

EDITORIAL - p.2

ABORTION:- THE BANDAID SOLUTION

Melinda Tankard Reist - p.3

'AND THE ANGEL DID SAY': A MEDITATION ON GENDER AND GENETICS IN THE AUSTRALIAN MEDIA

Jane-Maree Maher - pp.4-8

COMPUTER GRAPHICS IMAGING: INTERFACING LIFE AND DEATH IN THE ABSENCE OF WOMEN

Claudia Herbst - pp.8-12

A SECOND DEATH LINKED TO GENE THERAPY

Philip J Hilts

CHOICE, FREEDOM, AND CONTROL - OR LACK THERE OF.

Book Review: Giving Sorrow Words - Melinda Tankard Reist

Renee Beggs - pp.12-14



COVER ART:

LAYOUT: Laurel Guymer and Renee Beggs © 2000

ISSN 1328-5955

FINRRAGE (Australia) is indexed on APAIS (Australian Public Affairs Information Service)



Dear Readers.

Welcome to the first edition of FINRRAGE (Australia) for 2000. We hope you enjoyed the last bumper issue of FINRRAGE. Due to a crazy end of year, the last issue for 1999 did not make it to print. Instead it has re-surfaced as the first edition for 2000. Despite this, we hope that you, our subscribers, will continue to support us in the coming months. The journal depends on many factors including adequate financial support, your submissions, and loads of time and energy from the coordinators - all of which have lead to the development of this issue.

FINRRAGE (Australia) continues to support the international campaign to stop anti-pregnancy vaccines. Tee-shirts, with the imprint of a woman stamping out the vaccine, are still available (picture is on the front cover of a previous FINRRAGE edition).

We are pleased to announce a renewed group of subscribers interested in resistance to reproductive and genetic engineering. If you would like to become an active member of FINNRAGE (Australia), or if you would like to send articles, letters, conference reports, news and announcements, views nationally and internationally, then please do not hesitate contact the editors on the details below. (Preference is for copy to be submitted in Word on MacIntosh discs or email. However, we can convert IBM).

We hope you enjoy this issue of FINRRAGE and continue to support us be renewing your subscriptions and by passing word onto others. We look forward to seeing new subscribers, old subscribers and your comments and contributions this year.

Thank you to everyone who has contributed articles not only for this issue but also to our last edition. Apologies again for the inconsistency of printed journals.

Laurel Guymer and Renate Klein Coordinators FINNRAGE (Australia)

c/o Australian Women's Research Centre (AWORC) Faculty of Arts Deakin University Geelong, 3217

capri@deakin.edu.au http://arts.deakin.edu.au/guymer/aworc/finrrage.html





Melinda Tankard Reist

Abortion-rights groups have condemned church assistance to a pregnant 12-year-old English girl as a "bribe", even "aiding and abetting" the girl to bear a child, according to one appalled commentator (Lesley Garner, Daily Mail, Associated Newspapers Ltd, 10/12/1999p18).

What has once again been ignored in the outcry is any recognition of how a denial of options other than abortion to young pregnant women is an act of coercion.

The unidentified girl who lives in England is 30 weeks pregnant. She was "advised" by teachers and social workers to terminate. No matter that she might not understand the ramifications of a late-term abortion on her physical and emotional health. "Of course she won't understand what an abortion is", admitted Jane Roe of the Pro-Choice Alliance and a critic of assistance to the girl. "It sounds too dreadful for her at that age" (Reuters English News Service, Reuters

Limited 1999 10/11/99).

Pro-choice commentators argued that the girl was being "forced" to continue her pregnancy - not that they'd actually asked her if that's how she felt. *Unplanned* is assumed to mean *unwanted*. (The church

group supporting the girl said they became involved after she had decided to keep the baby).

The pro-choice side seems annoyed the girl didn't take the one "choice" they offered her, surely the best thing for a girl of her *circumstances*.

Cardinal Winning, the Archbishop of Glasgow, is condemned for his fund to assist women who want to continue their pregnancies. Do prochoice groups prefer that women submit to the social obligation to have an abortion because they conceived in less than perfect circumstances?

It is hardly "choice" and a celebration of her reproductive freedom if a woman feels driven by her difficult circumstances to have an abortion. Many women undergo abortion not because of "choice" but a lack of it. A New South Wales study of 2000 women found two in three gave the reason for abortion as "Can't afford a baby."

Jaine from Melbourne, a contributor to my book on women's experiences of grief after abortion, (*Giving Sorrow Words*, Duffy and Snellgrove, April 2000) examines the sort of structural issues which make women feel they have little choice other than abortion:

The financial strain in my life was too enormous to even consider having the baby ... there is a grieving – I wished I had been given the "body" to bury – this would have made me sit down and think for myself, but I felt so railroaded by "the system" – the alternatives seemed worse, as anybody who is involved in the vicious cycle of homelessness, domestic violence, unemployment, low incomes, welfare and public housing, knows. My grief was more at being out of control of the situation – no woman would kill her unborn child if there were suitable, decent, alternatives. We are offered a pittance...

"A choice is only possible if there are genuine alternatives. In *The Whole Woman*, (Doubleday 1999) Germaine Greer commends Winning's initiative as "a genuine alternative to abortion." She points out: "A choice is only possible if there are genuine alternatives."

Of course no one wants to encourage 12-yearolds becoming pregnant. Of course the care of the girl and her child should not end with nappies, a pram and cash. Of course a baby is for life. But so is abortion. But no one mentions that.

© Melinda Tankard Reist

Melinda is a Canberra based writer with a special interest in women's health, bioethics and the abuse of women in coercive population control programs. Melinda is the author of *Giving*



Sorrow Words, recently published by Duffy and Snellgrove, 2000.



'And the Angel did say': A Meditation on Gender and Genetics in the Australian Media

Jane Maree Maher

In the week beginning October 25, 1999, there were two particular reproductive moments that offered emblematic inscriptions of the enduring frames for debates about reproductive technologies. The website www.ronsangels.com was launched to great media fanfare. The array of supermodel eggs on sale was seen as an exciting media event attracting coverage on news stations and in most major newspapers. At the same time, a small article in The Age on page 6 covered an innovation in understanding male Sperm that struggle to swim, infertility. according to Associate Professor Henry Sathananthan from the Monash Institute of Reproduction and Development, have defects in a small structure in their neck, the centriole (The Age 26/10). This discovery meant that male infertility, previously identified at 30% of all infertility, was possibly as high as 50%. In this article, I argue that, in the media representations of these events, the structures of reproductive medicine can be seen as encoding and ensuring particular gender differences. Through an examination of the headlines, content and context of these articles on reproductive technologies, I identify several important themes understanding reproductive representation. The stories represent on-going and determined frames by which reproductive knowledge is created and reinforced in our cultural landscape.

It is particularly apposite to conduct this brief examination in and through media representations. One of the key vectors in the transmission of reproductive medical knowledge is the visual frame. The ability to see into the opaque womb, to understand processes that are generally hidden from view, to put under glass and the microscope that which took place in the

dark has been the technological innovation that has most shifted Western understandings of reproductive medicine. Indeed, Susan Squier has argued that the ability to see 'inside' has excited reproductive scientists more than the therapeutic possibilities (1994:162ff). The media has been an important player in the construction and continuation of these frames of reference. The congruence of technological advances in both reproductive techniques and the media centre on visibility and the ever-increasing possibilities of transmission of various kinds. The media has been vital in disseminating and developing awareness of reproductive techniques, as well as key in framing definitions of success and failure in the field. But it is in the area of visibility, both of reproductive processes and their meanings that the egg auction takes on particular meaning. There is an implicit acknowledgment of this link at the www.ronsangels.com site. In the top left hand corner of the site, there is a small square box containing an eye. This icon is evidently referential to notions of beauty being 'in the eye of the beholder' and is deployed in the context of Ron Harris' editorial spiel on beauty, which I will discuss later. But I contend that the presence of the eye acts as a subversive moment, making explicit the continuing strength of visual codes in determining and defining the reproductive field. This theme is demonstrated in number ways through these media article and forms the grounding for this critique.

A brief survey

The Australian placed the supermodel egg story on the front page with the headline 'Model behavior goes ova the top' (25/10). humorous slant was echoed in The Age headline that ran 'Model eggs laid online for the highest bidder' (The Age 25/10, p.9). The Australian followed up on Wednesday, October 27th, with 'Models' eggs hatch hits' on page 12.1 There is a uniformity of representational tropes here – the equation of women's eggs with chicken's eggs is found in all three headlines. This is reinforced in the doubled meaning of each of the headlines, which allows for the inscription of a comic face in the stories. Each of these three articles concerning model eggs contained a final paragraph, where Ron Harris's promises to auction model sperm were announced. website itself already contains a detailed curriculum vita of a male model ready to sell

_

¹ Both these papers are 'quality broadsheets'.

sperm. None of the headlines included this information – indeed, the emphasis on the egg auction appeared to obscure it. By contrast, the article in *The Age* dealing with male infertility appears under the headline, '*It takes more than speed to win the human race*'. The information concerning the role of sperm in male infertility did not appear in *The Australian*. The disparities in coverage merit some comment.

There are several identifiable anomalies in these media representations. The first point to note is the lack of specific reference to sperm in the title of the article concerning male infertility. The casual reader would not necessarily associate a consideration of human reproductive product with the generic headline 'It takes more than speed to win the human race'. The ova by contrast feature explicitly in each headline above. The second face of this lack of specific reference is the collapse of the specificity of the male body into the category 'human'. Rather than the headline noting male sperm as the vectors in question, the humanity and generality of the problem is emphasised. It's not simply

a male problem, but a people problem. The contrast to the characterisation of the woman as chicken could not be starker. This distinction is dramatically reinforced on the website. owner of the sperm to be auctioned has a twopage spread in which he details his life and credentials, his intelligence, moral standing and sexual orientation. These details are proffered in the first person narrative voice. Model 117, female, is rendered through a series of statistics, (including bust, waist, thighs) a single line occupation category and two reasons for her choice. The assignment of narrative autonomy to the male model and the concurrent silencing of the any individual voice for the woman inscribes notions of sperm as active and personalized and ova as acted upon and inactive.

It is clear that the sperm and the egg are represented in classically gendered roles here. The value of the egg is determined by its object value – how closely it fits within society's vision of the beautiful woman. One can only of course note that the comfortable assignment of 'looks' to an egg is one of the more contentious aspects of the project. The characterisation of the sperm, however, requires a fuller for of description, as it is clearly the active player in the process. Emily Martin's classic investigation of the sperm and

egg romance is here revisited nearly a decade later, with little alteration in the stereotypical nature of the roles that she investigated (Martin 1991). The eggs are passive and pretty and the sperm provides the requisite degree of activity and personality. Freud's sexed constructions of masculinity and femininity as activity and passivity are here genetically embodied. In the article considering of male infertility, this distinction is also marked. The relevant issue is

The use of the term 'model' to describe the women further encodes their object status.

For the 'models' in the egg auction, by contrast, visibility is the only frame of reference. The print media did not feature pictures with the articles considering ronsangels, but television news reports did (SBS, 9.30 p.m. News, 26/10). And the website itself is dedicated to the pleasure and power of the visual. The pictures of the women on the website are what constitute the value of the eggs. Harris's argument aligning visual beauty with power and commercial value makes this explicit. 'Beautiful people are usually given the job of selling to, and interacting The relative beauty of with society'.

children will 'giv[e] them an advantage in society' (1999:editorial page). The use of the term 'model' to describe the women further encodes their object status. Their role as egg producer, one inferred in the chicken references of the headlines, is subsumed in this concentration on the 'to be looked-at status' that they are assigned. There is a doubled inscription and deployment of codes of visibility and value that are being played out here. Feminist scholarship has identified the increasingly visual face of pregnancy, but has noted that this focus is almost always on the fetus, rather than on the woman.² Indeed, the maternal body is often

² Barbara Duden considers that the public fetus has become one of the most recognizable and potent symbols of modern culture (1993:2). The infant can be seen, before it can exist in the world, and it assumes a discrete and contained form. It is a pre-formed person, 'simply ... awaiting discovery' (Hartouni 1997:23). Alice Adams argues the fetus is portrayed as the 'quintessential human being' with its yet to be fulfilled potential (1994:4). Images of the fetus published in Life magazine in 1966 are seen as critical in allowing for a major shift in the cultural and social understanding of pregnancy. The construction of the fetal subject has

While the

embodied woman

makes an

appearance here,

it is only in order

the she can be fully

excised in the sale

excised at the edges of the frame, leading to the alienation and erasure of women. On the website, while women make an appearance as objects, their importance to the process as producers is not considered. Instead, the aesthetic frame is the only one that applies in this context. It seems pertinent that the places where women still appear at the centre of the reproductive frame are the points at which their value as an object for consumption, rather than as a reproductive actor, holds sway.

The doubled face of this representation can also be seen in the ways in which these eggs are available. One of Martin's key points in the 1991 analysis was the examination of medical textbooks and their framing of menstruation as an indication of the wasteful nature of female

egg production (1991:486). Here, that wastefulness is no longer a concern as menstruation is not at issue. The eggs are extracted and tidied, much like the models themselves, for presentation. Although the bodies of the women are used to assign value and qualities to the egg, the true value of these eggs lies in the fact that they are no longer inside the woman's body. The interplay of codes of visibility and invisibility show the conflicted natures of these

representations. The woman must be visible in

continued apace, and on many different sociocultural planes. Cynthia Daniels explores the response of the US legal system to a growing sense of fetal personhood, (1994) Celeste Condit (1990) and Rosalind Petschky (1984, 1990) consider its implications in the abortion debates. Patricia Bayer Richard notes the increasing pressures for fetal surgery (1995). Dorothy Roberts argues the implicit racial and racist implications of the new visual construction of pregnancy (1997). Carole Stabile (1994), Susan Squier (1994) and Karen Newman (1996) construct histories of the visual technological advances themselves and ponder implications. Sarah Franklin (1993) and Marilyn Strathern (1995) explore the implications for kinship networks of this new fetal subject. Although these accounts differ on many points, and in emphasis, there is a consensus on the implications of the processes of visualization for pregnant women and women more generally. The development of the fetal subject leads to the erasure of the woman.

order that the egg achieve its required value, but the body of the woman must be absent in order that this value can be realised. The shift achieved through the cyber representation of women on Ron Harris's website has been the reduction of the woman's body to the space of the egg. This process mirrors the shift identified in many feminist critiques of reproductive technologies where the embodied woman becomes increasingly irrelevant. While the embodied woman makes an appearance here, it is only in order the she can be fully excised in the sale of her ova.

The visibility and value of men and women's reproductive processes are clearly played out in the visual graphics and representations that accompany the text of these news items. The

picture that accompanied the item concerning male infertility was of two human embryos. The specificity of the sperm is already enclosed in the embryo; this narrative suture undercuts its location at the centre of the story and as the problem. Thus, the erasure identified earlier in the headline is reinforced by the graphics. These patterns of invisibility replicate those Cynthia

of her ova invisibility replicate those Cynthia Daniels identified in her study of the transmission of fetal harm through paternal sperm quality. Daniels considered that the obvious contribution of the mother had been used to frame her as the responsibility and culpable party, while scientific evidence considering the contribution of genetic damage through sperm had remained largely invisible. For Daniels, 'men have been spared the retribution aimed at women', despite clear evidence since the 1980s that there were links between fetal health problems and paternal exposure to toxicity, alcohol abuse, and smoking. (1997:579). In the frame that Daniels has set up, the ontological weight of the female body is strategically deployed to slate home or

In this particular moment, the conjunction of the auction and the ovum, I consider that Marilyn Strathern's description of how cultures constitute themselves through synthesising, including and excluding domains of knowledge offers us a useful way of viewing this new online

frame responsibilities in ways that are sex/gender

contribute to the invisibility of male infertility.

Here, both headline and graphic

development (1992:2-3). Strathern argues new 'life forms', in a broad sense, are developed when thinkers bring together frames of reference that do not normally fit and construct a paradigm that allows them to fit (1992:2). The knowledge frames act flexibly to restructure and encompass new points of information and knowledge. In the media portrayal of the egg auction, the field of women's role as reproducers collides with women's cultural designation as objects and a new reproductive frame is constructed. This frame allows conceptions of the object value of women's body products, but not the use value. The portrayal of the male participation in reproduction, in contrast, was muted, not commodified and retained a sense of the importance of sperm activity. The strength and flexibility of particular gendered codes; activity and passivity, subject and object, producer and consumer are clearly played out here as they adapt to new developments in the reproductive frame.

In the conjunction of these two media items, several observable traits of the representations of sex and gender in our cultural landscape are clearly laid out. The formulation of masculine work in terms of productivity is transferred onto an analysis of sperm capabilities. The value of women's body products is formulated in terms of aesthetics. The use value of the egg is largely determined by its availability outside the actual woman's body. In 1992, Carolyn Bell and

The question of men's infertility did not even appear as issue for consideration (1992:19). Phillip Noble conducted a quantitative and qualitative analysis of representations of women in the media in the reproductive area. Their conclusions identified women as the object of most reproductive discourses, rather than active participants in reproductive processes. Images of women flanked by medical practitioners who had 'given'

them a baby formed the bulk of media reportage, with women's putative infertility located as the problem. The question of men's infertility did not even appear as issue for consideration (1992:19). Seven years later, the frames of exclusion and inclusion they identified have been extended to new fields and frames. When men's infertility is raised, the headlines, lack of coverage and location of the problem as a 'human' one still collude to maintain its relative invisibility. Women's role is ever more tied to

her visibility as an aesthetic object, while her active role as producer and gestator is ever more occluded. The age of the Miss Gene Pageant cannot be far away.

Works Cited

Adams, Alice. Reproducing the Womb: Images of Childbirth in Science, Feminist Theory and Literature. Ithaca & London, Cornell UP, 1994.

Condit, Celeste. *Decoding Abortion Rhetoric*, Urbana, Illinois UP, 1990.

Condit, Deidre. 'Fetal Personhood: Political Identity under Construction', in *Expecting Trouble: Surrogacy, Fetal Abuse and New Reproductive Technologies.* Ed P.Boling. Boulder, San Francisco & Oxford, Westview Press, 1995.

Daniels, Cynthia. 'Between Fathers and Fetuses: The Social Construction of male Reproduction and the Politics of Fetal Harm', in *Signs* 22(3): pp. 579-616, 1997.

At Women's Expense: State Power and the Politics of Fetal Rights, Cambridge, Mass. & London, Harvard UP, 1993.

Duden, Barbra, *Disembodying Women: Perspectives on Pregnancy and the Unborn.* Trans. L.Hoinacki, Cambridge, Mass. & London, Harvard U P, 1993.

Franklin, Sarah. Introduction, in *Technologies* of *Procreation: Kinship in the Age of Assisted Conceptions*, Eds S. Franklin et al., Manchester & New York, Manchester UP, 1993.

Hartouni, Valerie. *Cultural Conceptions: On Reproductive Technologies and the Remaking of Life*, Minneapolis & London, Minnesota UP, 1997.

Martin, Emily. 'The Egg and the Sperm: How Science has constructed a Romance based on Stereotypical Male-Female Roles', in *Signs*. 16(3), 1991.

Newman, Karen. *Fetal Positions: Individualism, Science and Visuality.* Stanford, California, Stanford UP, 1996.

Noble, Carolyn, & Bell, Phillip. 'Reproducing Women's nature: Media Constructions of IVF and Related Issues', in *Australian Journal of Social Issues*, 27(1): pp. 17-30, 1992.

Petchsky, Rosalind. Abortion and Woman's Choice: The State, Sexuality and reproductive Freedom, New York & London, Longman, [1984] 1990.

'Fetal Images: The Power of Visual Culture in the Politics of Reproduction', in

Reproductive Technologies: Gender, Motherhood and Medicine. M.Stanworth(ed), Minneapolis, Minnesota U P, 1987.

Richard, Patricia B. 'The Tailor-Made Child: Implications for Women and the State', in *Expecting Trouble: Surrogacy, Fetal Abuse and New Reproductive Technologies*. Ed P.Boling. Boulder, San Francisco & Oxford, Westview Press, 1995.

Roberts, Dorothy. *Killing the Black Body: Race, Reproduction and the Meaning of Liberty.* New York, Pantheon Books, 1997.

Rothman, Barbra Katz. Recreating Motherhood: Ideology and Technology in a Patriarchal Society, London & New York, W.W. Norton, 1989, A.

The Tentative Pregnancy: Pre-Natal Diagnosis and the Future of Motherhood. London, Sydney & Wellington, Pandora Press, 1989. B.

Squier, Susan, Babies in Bottles: Twentieth Century Visions of Reproductive Technologies, New Brunswick, New Jersey, Rutgers U P, 1994. Stabile, Carole, Feminism and the Technological Fix. Manchester & New York, Manchester UP, 1994.

Strathern, Marilyn. "Displacing Knowledge: Technology and the Consequences for Kinship', in *Conceiving a New World Order: The Global Politics of Reproduction*. Eds. F.Ginsburg & R.Rapp, Berkeley, California UP, 1995.

Reproducing the Future: Essays on anthropology, kinship and the new reproductive technologies. New York, Routledge, 1992.

© Jane Maree Maher

Dr Jane-Maree Maher is a lecturer in the Centre for Women's studies and Gender Research at Monash University. She is currently developing a book provisionally entitled the promiscuous placenta: toward a new spectacle of the pregnant body. Her research interests include Virginia Woolf and pregnant embodiment.



COMPUTER GRAPHICS IMAGING: INTERFACING LIFE AND DEATH IN THE ABSENCE OF WOMEN

Claudia Herbst

Abstract: Computer Graphics Imaging, CGI, is a rapidly growing industry permeating a variety of disciplines such as the military, the arts, and the sciences. Despite its state of the art character, CGI is a gendered technology manifesting itself in gendered disciplines. The application of CGI marks two highly significant events: one is the virtual and real experience of sexualized death and destruction. The other is reproduction by virtue of its presence and application in Bioinformatics research such as the Human Genome Project. Due to CGI's genderedness, in both instances, the image of woman and its meaning is altered while she herself remains absent. As women increasingly are portrayed through images of sexualized aggression, women potentially may lose grounds that thus far have been identified as typically female: the powers of reproduction.

Computer Graphics Imaging, CGI, originated in World War II with radar technology. During the 1960s, supported by military funding, major breakthroughs in CGI technology followed at facilities such as the MIT research labs. By the mid 1980s much of CGI technology developed into a profitable and rapidly growing industry spanning across a wide range of disciplines. Some of the disciplines in which CGI is applied today are the fine arts, the entertainment industry, the sciences, and the military. A quick glance at the variety of applications for CGI illustrates the point: the Internet, interactive CD-ROMs, computer games, commercials, feature films, forensic animation, product visualization, sonograms, AIDS research, the tracking of weather and traffic patterns, intelligence and surveillance technology- and many more. What continues to foster CGI's rapid expansion is the ever augmenting need to visualize complex information and data.

Math and the hard sciences are identified as male domains. Mathematics and the sciences are the cornerstones of computer technology. This

renders the foundation of computer technology itself, if not exclusively nevertheless essentially, male. Unsurprisingly computer technology mirrors attributes that generally are considered male. For instance, the preoccupation with size and speed is rampant in the computer industry (i.e., the size of hard drives, the speed of modems, bandwidth, etc.). Possibly more importantly, computer technology is contrary to anything typically identified as female such as the non-linear, emotional, the soft and flowing.

Gender issues raised by technology which, such as CGI, spans across various disciplines are complex because some of these highly disciplines traditionally have been gendered themselves. For example, CGI originated in war technology. War, an occurrence led by patriarchal authority and performed predominantly by men, has often been described as a gendered event. The language and performance capabilities of CGI interfaces frequently emulate structures and language one would expect to encounter in combat. Because computer technology itself is gendered and because war is a gendered event, CGI technology, as a product of the powerful marriage between the two, is a gendered

technology. In turn, any product resulting from the application of CGI technology, to a varying degree, will reflect genderedness. (The common theme of violence in the majority of computer games may be evidence of that circumstance.) It seems impossible to interpret the meaning of gender in relation to computer graphics imaging technology without viewing it within the larger context of its origin, application, and the products that result from its application.

The meaning of womanhood is in part redefined by CGI technology. Yet women are widely excluded from this process because they largely tend to be absent from the invention and application of especially high-end CGI

Examples of violent language found in interfaces are commands such as "kill -take no hostage", "terminate", "execute." Examples of functions and processes implying violence in 3D animation software are "hard bodies" and "collision events." Examples of software featuring such language functions are Alias and

Maya (available at Alias/Wavefront).

technology. The question arises how then will the permeation of CGI technology in such diverse fields as the arts, the sciences, and the military affect women? In pursuit of an answer, I will first look at how women are represented in computer generated imagery. A new image of women is in part shaped by CGI's genderedness. I will then address the application of CGI in reproductive technologies. Reproduction, the process of giving life by means of gestation and birth, traditionally has been interpreted as women's domain.

Mary Ann Doane remarks, "When technology intersects with the body in the realm of representation the question of sexual difference is inevitably involved."² Perhaps even more so when the realm of technology is primarily void of the female as is the case with CGI. Enter Lara Croft, virtual heroine of the computer game Tomb Raider. Lara acquired unusual fame amongst her like-modeled, virtual colleagues because she embodies all that is new about female characters that have been designed and created with the aid of CGI. Lara mainly displays two features: overt sexiness and obvious potential for violence. In many ways her character combines the two of the biggest

spectacles, sex and death. Lara has long dark hair, big puffy lips, combined with a fierce look in her eyes. She wears boots, shorts, a tight tank top and round glasses. For a moment her appearance alleges intellectualism, but the glasses are sunglasses, not reading aides. Her breasts are very large, her waist is tiny. Most importantly though, Lara carries a big gun. Other computer games such as Parasite Eve and Tekken 3 depict similar, if not identical, models of the female gender.

Lara is not yet a woman but she is past girlhood, old enough to exude sexuality and to display a serious attitude. Lara Croft, virtual as she is, may very well be the role model many teen and pre-teenage girls will aspire to. A sense of disappointment may set in when girls realize

_

women

potentially may

lose grounds

that thus far

have been

identified as

typically

female: the

powers of

reproduction.

² Mary Ann Doane, "Technophilia: Technology, Representation, and the Feminine," Body/Politics: Women and the Discourse of Science, ed. Mary Jacobus, Evelyn Fox Keller, and Sally Shuttleworth (New York: Routledge, 1990), p.163.

that their bodies will not develop into the unlikely, computer generated forms of Lara Croft. While trying to live up to the idealized bodies of fashion models, girls and women have put themselves through a range of abusive behaviors. However, an attempt to emulate Lara Croft, or any of the other female characters depicted in computer games presents even more of a no-win situation. The presence and coolness of the gun is even more troubling because in the world of gun laden computer games no one ever really dies. In the world of CGI, violence has no lasting consequences. With every new game,

and without the struggle and pains of birth, the characters are reborn.

As do computer games, CGI enhanced movies provide a new image of women. Movies like the Alien sequels, Terminator I & II, Hardware, GI Jane, The Fifth Element, et al, present images that delineate sexualized aggression. In these movies it is through aggression and the expression of violence that women gain respect from their peers. Terminator II

presents a female character that is all muscle and impressively gun savvy. Ripley, the main female character in Alien III, is tougher than the inmates she encounters in a postmodern prisonmonastery at the end of space. She barely escapes a rape situation and in the end sacrifices her life. In Alien IV her now cloned character reappears. Her cloned version is devoid of emotions, unable to experience pain or fear. The lead character in GI Jane also nearly gets raped. She is beaten so severely she spits blood. Not until she delivers an equal amount of punches against her aggressor do onlooking soldiers respect her. Women, according to the new image, not only dish it out like men, they get beaten like men. At the local fashion mall one can purchase the new image: army boots and The entirely computer graphics mini skirts. generated film Toy Story offers some alternative images of womanhood though they are not necessarily more desirable. One of them consists of a pair walking Barbie legs with a fishing rod, hook-like device were the genitals would be (no body or head).

Some have praised the new powerful images of women. Admittedly, the women in the examples mentioned represent strong, self-reliant, fearless and confident individuals, which is a refreshing sight on any screen, big or small. However, if a new identity can be bought at the local mall, chances are it is not a source of real empowerment- it might not last but a season. History teaches us that rarely is anything gained by increased levels of violence. News reports of increasing numbers of girl gang violence and girl and women prison inmates prove that images of sexy violence are no more desirable than images of sexy incompetence. More importantly, the new image of women is not a product of women's vision of themselves but of the male dominated CGI and film industries. Lastly,

women in these images have merely taken on the roles of the aggressor- a role they have criticized men for in the past. Violence and empowerment are not synonymous. Ultimately it would be in the interest of men and women that the fantasy of the hyper aggressive female (no matter how sexy) does not manifest itself in reality. Even so, it appears women will pay the higher price living up to unrealistic images not of their own making that portray emotionally and physically unhealthy women.

More
importantly, the
new image of
women is not a
product of
women's vision
of themselves
but of the male
dominated CGI
and film

In the movie The Fifth Element CGI technology is used to visualize a Science Fiction technology which sculpts a previously deceased woman back to life. We see a special effects shot in which a machine traces bone, muscle and skin layers into thin air, all with the aid of technology and DNA reference. CGI is used to visualize the dream of the machine that gives life. emergence of life is depicted without the messiness and struggle of birth. The process is a visual spectacle, it is clean, dry, and painless: death is overcome when at the end of the scene a beautiful, naked, though unpleasantly aggressive, young women emerge from a glass tube. In the CGI heavy movie Jurassic Park, computer technology is used to sequence the DNA of a dinosaur for cloning in order to produce (profitable) baby dinosaurs. These films and their representation of reproductive technology are not far from today's actual technology applied in Bioinformatics. Though other movies may be more Science Fiction than science fact, these movies all reflect actual research and current desire in reproductive technologies which CGI is part of.

Computer technology is applied in disciplines such as Bioinformatics because knowledge in biology has exploded in such a way that

powerful tools are required for the organization and interpretation of complex data. Computer technology is a crucial player when dealing with literally trillions of bits of information. CGI often is applied because complex sets of data are better analyzed and understood when visualized. One can get a sense of the presence and importance of CGI in Bioinformatics when hearing such terms as BioMedical Graphics, Molecular Graphics, and 3D Microscopy. The importance of CGI in reproductive technologies becomes clearer when seeing graphical user interfaces used for genome map assembly, or when coming across computer generated, 3D representations of DNA (the double helix). Sonograms are a further, albeit technically less advanced, example of the application of visualization technologies in reproductive processes.

Another
example
for fertility
as
commodity
is the
Human
Genome
Proiect.

The application of CGI and technologies other reproductive processes has at least two immediate problematic consequences one of which is the possible abuse of these technologies. In China, sonograms are used to determine gender of the unborn so female fetuses can be aborted. The other

immediate concern is that fertility turns into commodity. Sperm banks, egg donation, umbilical cord blood stem storage, In-Vitro Fertilization, gestation surrogacy, are services offered by fertility centers and first steps in that direction, however helpful to individuals with fertility problems. Another example for fertility as commodity is the Human Genome Project.³

A genome contains all the DNA in an organism, including its genes. Genes carry information for making the proteins required by all organisms. These genes are the deciding factor for how the organism looks, how it behaves, and how it potentially may dysfunction. The Human Genome Project began in 1990 and was a

http://www.ornl.gov/TechResources/Human_ Genome/home.html

planned 15-year effort coordinated by the US. Department of Energy and the National Institutes of Health. The project was intended to be completed by 2005 but gene researchers claim that with industry funding delivering faster and more powerful computers, they will complete the project within three years. The race to map the human genome, enabling private government institutions to claim intellectual property rights on the genetic information of humanity, has become a race in which primarily size and speed of computer technology matter. Owning the rights to genetic information has already turned into lucrative business. Rights to genetic information, human or otherwise, will soon be a sought after commodity in world economy.

The significance of CGI in its use for the design and creation of computer games or movie effects, and its application and importance in reproductive technology, lies in its genderedness. CGI's origin is gendered, its application in male domains is a gendered phenomenon and the resulting products in any of these disciplines will mirror genderedness. The importance of these circumstances for women reaches far beyond issues of economic equality in the lucrative CGI industry. CGI at once interfaces sexuality and death through the generation of images of sexualized aggression in women. At once it occupies the line separating life from death by virtue of its origin and wide application in the military on the one hand and reproductive technologies on the other. It is the combination of the closeness of life and death in CGI paired with absence of women that I find troubling.

Games and movies may be fictional, however CGI, by its origin and they imitate life. application, is utilized at the interface of destruction and creation at once. Consequential is the fact that reproductive processes thus far, throughout world history and across cultures, have been women's domain. It is women who carry a child to term and give birth. Now the face and meaning of this monopoly, hence source of power and identity, for better or for worse, is changing. War in the past has been a male domain. It might not be a coincidence that CGI heavy visuals are promoting images of women in aggressive, fighter roles such as typically identified with soldiers. While men, aided by technology, increasingly tap into the powers of reproduction women are invited to the front lines. Crucial is not only that CGI is

³ More detailed information regarding the Human Genome Project can be found on the Internet at the following government maintained website:

playing a key role in this shift in the meaning of gender, but women are absent from determining its direction. The line that is drawn between CGI's application in the name of reproduction or destruction is walked almost exclusively by men. Women's identity, which partially is defined through women's reproductive potential- whether that potential is actually fulfilled or not- is taking on a different meaning, arguably one less powerful. Despite the capacity for major medical breakthroughs due to CGI and other computer technology in Bioinformatics and related fields, the absence of women's voices in fields this powerful is nothing less than tragic.

CGI's more malignant characteristics are not to blame on the male gender, rather, it is the genderedness, the imbalance of gender in the control of CGI, that renders it objectionable. Imbalance in life or nature has always been an indicator of misdirection and looming trouble. A so-called 3D paint package, software providing the ability to interactively paint on computer generated models, advertises with a sequence of images demonstrating the progression of the software's application. The images are of a woman's head: the first depicts the plain face of the woman, in the second the woman wears make-up, in the third she appears severely beaten, featuring bruised and bloody skin. Even a bandage has interactively been painted around her virtual head to demonstrate the software's capabilities. The ad is printed in brochures and computer magazines. It will be no easy task to invite women into these realms. But the need never seems to have been greater.

© Claudia Herbst, 1999

Claudia Herbst is Assistant Professor at Pratt Institute, School of Art and Design, Dept. of Computer Graphics & Interactive Media. As an artist, Ms Herbst employs 2D and 3D animation technologies as well as video. Her animations have been shown internationally. In her research and writing Ms Herbst focuses on issues of gender equality in new media. She holds a MFA in Imaging and Digital Arts, and a BFA in Computer Graphics.

cherbst@pratt.edu http://pratt.edu/~cherbst/home/space.html





A SECOND DEATH LINKED TO GENE THER APY

Phillip J Hilts

BOSTON, May 3

Researchers at St Elizabeth's Medical Center here failed to report the death of a patient in gene therapy experiments and might have contributed to the growth of cancer in another patient, whose condition was also reported improperly, investigators for the Food and Drug Administration have said.

Their accusations were made in April in a letter to the hospital and the chief researcher in the experiment, Dr Jeffrey M Isner, and was recently posted on the agency's website.

The experiments have been stopped.

The news comes as scientists, hospitals and companies sponsoring gene therapy experiments have been working to assure the public of the safety of the experiments after the death of a patient in the gene experiment at the University of Pennsylvania last year.

Jack Cumming, president of the Vacular Genetics Inc., of Durham, N.C., the company sponsoring the experiment at St Elizabeth's acknowledged today that there have been some 'problems' in the gene therapy experiment.

Mr Cumming said the company would do everything it could to satisfy the F.D.A in correcting the problems. He said he was "very optimistic" that positive results would be presented to the agency this summer.

Mr Cumming said he would not dispute the agency's findings and said that his company had hired two outside groups to audit and monitor all the experiments it had begun around the country, including the one at St Elizabeth's. The groups were hired after the company learned that the federal agency was writing a warning letter, he said.

Sonia Hagopian, a spokeswoman for the St Elizabeth's said the hospital took the warning letter very seriously, and added: "We are focusing all our resources on producing a thorough and thoughtful response to F.D.A."

The hospital's public relations office said Dr Isner would not be available for comment at this time.

The problem in the experiment was reported on Tuesday in The Washington Post and The Boston Herald.

In the experiment at St Elizabeth's, which was jointly sponsored by Tufts University, a gene that makes a substance called V.E.G.F (for vascular endothelial growth factor) was injected directly into the hearts of patients with blocked heart vessels. Researchers hoped the gene would start making the gene factor, which is the body's natural substance to make blood vessels grow.

Inspectors for the federal agency said they found several violations of the rules of the experiment in a routine check in March. One patient in the experiment died two months after receiving the experiment therapy, but the researcher failed to report the death to the agency. The agency is investigating to determine if the treatment was the cause of the death.

In another case, a patient was included in the study although he should have been kept out under the rules of the experiment. The patient was a heavy smoker and a small mass had appeared in one lung, the agency said. Because the experiment therapy used chemical designed to increase the growth of blood vessels, the agency said, it was possible that it increased the supply of blood to the growing tumour.

The agency's warning letter noted that the St Elizabeth researchers saw the mass when it was less than a centimeter in July 1999, then again in August when it was two centimeters in diameter, but went ahead with the treatment on September 21, 1999. Two months later, the agency said, the patient was hospitalised with chest pain, and the mass was found to have grown five centimeters. There was no evidence in the patient's records of the experiment records that either the patient of his doctor was notified of the growth of the mass, investigators said.

The hospital and the researchers have 15 days to tell the agency how they will correct the problem in the experiment. The F.D.A has the authority to ban the researchers from further work using federal money.

This and three other experiments carried in by Dr Isner were stopped when the agency first began its inspection in February and have not resumed.

Dr Isner is a founder of the company leading the trials and is a major stockholder in it.



BOOK REVIEW

Choice, freedom and control - or lack there of.

By Renee Beggs

GIVING SORROW WORDS by Melinda Tankard Reist Duffy & Snellgrove. \$17.95

Most public discussion about abortion takes place with little or no consideration of the actual experiences of women who have endured the termination of their pregnancies. (Tankard Reist, 2000, p.1)

Just recently, I was asked to review Giving Sorrow Words. At first I was hesitant. I did not want to be reading another text that regurgitated the same old arguments of women having a choice to free and accessible abortions and the chance to take control of one's own body arguments that developed with the 1960s feminism. I did not want to be reading another pro-choice or pro-life text where women's voices are largely ignored. The abortion debates, in Western society, have not and still do not centre on women's voices, nor do they focus on women's lived experiences of abortion. The language of choice suggests that women are free to chose from a variety of options and that all choices are inherently good. However, by looking deeper into the rhetoric of choice and freedom, it is clear that women are not free to make informed choices about their bodies. If women do have the right to choose their own destiny, then surely they have the right to be made aware of all the implications that go with the choices they make.

So how does Melinda Tankard Reist's text fit into the abortion debates. Simple – it doesn't. Giving Sorrow Words is not about giving definitive pro-choice, or pro-life arguments. Giving Sorrow Words goes beyond the abortion debates by actually listening to women's voices and recording their stories of abortion grief. This is a book that tells of how women were not fully informed about the implications that accompany abortion. It tells the story of 250 Australian women's experiences of abortion grief, with 18

detailed accounts of what these women went through after an abortion. I think it is important to note that although Giving Sorrow Words centres around post abortion grief, the stories in the book also reflect the traumatic times leading up to and during the abortions. apprehension and confusion prior to an abortion, and the abortion procedure itself, how the women felt and what they experienced added to the pain, the suffering and the anger women faced days, weeks, months and years following an abortion. Most of the women expressed feeling debilitated by grief following the abortion, some shared their tales of selfmutilation and suicidal thoughts, others told the story of constant tears. But where there is sadness there is also some happiness. A few women in Giving Sorrow Words told of finding peace in spirituality and religion, building a house, having a mock funeral for their unborn baby, and or happiness in their other children. These are real experiences that real women have faced in Australia yet for some reason these experiences have been ignored ... until now.

Giving Sorrow Words is a courageous book full of intense emotions. It is not about portraying women as victims, as Leslie Cannold, author of *The Abortion Myth*, would have us believe. She claims that Tankard Reist "struggles to portray women as helpless victims" and that the project reverts back to the 1970s style victim feminism.

Giving Sorrow Words is simply about giving women the opportunity to express their feelings and experiences of abortion grief. Not once does Cannold mention the reality of women's experiences and the decisions they make around abortion. Not once does Cannold take into account patriarchal and heterosexual pressures women face when making abortion decisions. As far as Cannold is concerned, women are free agents capable of making the abortion decision without any impact from family, partners or the society surrounding them. Cannold further illegitimates and invisibilises women's experiences, hence why Giving Sorrow Words is an important book for anyone to read regardless of their stance on abortion.

Postscript

After reading *Giving Sorrow Words* and a few prompting comments from a friend of mine, I interviewed (by email) Melinda Tankard Reist. I wanted to find out why she wrote the book, especially considering how split the Australian

feminist movement is on abortion and also how such stories impacted on her life. Her comments were going to be included into the body of my review, however that didn't seem appropriate. Melinda's answers to my questions are powerful enough on their own. So you will find below, a short manuscript of the interview I conducted with Melinda.

Renee: What was the driving force behind *Giving Sorrow Words*?

Melinda: I heard the stories of a couple of women who shared their stories with me. I wondered if there were other women also troubled by grief after abortion, and felt I would like to explore the issue in a bit more detail. I began placing a few small advertisements in women's magazines, newspapers etc and the responses began coming in. The intensely moving nature of the initial response convinced me that the book was a worthwhile and necessary project that would benefit women.

Renee: How did the title *Giving Sorrow Words* come about?

merits. A number of reviews have concentrated on me and who I am rather than address the suffering of women. So again, their suffering gets marginalised because it is easier to attack me for writing the book.

Renee: Leslie Cannold, author of *The Abortion Myth*, writes in her review (The Age, 8/4/2000) that *Giving Sorrow Words* "emphasise female victimhood". But surely *Giving Sorrow Words* is about empowering women – giving them the space to voice their abortion and abortion grief experiences?

Melinda: You got it in one. It's a book in the women's own words – and they have found it empowering and helpful. I'm hearing from them almost daily. Without exception, they were appalled by Cannold's depiction of them.

Renee: With 250 women responding to your ads, how did you manage to choose the best 18 stories? And why only 18 accounts?

Melinda: This was a very difficult task. I tried to select them to include as wide a variety of ages, backgrounds, experiences, different years of abortion etc. Originally I was only meant to include 12! But the publisher was very generous and allowed me 20,000 more words than was

Melinda: It's a quote from Shakespeare's *Macbeth*, which I read somewhere. It sort of dawned on me that this was the right title for the book.

Renee: Why do you think there is such an invisible screen around listening to women's voices and experiences of abortion?

Melinda: Because of the politics – a woman can't speak about her grief for fear of being made to feel she's a betrayer of 'the cause'; because you're not meant to grieve an aborted baby – everyone is telling her there was no baby and what is she carrying on about, and because she is made to feel there must be something wrong with her for feeling this way. Who wants to be labeled 'psychotic'?

Renee: How important is *Giving Sorrow Words* to the abortion debates?

Melinda: I think the book should enrich the debate, broaden the discussion. But vested interests are trying to prevent that, preferring to stereotype me than consider the book on its agreed to in the contract. Even though I could only use 18 complete stories, I tried to use extracts from as many other accounts as I possibly could. But really I would love to have published every account. They all deserved it.

Renee: How has writing and compiling *Giving Sorrow Words* impacted on your life? Surely it can't have been an easy text to research, especially when the abortion debate is so fierce in Australia.

Melinda: It was a harrowing book to write because the trauma of the women was with me every day. Women crying on the phone "I just want to hold my baby, I just want to hold my baby", women unable to find help or relief from their suffering, women harming themselves. At times I felt overwhelmed by the outpouring grief. But now the book is finished, the response from the contributors and from other women has made it all worthwhile.

©Renee Beggs

Renee Beggs is a young radical feminist with a Bachelor of Arts degree at Deakin Uni, in Women's Studies and Journalism. She is interested in the problematic nature of how concepts of choice impact on women's lives.



All correspondence should be sent to: FINRRAGE (Australia), c/o Australian Women's Research Centre (AWORC) Deakin University, Faculty of Arts, Geelong, 3217. ph: 61 (3) 5227 1335

fax: 61 (3) 5227 2018 mobile: 0413 13 6912

email: klein@deakin.edu.au or capri@deakin.edu.au

All cheques should be made out to FINRRAGE (Australia) Check out our new web page via http://arts.deakin.edu.au/aworc/

FINRRAGE aims to monitor international developments in the area of reproductive medicine and technology; to assess their implications for the socio-economic position and well being of women in different situations, cultures and countries and the impact on the environment; to raise public awareness and extend links with women internationally; to analyse the relationship between science, technology and social relations in patriarchal societies, and the implications for the feminist movement and the development of alternatives; to work towards feminist resistance to population control policies.

Cover design by Deb Snibson ©
Permission to use images and text should be directed to Spinifex Press

Sequel to the highly successful *Chinese Medicine for Women* by Bronwyn Whitlocke Shiatsu Therapy for Pregnancy Women's Health

Shiatsu is a traditional method of treating illness through stimulating points and meridians with the fingers, thumbsand palms. Shiatsu Therapy for Pregnancy is an instructive manual for pregnant women, practitioners, partners, and birthing partners caring for pregnant women.

With early discharge policies now being the norm, women have to fend for themselves and deal with conditions such as arthralgia, lochiorrheoa, pain, fainting, urinary incontinence, constipation, and many more. This handbook describes the foundations for using shiatsu to alleviate the symptoms. For those suffering postnatal depression suggestions for lifestyle are a positive addition to assist women following delivery.

The author provides practical solutions to a host of problems experienced during and after pregnancy. From the antenatal classes to the days and hours just preceding birth, non-intrusive remedies are provided.

Bronwyn Whitlocke, a Shiatsu Therapist and Chinese Medicine Herbalist has twenty years of professional and practical experience. Bronwyn believes that health can be achieved using natural remedies. Her common sense approach encourages individuals to understand and maintain their own health.

ISBN 1-875559-81-7 Oct/99 Women's Health \$A17.95 148pp 128x198mm pb Territories:World All rights:Spinifex Press

women@spinifexpress.com.au