

FAMILIES OF THE NEW MILLENNIUM

Designer babies, cyber sex and virtual communities

There is a growing consensus that it is the technological revolution that is driving the transformation of society and culture – not least the family. Designer babies, cyber sex and virtual communities are all new expressions that highlight the role of new technologies in the changing character of family and personal relationships.

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In the 1970s and 1980s nobody was quite sure what was happening to the family. The statistical trends were clear enough: less marriage, more de facto relationships, more divorce, fewer children, more children born outside marriage and so on. But social scientists struggled to make sense of the underlying dynamic that underpinned these trends.

Some social scientists decided that there was no underlying dynamic – and what's more, perhaps no such thing as "the family". They deconstructed the family and found that there was nothing there. The American feminist Judith Stacey put this view most eloquently:

"We are living, I believe, through a transitional and contested period of family history, a period after the modern family order, but before what we cannot foretell. Precisely because it is not possible to characterise with a single term the competing sets of family cultures that coexist at present, I identify this family regime as postmodern. The postmodern family is not a new model of family life, not the next stage of an orderly progression of family history, but the stage when the belief in a logical progression of stages breaks down." (Stacey 1990: 18)

During the 1990s, though, there emerged a growing consensus that the dramatic changes in the family were one aspect of a much bigger set of changes that was occurring across western societies, and in many other parts of the world also. The most common way of talking about this bigger set of changes was in terms of "the Information Age". Alternatively, some social scientists emphasised the broader sweep of

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technological innovation, through concepts such as "the third industrial revolution", "the knowledge economy" and "the weightless economy". The bottom line was the idea that it was the technological revolution that was driving the transformation of society and culture – not least the family.

Manuel Castells, a Spanish-born sociologist at the University of California, was the most prominent theorist of the Information Age. Castells spoke of "a technological revolution, centered around information technologies" reshaping "at an accelerated pace" the foundations of society. In this context, he described "the crisis of the patriarchal family". As he put it:

"Thus, gender relationships have become, in much of the world, a contested domain, rather than a sphere of cultural reproduction. A fundamental redefinition of relationships between women, men and children has followed, and thus, of family, sexuality and personality." (Castells 2000: 2-3)

Similarly, the leading British sociologist Anthony Giddens emphasised the effects of the "world-wide communications revolution", the "new knowledge economy" and globalisation. In this context many social institutions "appear the same as they used to be from the outside, and carry the same names, but inside have become quite different". Giddens described such institutions as "shell institutions". Marriage and the family were shell institutions – once overwhelmingly economic in their character; now based on emotional communication or intimacy. Moreover, this was a global shift:



"There are few countries in the world where there isn't intense discussion about sexual equality, the regulation of sexuality, and the future of the family. And where there isn't open debate, this is mostly because it is actively repressed by authoritarian governments or fundamentalist groups." (Giddens 1999: online)

Left-leaning social scientists were not alone in making a connection between the Information Age and the transformation of the family. The conservative American political scientist Francis Fukuyama explained the dramatic changes in the family – the “Great Disruption”, as he described it – in terms of “the information society”. In his words:

"The changing nature of work tended to substitute mental for physical labour, thereby propelling millions of women into the workplace and undermining the traditional understandings on which the family had been based. Innovations in medical technology like the birth control pill and increasing longevity diminished the role of reproduction and family in people's lives. And the culture of intensive individualism, which in the marketplace and laboratory leads to innovation and growth, spilled over into the realm of social norms, where it corroded virtually all forms of authority and weakened the bonds holding families, neighbourhoods, and nations together." (Fukuyama 1999:5-6)

This article is about the relationship between technological change (the “Third Industrial Revolution”) and the transformation of the family. In particular it considers three new expressions that highlight the connection between new technologies and family – “designer babies”, “cyber sex” and “virtual communities”. It explores what these

expressions tell us about changing family forms, and how families might change in the future.

Technological determinism

Before anything else, a cautionary note. In this type of exercise, it is easy to fall into technological determinism, placing too much weight on technological events and not enough on social relationships.

Consider, for example, Fukuyama's account of the Great Disruption. Fukuyama drew attention to two aspects of technological innovation: first, the birth control pill, allowing women more control over their fertility; and second, labour-saving technology, enhancing the importance of skill at the expense of physical exertion. In turn, Fukuyama argued that women were the winners from technological innovation, whereas blue-collar men were the losers.

Yet the birth control revolution long pre-dated the birth control pill. It was driven by the changing relationship of children to the family economy. That is, prolonged education meant that children became more expensive, which meant that parents had fewer children (Ruzicka and Caldwell 1977: ch. 1). Moreover, the revolution was achieved for the most part through long-standing birth control technologies (Gilding 1991: 65-73). In Australia the birth rate fell below replacement level during the 1930s Depression – 30 years before the pill.

Fukuyama's claims about the impact of labour-saving technology are also questionable. After all, women provided a large measure of back-breaking

labour in agricultural and industrial societies. In the early twentieth century, for example, a Royal Commission on Female Employment in New South Wales did its best to push the view that women should be excluded from factory work because of its physical demands. The Commissioners, though, were frustrated and embarrassed by the young female factory workers who appeared as witnesses and insisted that they preferred factory work because it was less physically demanding than domestic service (Ryan and Conlon: 72-5).

The general point here is that the relationship between technology and culture is a complicated one. It is easy to attribute too much to new technologies. In any case, new technologies (such as the birth control pill) are themselves the outcomes of social and political processes. That is, the restriction of fertility in the wake of prolonged education created the demand for new contraceptive technologies.

Timing

According to Castells, there were four main reasons for the dramatic changes in the family. First, there was “the transformation of the economy, and of the labour market, in close association with the opening of educational opportunities to women” (Castells 1997: 136). The growth of the “informational economy” favoured the employment of women, not least on account of their relational skills. In turn, women’s employment undermined men’s economic control of the family.

Second, “the technological transformation in biology, pharmacology, and medicine” promoted “growing control over child bearing, and over the reproduction of the human species” (Castells 1997: 136). The possibilities of *in vitro* fertilisation, sperm banks, surrogate mothers and genetically engineered babies opened up a “whole new area of social experimentation”. Above all, parenting no longer necessarily implied socialisation, severing the “fundamental relationship between biology and society in the reproduction of the human species” (Castells 1997: 241).

Third, the development of the feminist movement further undermined “patriarchalism”, as Castells calls it. Feminism was one of a myriad of social movements from the 1970s onwards, characteristic of the network society. Social movements such as feminism were themselves the outcome of the Information Age, as identity depended less upon civil society (which was shrinking) and more upon communal resistance (increasingly the basis of identity).

Finally, there was the “rapid diffusion of ideas in a globalised culture, and in an interrelated world, where people and experience travel and mingle, quickly weaving a hyperquilt of women’s voices throughout most of the planet” (Castells 1997: 137). In March 2002, for example, there was an international controversy about a woman who had been sentenced to death by stoning in Nigeria for adultery. Globalised communication placed the

decision-making processes of regional and national authorities under international scrutiny, eventually resulting in the woman’s release.

One problem with Castells’ line of argument is timing. The dawn of the Information Age occurred in Silicon Valley during the 1970s. Only then, Castells (2000: 39) observed, “did new information technologies diffuse widely, accelerating their synergistic development and converging into a new paradigm”. Yet some of the most dramatic changes in the Australian family occurred in the late 1960s and early 1970s. In particular, this was the time when the divorce rate spiralled, after which it stabilised during the 1980s and 1990s.

So how is it possible that the cultural effects of the Information Age occurred at the very dawn of the technological revolution in the relative technological backwater of Australia? After all, Australia is still a laggard in the New Economy thirty years on.

The bottom line is that the dramatic changes in the family were anchored in the “Second Industrial Revolution”, no less than the Information Age itself. By the same token, the Information Age did not put a stop on these changes. On the contrary, as Castells observed, women’s workforce participation continued to increase; social experimentation around birth and socialisation proliferated; and patriarchal privilege struggled to maintain its legitimacy.

In close connection, a new vocabulary of family and communal relationships – such as “designer babies”, “cyber sex” and “virtual communities” – emerged. The new vocabulary suggested new possibilities and choices. It warrants closer scrutiny.

Designer babies

One hundred years ago the most controversial aspect of family change was the declining birth rate. In the 1900s a Royal Commission on the Decline of the Birth-Rate described birth control as a “threat to the future of the family”. Yet by the 1950s birth control was routine. Indeed, it was even described as “family planning”.

Birth control suggested the possibility of selective breeding among human beings. In 1885 Francis Galton, a cousin of Charles Darwin, coined the word “eugenics” to describe the science of selective breeding among humans. From the 1900s eugenics became increasingly influential across western societies. More than this, it was instrumental in creating a more tolerant attitude towards birth control. The first birth control clinic in New South Wales, for example, was established by the Racial Hygiene Association, a eugenics organisation (Gild- ing 1991: 78).

During this era some countries adopted coercive eugenics policies. Many states in the United States passed laws providing for compulsory sterilisation of the “feeble-minded”. More than 100,000 Americans were sterilised under these laws (Ridley 2000b: 35). The Nazi regime in Germany went furthest of all. Its mass sterilisations and death camps

ultimately disgraced eugenics and made it a dirty word.

Fifty years later we are again practising a sort of eugenics – not in the coercive sense, but at the level of individual practices and choices. More specifically, individuals and couples are taking a more calculative approach to the genetic material of their offspring. In turn, they are making choices about coupling, conception and abortion, with significant effects on the make-up of the human population.

In the United States, for example, the Committee for the Prevention of Jewish Genetic Disease organises the routine testing of school children's blood. A hotline allows prospective couples to find out whether they are carriers of the same genetic mutations. As a result, cystic fibrosis has been almost eliminated from the Jewish population in the United States (Ridley 2000a: 191).

Similarly, medical screening procedures such as amniocentesis are now widespread in western societies. They are especially widespread for older mothers who are more likely to give birth to babies with genetic mutations, notably Down syndrome. The proportion of babies with Down syndrome born to older mothers has fallen dramatically in the past decade. This is because older mothers are often choosing to abort the foetus rather than proceed with the pregnancy (Ridley 2000a: 286-287).

The scope for calculative choice in designing our babies is growing at breathtaking speed. Genetic engineering of plants and animals is now routine, but it is still controversial (Commoner 2002: 39-47). Only the genetic engineering of human beings

And if genetic engineering for appearance became commonplace, then it is not difficult to imagine engineering for performance. For example, there is a gene on chromosome 17 called the ACE gene. This gene comes in two varieties, long and short. They are equally common in the population. On average, people who inherit two long ACE genes make better athletes than people with two short genes. According to Ridley, it would not be so difficult to engineer an embryo with two long genes (Ridley 2000b: 35).

And if genetic engineering for performance occurred, then it is no less difficult to imagine engineering for behaviour. Yet the further we travel down this pathway, the more uncertain the effect of genetic inheritance becomes. More to the point, social influences such as family environment and social class become more important in mediating the effects of our genes. Even so, there will be experimentation anyway.

It is possible that “designer babies” will become so ubiquitous that the expression itself will become irrelevant – a bit like the expression “small families” in the course of the twentieth century.

Cyber sex

One hundred years ago birth control unleashed fears not only about the future of the family, but also the future of sexuality. This was because birth control meant a separation between sex and reproduction. For example, the Royal Commission on the Decline of the Birth-Rate quoted the Anglican Archbishop of Sydney, who complained that birth

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is now forbidden, but some commentators have no doubt that it would work. The science writer Matt Ridley, for example, provides a simple example: “the gene on chromosome 4 that is associated with Huntington's disease, a terrible mental affliction of middle age”.

“You could go into the gene in a fertilised egg, find the crucial phrase ‘CAG’ – which, in affected people, is repeated more than 39 times in the middle of the gene – and remove about half of the repeats. It would not be easy, but it could probably be done. The result would be a healthy person with no risk of Huntington's, and no risk of passing it on to her children.” (Ridley 2000b: 35)

It is difficult to imagine that genetic engineering along these lines will *not* occur. After all, it seems a lot less intrusive than genetic screening followed by abortion, which is currently available. And if this type of procedure becomes routine, then it is a series of short steps to cosmetic genetic engineering – say, to prevent dwarfism, or remove a facial disfigurement, or program for blond hair and blue eyes.

control turned marriage into “a mere sexual compact” (cited in Gilding 2001: 8).

In the course of the twentieth century the worst fears of the Archbishop of Sydney were probably more than realised. There occurred what has been described as a “sexualisation” of marriage, whereby sexuality became more important in marital relations (Game and Pringle 1979: 74-81). An Australian survey in the 1980s, for example, found that most Australians thought that sexual pleasure was more important to a happy marriage than success as a breadwinner or performance of household duties (Evans and Kelley 1990: 9).

More than this: sexuality itself became increasingly detached from marriage. This was reflected in the growth of de facto relationships and ex-nuptial births. And it was exemplified in growing social acceptance and legal recognition of homosexuality. As Anthony Giddens observed, this was “the logical outcome of the severance of sexuality from reproduction” (Giddens 1999).

Giddens described the new sexuality as “plastic sexuality”. Plastic sexuality was “decentred sexuality, freed from the needs of reproduction” (Giddens 1992: 2), “something to be discovered, moulded, altered” (Giddens 1999). It was intrinsic to what Giddens called “the pure relationship”, the emergent social ideal for coupledness in western societies. The pure relationship was based upon intimacy, equality and voluntary commitment, unencumbered by kin and community obligations.

The Internet facilitates new ways of forming relationships – and having sex. Cyber sex, or netsex as it is sometimes called, is sex in cyber space. An Internet list of “Frequently Answered Questions” describes cyber sex as people typing messages with erotic content to each other, “sometimes with one hand on the keyset, sometimes with two”. Sherry Turkle, an American psychologist, observes:

“Many people who engage in netsex say that they are constantly surprised by how emotionally and physically powerful it can be. They insist that it demonstrates the truth of the adage that 90 per cent of sex takes place in the mind. This is certainly not a new idea, but netsex has made it commonplace among teenage boys, a social group not usually known for its sophistication about such matters.” (Turkle 1996: 21)

Relationships forged on the web, including cyber sex, have at least four distinctive characteristics. First, they transcend geographical distance. More than this, relationships formed on the web transcend distance through high-speed, low-cost interactive communication. People can have cyber sex with next door neighbours, or with people on the other side of the planet.

Second, cyber relationships are forged on the basis of common interests, rather than common locality. These common interests can become very specialised. They may also lead to the formation of “real life” networks and relationships. One of the most infamous bulletin boards on the Internet, for example, is a site where people with a common interest in bondage, discipline and sadomasochism meet in cyberspace. They also meet in real life (Canadian Broadcasting Corporation 1995).

Third, relationships forged in cyberspace are disembodied. Disembodiment means that symbolic exchanges become more important at the expense of physical markers. In turn, there is more scope for fantasy, deception and experimentation. In this context it becomes possible to explore different identities and sexualities. The most well-known form of deception (or experimentation, depending upon your point of view) is men pretending to be women, and women pretending to be men.

Finally, cyber relationships – for a variety of reasons, including disembodiment - tend to be relatively disinhibited. Disinhibited behaviour on the web includes what is known as “flaming”, or destructive behaviour. It also includes heightened self-disclosure, with people revealing more important, risky and personal behaviour online (Parks and Floyd 1986: 88; Walther 1996: 17-23).

Following this line of inquiry, some social scientists have described relationships formed through cyberspace as “hyperpersonal” (Walther 1996: 5). In the words of the psychologist Patricia Wallace:

“You may reveal more about yourself to [online friends than real life ones], feel more attraction to them, and express more emotions – even when all you have is a keyboard. At the keyboard you can concentrate only on yourself, your words, and the feelings you want to convey. You don’t have to worry about how you look, or those extra pounds you meant to shed ... online you can reallocate your energies to the message.” (Wallace 1999: 151)

Another American psychologist, Joan Ullman, has observed that the unpurgated email in New York’s first Internet-related sexual assault case provided “a prism for viewing the new havoc in relationships playing out on-line”:

“The most important facets include blurring of male and female identities, cocktails of fact and fantasy, sharp disjunctions and free associations in thoughts, and the fluid assumption of new personas, all aided and abetted by hyperfast communication in the absence of verbal and visual cues to behaviour. If the cybersex trial tells us anything, it is that in the free-wheeling interplay of these elements, which it encourages, cyberculture has turned yesterday’s pathology into today’s ordinary sex chat.” (Ullman 1998)

Cyber sex is a new form of “plastic sexuality”. Like homosexuality, it is decentred sex, cut loose from reproduction. It also exemplifies the “pure relationship”, in the sense that it is grounded in interpersonal intimacy, unencumbered by kin and community relationships (Clark 1998).

Some historians argue that sexual mores swing like a pendulum, back and forth between permissiveness and repression (Stone 1977). Yet the emergence of plastic sexuality seems qualitatively different from earlier shifts in sexual mores. More likely, it seems that there will be further elaborations of plastic sexuality in the new millennium.

Virtual communities

Birth control was one controversy one hundred years ago. Another controversy was the living quarters of the working class and poor. This controversy was precipitated by the outbreak of bubonic plague in inner-city Sydney. As a city health officer reflected in his official report, the “poorer classes” needed better housing “not the less for their own health, but as a policy of insurance for that of the whole community” (cited in Gilding 1991: 42-43).

During the next two decades there emerged an outspoken town planning movement, which blamed high-density inner-city neighbourhoods for dysfunctional community relationships. More specifically, they blamed the “slums” for drunkenness, crime, larrikinism, immorality, birth control, infant mortality, industrial inefficiency and political subversion. The solution rested in low-density “garden suburbs”, where people became more family-centred (Gilding 1991: 42-46).

Public transport made low-density suburbs possible. Before rail and tram networks in the late nineteenth and early twentieth centuries, people needed to be within walking distance of where they worked – and for that matter, within walking distance of those people with whom they wanted regular contact (Spearritt 1978: 141). This often meant the intertwining of residential, work and kinship relationships. Public transport meant that people were able to follow the rail and tram lines into the suburbs. Public roads and private cars meant that they were able to move out further still. In turn, there was increasing separation of residential, work and kinship relationships.

Since the 1960s sociologists have mapped the patterns of community involvement in the Australian suburbs. Lyn Richards' description of a new Melbourne housing estate in the 1980s is typical:

At the inception of the project, the agencies sponsoring Reach for the Clouds were mainly interested in whether providing residents with networked PCs would facilitate local community and exchange – ironically, the type of relationships that slum clearance was once intended to wipe out. But the preliminary findings of Reach for the Clouds show that residents are mostly interested in using their PCs to email family and friends overseas, in the countries from whence they have come.

Some commentators lament the decline of local communities. But as the Canadian sociologists Barry Wellman and Milena Gulia (1994: 78) argue: "It is not that people's communities are disintegrating, but rather that they are in flux." Networked PCs facilitate personal communities unrestrained by physical distance – including existing networks of family and friends (as is the case with Atherton

Networked PCs facilitate personal communities unrestrained by physical distance – including existing networks of family and friends.



"The strongest message is that neighbour relations normally are not close. Those who have close relations find them elsewhere, those who know their near neighbours know them very little." (Richards 1990:215)

In this context, community ties in contemporary Australia are not generally grounded in neighbourhood. What we have instead are "personal communities", facilitated by cars and phones. These communities consist of multiple social networks, involving narrow and specialised relationships – say, school friends, or tennis friends, or work friends, or the relatives. By implication, people have to actively maintain their networks, rather than rely upon the goodwill of a single community (Gilding 1997: ch. 4).

Faxes, mobile telephones, electronic mail, the Internet and hand-held computers further extend the scope for personal communities. Local neighbourhoods become even less important as the basis for personal communities. It is now possible to forge disembodied communities on the basis of extraordinarily narrow interests. Consider, for example, the Diving Dentists Society, which unites dentists interested in scuba or other forms of diving. Or the Ginger Alden "Lady Superstar" Fan Club, consisting of fans of Elvis Presley's last girlfriend (Frank and Cook 1996: 51).

Consider another example, arising from an innovative piece of research called "Reach for the Clouds", at Swinburne University of Technology (Meredyth, Hopkins and Ewing 2002). The project is a practical experiment in building a networked community at Atherton Gardens, a high-rise public housing estate in inner-city Melbourne. The estate had its origins in "slum clearance" during the 1960s. It houses low-income families, many of them recent immigrants.

Gardens), and new relationships with total strangers sharing specialised and sometimes esoteric interests (as is the case with the Diving Dentists).

There is even scope for optimism. The American sociologist Mark Granovetter (1973) has documented "the strength of weak ties" – that is, the way in which loose networks can have dramatic effects (for example, in getting a job or identifying a business opportunity). Networked PCs lower the costs in building and maintaining weak ties. They also have the capacity to facilitate strong links, as observed in the discussion of cyber sex above. In Wellman and Gulia's (1994: 176) words: "Thus even as the Net might accelerate the trend to moving community interaction out of public spaces, it may also integrate society and foster social trust."

New millennium families

In the late nineteenth and early twentieth centuries new expressions were coined and old ones were re-fashioned to describe the changing structure and contours of family life and sexuality. Old words with a new meaning included "housewife", "breadwinner" and "motherhood". New expressions included "homosexual", "teenager", "the small family", "the nuclear family" and "broken families" (Gilding 1991).

Expressions such as "designer babies", "cyber sex" and "virtual communities" also reflect new experiences of family and sexuality. The common thread in these expressions is that they all contain a reference to new technologies in communications and the biosciences.

There is a sense in which designer babies, cyber sex and virtual communities are simply the extension of long established trends. Eugenics, after all, predated designer babies by more than one hundred

years. More permissive norms around sexuality paved the way for cyber sex. Trains and trams undercut local neighbourhoods with overlapping social relationships long before the virtual communities of cyberspace. From this perspective, we can regard the technologies themselves as the outcome of cultural patterns and preferences.

By the same token, the new technologies dramatically extended the scale and scope of family change. Biotechnology made the old-style eugenics seem hopelessly crude. Cyber sex was the ultimate expression of plastic sexuality and the pure relationship. The Internet took over from the car and the telephone, pushing the boundaries of personal communities to the edges of the planet. We are now able to choose our offspring, our sexual partners and our communities in ways that were once inconceivable. This is why it became necessary to invent new expressions. It is also why social scientists such as Castells, Giddens and Fukuyama drew attention to the effects of new technologies in the Information Age.

The sociologist Judith Stacey has described gay and lesbian families as “the pioneer outpost of the post-modern family condition, confronting most directly its features of improvisation, ambiguity, diversity, contradiction, self-reflection and flux”. More to the point, she observed “how unambiguously the substance of their relationships takes precedence over their form, their emotional and social commitments over genetic claims” (Stacey 1996: 142-143). The same could be said of designer babies, cyber sex and virtual communities. Above all, they are manifestations of “the families we choose” – right down to parents and their babies, the biological core of family relationships.

In one hundred years I imagine that social scientists (if that is what they are called then) will look back on our own times and find the seeds of their own family structures and relationships in expressions such as designer babies, cyber sex and virtual communities. The only qualification here is that these expressions may well be anachronisms by then. Not least, the phenomena to which they refer may be so routine as to make the expressions irrelevant.

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