

get a new address.ok?

Telephones? Old Hat. The humble letter?

Archaic. Even the fax has been

superseded by the global computer

network—Internet.

text Sandy Indlekofer-O'Sullivan

INHABITING CYBERSPACE

Over the past twelve months the print and electronic media has been spitting out stories at the rate of lotto numbers about the Internet and the World Wide Web—both forerunners of the much ballyhooed Information Superhighway (or Autobahn for metaphorical jesters). Terms such as cyberspace, surfing the Net, navigating the Web, moo-ing, Net-chatting and virtual space have defined the digitised landscape of Internet and the user patterns of its computer junkies. And now, artist participation in the cyber community has become a major issue for policy makers, theorists, service providers and users of Internet (the Net)—particularly since Creative Nation's pledge of \$84 million for multi-media cultural production 'in the Information Age' over the next four years.

Unlike the single-way visual interface of television controlled from a centralised, bureaucratic base (providing little opportunity for response or debate), the Net allows artists to present their work, 'talk' with other artists and interactively develop projects. But the Net is still a largely uncharted space—with questions of who controls the space, how equitable is access and representation, and how copyright and moral rights are being enforced still under discussion.

Many cultural groups are now demanding equal space and control of parameters on the Net. The uneven balance of groups on the Internet has seen Net theorists proposing the creation of frameworks that encourage under-represented groups to participate in the construction of the space. In 1991 Jane Shefton, an Internet theorist exploring the gender and social balance of the Net, argued that the Internet was "...spiralling towards the unholy land of the *Lord of the Flies*; the boys control the space and map out a vision that speaks more of the desire to desire, than the desire to create... while men remain the creators and controllers of the space, they define our roles in it as women".¹ Shefton's attack on the construction, curation and

moderation of Internet may now be perceived as dated, since many changes have occurred in Net activity since her article appeared four years ago. At that time member statistics of the American watchdog of the Internet, The Electronic Frontier Foundation, showed a 96 percent gender imbalance towards men.² In more recent years over 300 feminist-related groups have formed; issues of pornography have been addressed at forums intent on developing an Internet Code of Conduct; and women have begun to control and moderate groups in all disciplines. Despite these apparent advances in Net representation, according to statistics produced from a survey completed in March 1995 by the Rissa Group, a slice of Net-activity showed a female user statistic of just 10.2 percent.³ Similarly, those working outside the cyber-related medium are still not represented. If Net-use reflective of the entire community is desired, opportunities for these groups to become involved in the planning of cyberspace must continue to be positively reinforced by all the relevant agencies.

During the Creative Nation conference held in Sydney in early 1995, the visibility and promotion of artists was identified by conference co-ordinators as an important step in contributing to the cultural value of the Net. Construction of the space was acknowledged as being traditionally out of the control of these groups and suggestions of empowerment and participation of artists in the planning and implementation of cyberspace was publicly encouraged by Creative Nation's protagonists.

There are, however, a plethora of unresolved legal and regulatory problems arising from the new digital environment. Artists looking to the Net as an exhibition site must be aware that work can be manipulated or its use abused without consent. While copyright is automatic in the Internet form (as in print and exhibited media) issues around the international enforcement of copyright are still being argued by lawyers and

watchdog groups concerned with intellectual and artistic property. Further, the issue of payment and acknowledgment for viewing or accessing an exhibited work through the Net is still in a trialling stage.

While issues of copyright and moral rights in exhibited electronic images are being nipped out, craft practitioners can still use Internet's World Wide Web in countless productive ways. But first, let's understand how the World Wide Web works. As a global connection of computers, the Web allows both access and display of video, text, sound and still images. Each computer connected to the Web can store information on any subject for other users of the Web to view, as they would a large database. These spaces are called Home Pages—a computer screen showing visual and text information. Access from one computer screen to another through the Web is possible by a system of direct addressing or through searches of relevant keywords. Home Pages can be linked to other relevant pages, and it is this connectivity which allows programmers of the Internet to create indexes for the Net user to access—transforming Internet into a complex database, with subjects accessed by association.

Within the framework of World Wide Web artists can present digitised representations of their work to a global marketplace. Craft co-operatives are now forming to proactivate the sale of production ranges through an order/creditcard purchase system. DesignLink is an example of a Web Page offering an on-line agency for crafts practitioners to market their work; available to a global client base, work visually displayed or textually detailed is accessible by sixty million users of the Internet. This form of on-line agency provides both the artist and the consumer with a service and market reach which would be difficult to parallel via more traditional forms of marketing and communication, or within the same budget and time lines. Like electronic banking, Internet can facilitate an immediate response

for a practitioner testing the market for a new production range, or a conceptual artist seeking random feedback on a work-in-progress.

SURVEY OF CRAFT ARTISTS ON THE NET

Exhibition and marketing agendas aside, the Web is a significant resource and research forum for practitioners and theorists. The estimated sixty million users of the Internet indicate the value of groups in highly specialised fields of crafting, allowing individuals to share information and resources within minutes or hours on a global scale. For instance, ceramists can access a Home Page which provides a database of glazes, established and maintained by a group of clay artists researching and working within this field; glass artists have a choice of three different Home Pages which detail the latest research and techniques in hot and cold glass through image and text. Karen A. Droms, an American textile artist and theorist finds that Web digitisation allows her to exhibit rendered 3D images of her work, in a form similar to CAD (computer aided design). These 'animated' images can then be viewed on the Home Page from which she markets and sells her limited edition range.

Information sharing generally occurs within e-mail discussion groups. E-mail—frequently the first entry point for new users of the Net—uses a unique addressing system between computers to facilitate the exchange of text between two parties. A jeweller in Detroit might be having particular problems with patinated metals. She can send a note, via her computer, to a relevant Home Page and literally within hours, via her e-mail address, have responses on her computer screen from places as far flung as Alice Springs, Auckland, Lima, London and Tokyo. It's quite probable that her computer screen will roll through dozens of responses from around the world. Discussion groups available throughout the Internet include over five hundred arts-related lists, allowing

members to engage in a global forum.⁴ ARTCRIT, an art criticism discussion forum, and CRAFTS-L, forming a discussion of crafts practice and theory are just two groups which encourage discussion and the dissemination of information between their subscribers. Object surveyed these groups for responses on their involvement and interest in the Internet. A staggering 250 responses were received from around the world within 24 hours of sending the request. [See page 33 for a selection of responses].

The majority of participants in CRAFTS-L claimed that the group had become an intrinsic part of their practice, providing both information and resources, and spurning a 'Chinese Whispers' or anecdotal development of ideas. A recent posting to CRAFTS-L from US textile artist, Judy Heim, demonstrated the personal nature of the mailing list forums, and the way in which a thread can develop. Heim simply told a story from her childhood: "When I was a kid, to keep me busy my mother made me sew yo-yo's. We lived across the street from a cemetery, and we used to walk through the cemetery in the evening after the caretaker had straightened up around the graves, and pick out all the satin ribbons from the faded funeral bouquets in the garbage piles. This was years ago, and the satin ribbon on these bouquets was beautiful—not the cheap stuff on floral bouquets today."⁵

The retelling of oral stories forms a large part of the discussion group forum, providing opportunities to exchange information which has cultural and personal significance. Judy Heim's story provoked a large response when it appeared, branching off into discussion about the quality of ribbon, the significance of grave sites, the effect of this experience on a child. This form of personalised exchange encourages the user/practitioner to write themselves into the history, development and conceptualising of craft. They cease to be passive readers of the text and instead, become interactive participants in

the extension of a story's narrative.

Over the period of a week, the CRAFTS-L group's discussions ranged from a debate about definitions of art and craft through to instructional on the use of materials in cross media art forms. It also contained many individual responses to works in progress which had been aired on the Net as text or image. The dialogue through ARTCRIT, more concerned with the critical and theoretical aspects of all visual art forms, was largely carried forward by its subscriber base of academics and curators. ARTCRIT discussion included an exchange of cited texts in the field of industrial design; a discussion on the temporary artform within postmodernist theory; a proposal for an on-line theoretical design journal; and regular advertisements for employment within the field. Both groups encouraged members less acquainted with the Web to request information, and nominated group leaders (moderators) to provide assistance in using the Net.⁶

The Internet, as an expedient and responsive forum for research, can provide practitioners working in both practical and theoretical areas with the opportunity to cast a wide 'net' in a search of relevant information. Scientists, engineers, archaeologists and many specialists in every discipline inhabit the Net. Their skills and cumulative research are a valuable resource for anyone searching outside of their own discipline. In *Object* 4-94, for instance, Robert Baines critiqued Crucible (an exhibition concerned with materials and processes), arguing that the project's curation required a more rigorous investigation of new processes.⁸ Any one of the seven exhibitors working with fibre, metal and clay could have expediently accessed the Net for up-to-the-minute research on materials technology in their field. A user is able to join any number of groups at one time: a ceramist might, for instance, join a design discussion group at the same time as a feminist theory discussion group, or a group concerned with Global Coastal Representative Craft or CLAYART. There

is no fee for joining the group, apart from the cost of Net connection, and there is no obligation to remain a part of the group.

NAVIGATING THE NET: DESIGN, CURATION AND HYPERTEXTUALITY

In order to effectively inhabit cyberspace, the crafts practitioner will require the means of constructing a framework in which they may create, exhibit and engage in information exchange. Until recently these skills would have involved complex computer programming and a dedication to maintaining a current knowledge of new technologies.

However the tools for creating the frameworks have become simpler. Nowadays, due to World Wide Web's computer language called Hypertext, creating a Home Page of information, visual images, video and sound is no more difficult than learning to use a simple text editor. The Hypertext language, which sets the medium of the Web apart from its predecessors, allows the user to create an audio-visual/multi-media presentation in their Home Page using simple commands. Hypertext does not require complex programming to construct or maintain a Home Page, nor does it take up a large amount of disk space.

Hypertext language, however, creates a dilemma for the crafts practitioner. Weight, texture and depth cannot be accurately represented in virtual space. The dimensional restriction of a computer screen makes the viewing of many three dimensional art forms inaccurate or significantly compromised. However as artists begin to understand and construct the space of the Internet, they may find that hypertextuality provides a format for art to be recontextualised and exhibited by employing different spatial concerns. Rather than presenting multi-dimensional fields of real space, the Web offers a depth of field by creating direct links to associated works thousands of kilometres away.

In 1994 a gallery opening in Toronto was uploaded as a video file to the Web. The gallery could then be viewed using Hypertext software and saved to disk for future reference. In another example, *Postmodern Cultures*, an electronic and hardcopy journal, uses the electronic nature of the medium to illustrate journal articles with visual walk-thrus, sound files, videos and other Web devices. Although the hard copy of this magazine remains popular as an archival record of its offerings, the electronic version succeeds in creating a display which extends the static representation of work published in hard copy.

In addition to designers and co-operatives creating personal Home Pages to exhibit current work, there is an on-line journal for paper artists, several visual arts theory journals, and over eighty photographic galleries. There are more than three thousand visual craft/arts-related destinations and events, with millions of potential contributors to each site. Home Pages can also be linked to other relevant sites in apparently endless configurations. Kathleen Burnett suggests that the role of Hypertext is to provide a structure that defies the traditional ideas of form and connectivity: "What distinguishes hypermedia is that it posits an information structure so dissimilar to any other in human experience that it is difficult to describe it as a structure at all. It is non-linear, and therefore may seem an alien wrapping of language when compared to the historical path written communication has traversed; it is explicitly non-sequential, neither hierarchical nor 'rooted' in its organisational structure, and therefore may appear chaotic and entropic."⁹ It seems clear that the use of the Web as a forum for crafts exhibition will depend on contributing artists and curators acknowledging that the landscape and architecture of the space is, in every sense, an antithesis of the conventional gallery 'cube' as we have known it. [See John Conomos' article in this edition for an extended discussion on exhibiting in cyberspace].

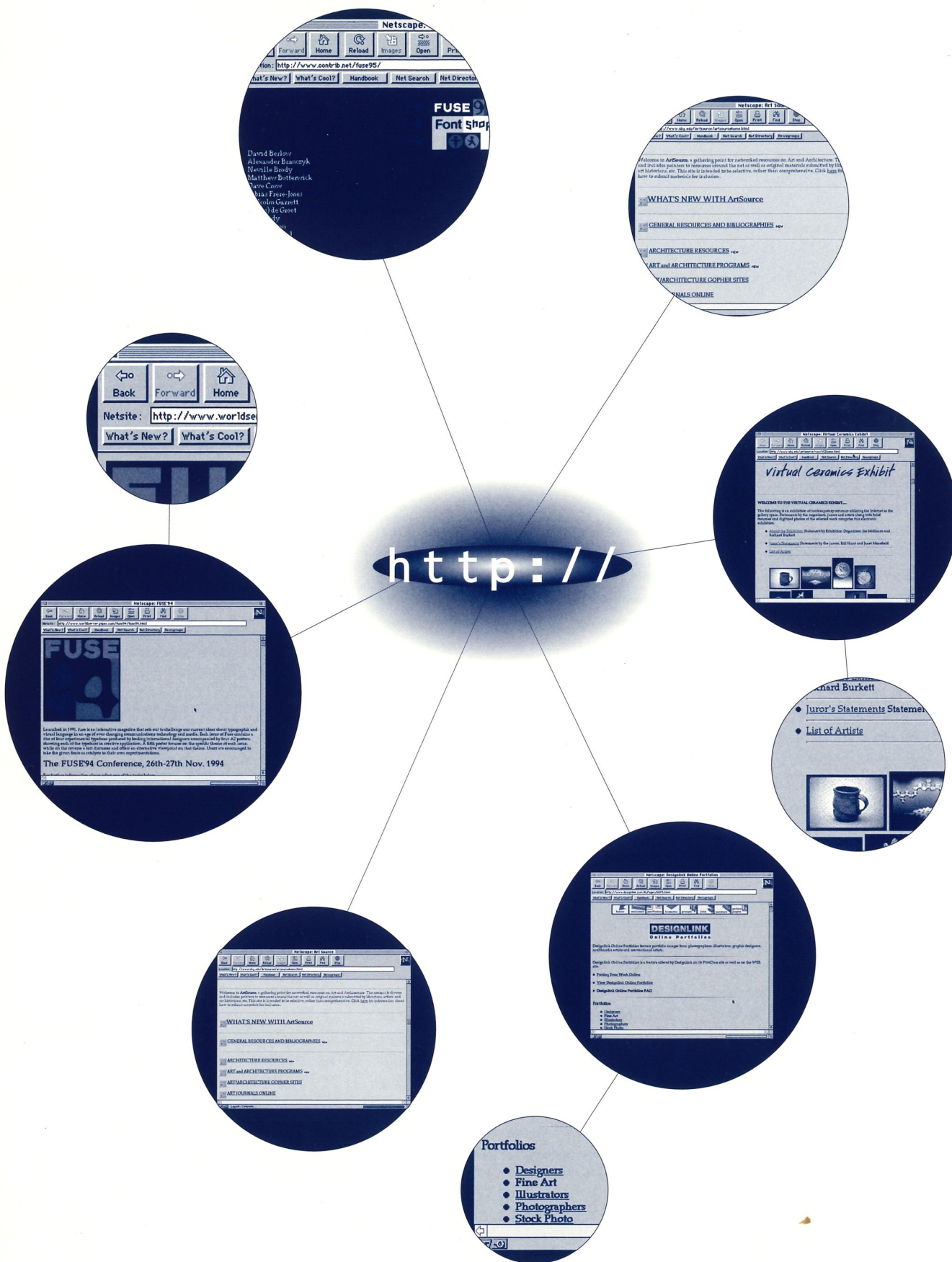
There are, however, still some prohibiting factors for

Australian artists. Costs in Australia, outside of a University environment, can be comparatively high for the extensive use that effective charting and navigating of the space requires, or for the construction of a Home Page. However many artists can still browse and contribute to the Net without setting up individual Home Pages. Pages can be constructed by a group of Net-users with common interests and contributions can be made at a significantly lower cost on a 'per user' basis. Wide use of the Net will bring about more service providers at increasingly competitive rates. Like personal computers and mobile telephones, connection to the Net is bound to become a mandatory business tool. For artists, it has myriad additional benefits as a research, development, exhibition and marketing tool. ◯

ENDNOTES

- 1 Jane Sheffton, *Demanding the Space*, Iowa Women's Press, 1991, p2.
- 2 J. Rassmussen, *Statistics*, Electronic Frontier Foundation, 1991, p12.
- 3 Mike Rissa, *Statistics on the Internet*, Rissa Group, Helsinki, 1995, p3 (mike.rissa@mroy.fi).
- 4 Sandy Indlekofer-O'Sullivan, *Creative Artists Accessing the Internet*, Online Publications, 1994, pp105-108.
- 5 Individual Contributions from CRAFTS-L Listserv discussion group. 15 March-2nd April, 1995. (listserv@bigvax.alfred.edu)
- 6 Judy Heim. CRAFTS-L Listserv discussion group. 4 April 1995. (listserv@bigvax.alfred.edu).
- 7 Individual Contributions from ARTCRIT Listserv discussion group. 1-18 April 1995. (listserv@vml.yorku.ca).
- 8 Robert Baines, 'Journey into Technologia' in *Object*, 4-1994/95, pp34-36.
- 9 *Postmodern Cultures* v3, n2, January, 1993, pp1-18 (WWW http://jefferson.village.virginia.edu/pmc).
- 10 Individual Contributions from PSEB Discussion Group, 1-10 April 1995.

Sandy Indlekofer-O'Sullivan has been Resident Artist in the cyber and sound text area at the Wollongong City Gallery since 1994 and is completing a Research Masters in Creative Arts at the University of Wollongong. She is co-ordinating the Australian program of the UN's conference of The World's Women Online Project in August 1995.



"The most powerful use of the Internet for craft or design theorists must be the access [it provides] to other cultures. If I am researching any aspect of a culture in any country in the world, I can research it on the Net and get responses from people from those countries. I would never have this kind of access in real life. The medium is incredibly powerful. I had occasion recently to ask for any texts referencing the development of glass arts in Mexico during the 19th Century. The responses I received not only suggested a whole bibliography of items, but it began a discussion on Mexican glass arts. From the discussion, I gathered that the way in which I was approaching the writing was rather outdated. This of course was very useful for me." Jackie Corbee, Designer, Arizona, USA

"I sell many of my designs through the Internet. I am a designer of glass art and have a Web page that people can reach if they want to see my designs... I make work by commission and I have editions of existing works displayed for all to see... I get orders from all over the world. I have never been concerned about copyright; no more concerned than if I had the images in a book or a magazine or in a flyer. After all, anyone can steal an image; it is still protected by my copyright and I have the best copyright proof—my own marked Home Page. I joined the ARTCRIT mailing forum because I wanted to be part of a list that had some discussion about the critical and conceptual theories of art. Many of the other groups simply provide practical information, but ARTCRIT often has engaging and interesting conversations about the concerns of 'art' and 'craft' and 'design'." Frank Wayne, Glass Artist, Durham, United Kingdom

"The Internet allows me to network and exchange information and ideas with other designers working in similar fields. The usefulness of the Internet for me is twofold: firstly it gives me access to discussion of current theory and practice in design; secondly I have become a more visible designer. It gives me a prominence which I don't believe I would have had outside of the Internet." Frank Jenssen, Designer, New York City, USA

"I make jewelry as a small-scale retail business and am now receiving via e-mail the postings from the CRAFT-L group which shares practical information such as sources of supplies, books and videos, societies, techniques, problems, pricing and marketplace issues, and exchange ideas on philosophical issues. The Internet is a wonderful way to collect, display and retrieve information of all kinds." Susan Campanini, Jeweler, Illinois, USA

"Several months ago on ARTCRIT there was a discussion concerning the definitions surrounding 'art' and 'craft'. I was dismayed to find that many on the list felt that 'craft' did not deserve to be discussed within a critical forum. I was so angered by this response that I and several other ARTCRIT members continued the thread—arguing for the need to engage in critical theoretical discussion of craft. This, in turn, led to a discussion on definitions of craft, issues of professionalism, and ideas about conceptual and edition-based work. It is this kind of discussion that makes this forum so frustrating and yet so empowering. It is a great place to be able to really make a mark." Jean Kayser, Designer, New Jersey, USA