弘扬中华民族传统文化和大胆借鉴吸收外来文化,是繁荣发展艺术科学的重要途径。中华民族优秀的文化艺术,是在同外来文化艺术的相互交流、碰撞和竞争中形成的,在我国改革开放特别是现代信息技术日新月异的形势下,要大胆而辩证地吸收借鉴外来文化

^① 中国出版科学研究所:《从传统走向现代的国人阅读——第五次全国国民阅读调查综述》,光明日报 2008 年 8 月 26 日 12 版。

及其艺术科学成果,不断拓展我们艺术科学的视野,丰富我们的学术和创作积累,才能加速艺术科学的建设发展。从根本上说,民族文化的生存和发展,将取决于它的优秀传统文化的保存和文化创新。中国艺术科学的研究将肩负着总结中国优秀传统文化艺术、借鉴世界先进文化,创建高质量新文艺的历史重任。同时它对构建社会主义和谐社会也将起到不可低估的作用。构建社会主义和谐社会,关键在于我们对世界要有和谐的科学把握,其中,必不可少地需要有对艺术科学的把握。

2008“全国新媒体艺术系主任(院长)论坛”是在国家教育部的高度重视下,并在国务院学位办具体指导下,经“全国新媒体艺术系主任(院长)论坛”执委会成员高校齐心协力的筹备下举办的,它的举办必将对推动我国新媒体艺术学科及艺术科学的发展作出应有的贡献。

2008“全国新媒体艺术系主任(院长)论坛”

执行委员会轮值主席 王 荔

2008年10月

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第一篇

新媒体艺术与学科发展

New Media and Education

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Abstract New Media has no definition. That makes the successful teaching of New Media near impossible. In an attempt to identify its key concepts, this paper reduces New Media to a few basic tenets. Then, it outlines an undergraduate through PhD curriculum for use in all media, and specifies some places for New Media inclusion.

Key words New Media Education

1 WHAT IS NEW MEDIA?

1.1 Background

In Lev Manovich's 2001 book *The Language of New Media*, he compares New Media to early cinema. Early cinema was a moving image with sound and text—a multi-medium. His argument is that New Media is a combination of multimediation into one form. What made media new was his language argument, or the principles of the New Media:

1. Numerical Representation
2. Modularity
3. Automation
4. Variability
5. Transcoding

Manovich updates his view on New Media in the article *New Media from Borges to HTML* that prefaced the 2003 book *The New Media Reader*. In the article he makes eight propositions for New Media:

1. New Media versus Cyberculture;
2. New Media as Computer Technology Used as Distribution Platform;
3. New Media as Digital Data Controlled by Software;
4. New Media as the Mix Between Existing Cultural Conventions and the Conventions of Software;
5. New Media as the Aesthetics that Accompanies the Early Stage of Every New Modern Media and Communication Technology;
6. New Media as Faster Execution of Algorithms Previously Executed Manually or through Other Technologies;
7. New Media as the encoding of Modernist Avant-Garde; New Media as MetaMedia;
8. New Media as Parallel Articulation of Similar Ideas in Post-WWII Art and Modern Computing.

In the 2004 book, *New Philosophy for New Media*, Mark Hansen takes a post-modern philosophical approach to New Media. First, he begins by discounting Manovich's principles of New Media. Then, Hansen likens New Media to specifically the interactive image. He builds an argument for New Media being an extended phenomenological concept of embodiment technesis. Though part of his introductory groundwork, Hansen does give some indication to the binary or numeric representation of New Media.

Mark Tribe's book *New Media Art* (2007) gives potentially the most current interpretation. He states that New Media is a mixture of Media Art along with Art and Technology. He defends his position by saying, "... we use the term New Media art to describe projects that make use of emerging media technologies and are concerned with the with cultural, political and aesthetic possibilities of these tools."

These references show that there is no agreed upon definition of New Media. Furthermore, it demonstrates how difficult it is to teach New Media. When there is no framework or canon of reference, creation, exhibition, and critique of New Media is more like anarchy or oligarchy than democracy or meritocracy.

Many of the principles, propositions, philosophies, or combined definitions of New Media are flawed. The principles of Modularity, Automation, and Transcoding are Industrial Age or World War II age terminologies. Manovich's first proposition is a partial oxymoron, and his principles two through six as well as number eight are not novel to New Media. Hansen takes a narrow view of art with his embodied technesis theory. While it does begin to counter the Cartesian dualism, his swatch of selected artists is very limited, thus limiting his ability to define. Tribe's selection of artists is better, although he appears to show, rather than tell, that which is New Media. Additionally, political art is still political art regardless of the media that is used. Some artist selections are political artists who are not New Media artists. The curatorial choice in aesthetics represents a particular New York City aesthetic and Tribe's bias.

1.2 The Tenets

This paper proposes only three basic tenets of New Media.

1. Common Numerical Representation
2. Old Media
3. Network

1.2.1 Bit by Bit

Everything is a bit, 1 or 0, of data. Text, image, sound—everything is universally represented, stored, modified, and combined numerically. The distinction between different media evaporates. This implies that the data is open for subjective representation. Images can be heard and audio seen. Earlier we said that transcoding is not novel enough for New Media, so what are we getting at with the common representation? Manovich's proposition of metamedia begins to describe this situation. All media becomes meta when its individual distinctions are not required for processing or use. Take for

instance, a realtime simulation. The compositing engine of a computer sees all media as binary data. The computer's only concern is how to put sets of data together. This means that the artist has to externalize their vision into a process of management over visual, text, and audio. The format of the media becomes meta, because the content becomes uniformly binary and displayed on a single output format-the pixel.

Is it possible that this metamedia is a precursor for post-media? What would a full evolution of New Media into a period of art with post-media be? When mathematics can represent all media, will we be at the end of art? Computer scientists have already created art filters: Seurat, Van Gogh, and Chuck Close; and they have created rendering techniques that replicate art styles or the hyper-realism of photography. How long before an algorithm is created to generate data-media-that inherently has meaning or artistic intent? Does Jim Campbell's *The End* represent the onset of post-media?

1.2.2 Olde Tyme

New Media reuses the conventions of Old Media: TV, film, radio, telephone, and print. Even the computer operating system is an iconography of an office that has files, folders, and trashcans. On websites we find shopping carts, picture albums, radio streams, and telephone services.

It is clear that the New Media platform is one that has consumed most Old Media forms. New Media conventions are remixed Old Media conventions. The remixing also spans Old Media content. The remixing of content and conventions is how New Media attempts to generate meaning. New Media becomes a presentation of remixed Old Media.

1.2.3 Network

Networking in New Media has two major components. The first is the ability for consumer level mass communication. The second is that the Internet is a mass database of collective consciousness.

The ability to send or receive media has been greatly facilitated with the Internet. We are able to be tele-present at meetings, conferences, or with family. Web cameras allow us to have 'distance seeing' powers. Conceptually speaking, we can mentally be at any networked location through our local portal.

The Internet is the largest database. Before the concept of search or google was infused into modern day language, how did we ever find anything? It is impossible for any human to navigate the Internet without the help of computers that index the data and provide a mediation to peek at that data.

The Internet is a place of public and private information. It shows trends in collective thought or interest. The number of searches for New Media has been steadily decreasing from the time that Google started tracking the trend in 2004. In terms of collective consciousness it appears as though New Media might be coming to an end. It also lists the number one city for searching New Media — New York City.

If we combine the two networking components, communication and the collective

database, we create the hive-mind. Anyone, anywhere, can connect to, and then contribute or research, the collective for information. Envisioning the Borg from Star Trek is likely to be a little extreme; although we do need to consider how much personal information or individuality is lost.

1.3 The Pieces Don't Make the Whole

The downturn in searches for New Media should be a disconcerting thought. New Media hasn't really established itself as a valid artistic practice. This is particularly relevant to its reliance on Old Media. In terms of the three stages that any emerging media undergoes:

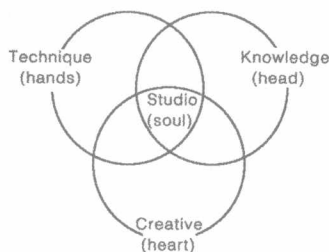
1. Do anything;
2. Replicate previous media;
3. Do something new.

New Media appears to be perpetually stuck in stage two. This does not mean that New Media was a fad and has nothing new to offer. It means that New Media is at a point of transition and needs to mature enough to begin stage three. This is where a better education for New Media is needed. Indeed, progressing from stage two to stage three would eliminate one of my New Media tenets, so now is time to replace it.

2 NEW EDUCATION

I've experienced, taught, surveyed, created, and meditated on how art curriculums should be developed. While these are my opinionated observations, I believe that the following model has the potential of developing outstanding artists.

There should be three primary areas of course work: Technique, Knowledge, and Creativity (Fig. 1). These three are then focused into a student's studio practice. Technical and spiritual terminologies are listed to assist in understanding their combination.



Technique (hands) : painting, printing, sculpting, drawing, music, writing, acting, computer applications, programming, etc.

Knowledge (head) : history, philosophy, science, humanities

Creativity (heart) : unique problem solving, conceptualizing, inventing, entrepreneurship, ingenuity, spirituality.

Studio practice (soul) : The mental and physical space where students synthesize the three bases in the production of their artwork. It is the core of a working artist.

Fig. 1 Three areas of learning that comprise an artist's studio practice

Most art programs are too heavy on the Technique portion. This results in an industry and

commercial labor force. Knowledge is often found in art schools within a larger university that require a university science and humanities core. A few non-university art schools will have these

courses; although their depth may not be as sufficient. Creativity is typically something that is assumed in most technique courses. Rarely are strictly creative course ever offered. Creativity can also be thought of as effort or desire, which is why it carries the spiritual label of heart. Studio has typically been thought of as place, and not developed specifically as a course. Thesis Advising at the graduate level could be a current equivalent to a Studio course.

Underlying the curriculum is a subtle give and take mentality through the teaching and critique arrangements. As a student starts with the undergraduate curriculum, they take in from everyone around them. At the graduate level they take in a little less, and begin to give back to peers and undergraduates. Finally at the PhD level students take in just a little, but are giving only slightly less than a member of the faculty. Conceptually, students begin by learning through instruction and transition to learning through teaching at the end.

A common thread throughout the curriculum is the ample opportunity for student interaction with colleagues, faculty, and students in different levels of degrees. This mixing will help to build a strong community and flow of ideas.

2.1 For New Media

New Media education should not differ from traditional style art schooling in a wider view of curriculum and concept. As with any art practice, studying with faculty within the area of interest is paramount. Where New Media concerns lie is with a concentration of more technical courses for the Knowledge portion and specific middle and upper level courses for Technique portion. The middle level courses will prepare the students with basic audio, video, image, and web skills. The upper level Technique courses will be software, hardware, and network programming. A school that focuses only on New Media for undergraduates is missing a large piece of artistic technique training. For example, where I teach no two-dimensional technique is required, nor painting, nor drawing, nor printmaking. As a direct result, in my 3D animation course, students don't understand perspective, vanishing points, depth cues, positive/negative space. New Media at Graduate or PhD level is generally more accepted for student focus. At those levels, students should be permitted to use the Media that best fits the conceptual drive of a particular project. This also encourages students to consider their artistic practice around ideas or themes instead of a specific media or tool.

A school that wants to teach a New Media curriculum must commit to the technical support it requires with regular renewal as needed. This includes equipment, network, servers, and personnel. Realistically, in an existing art curriculum it will take 20 to 30 years for the full turnover of students and faculty to really see the effects of this type of

program. Tweaking and technique changes are to be expected.

2.2 Undergraduate

2.2.1 Core

The Undergraduate structure is designed to give students a broad base in technique. The studio idea is introduced in the second year. Students start developing their studio and using it to create artwork. At an undergraduate level, the Studio course consists of the entire class making visits to each student's studio and giving feedback.

It is important that undergraduates understand the need for all three areas: Technique, Knowledge, and Creativity (Tab. 1). Even if a student only wants to paint, they are required to take some courses in other media. Additionally, students are encouraged to understand how Knowledge courses connect to themselves on a personal and global scale. In the third year all students are encouraged to take one or two semesters in a foreign country. This opportunity prepares the student for future professional travel, residencies, and personal networking. It also allows the student an opportunity to reinvent themselves upon arriving in the host country; and another opportunity to reinvent themselves when returning.

Tab. 1

the Undergraduate Course

year	Fall	Spring
1	Technique Technique Knowledge Creative	Technique Technique Knowledge Creative
2	Technique Knowledge Creative Studio	Technique Knowledge Creative Studio
3	Technique Knowledge Creative Studio	Technique Knowledge Creative Studio
4	Technique Knowledge Creative Studio	Technique Knowledge Creative Studio

2.2.2 Qualifying Reviews

There are qualifying reviews at the end of the second and fourth years. The second year review is a studio visit and critique by a mixed faculty who determine the continuation of the student in the program. The student is expected to show artwork and be prepared to talk about their artwork and direction of interest within the next two years of the program.