**Delaying menopause, buying time? Positioning ovarian tissue cryopreservation and transplantation technologies for delaying menopause in the context of women’s embodied reproductive choice and agency across the life course**

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**Introduction and aims**

Twenty years ago Margaret Morganroth Gullette (1997) drew attention to the way in which menopause discourse served a powerful cultural role, in marking a (negative) shift in women’s social status, shaping both social norms and women’s self-appraisals and dividing women’s life course into two; fertile and post-fertile with value attributed only to the former. Its reappearance at a time when women have enjoyed access to education and professional status, she suggested, served to undermine those gains in a powerful combination of misogyny and ageism. Gullette’s focus was on hormone replacement therapy (HRT) specifically in which female ovarian ageing is considered to be synonymous with pathology in medical discourse, ushering in a number of potentially devastating health conditions, from heart problems to osteoporosis and frailty. However, In 2019 a new menopause discourse entered the cultural domain, with the emergence of a new ‘solution’ to the problem of menopause via a surgical technology that had formerly only been available for younger women undergoing medical treatment that compromised their fertility. Offered by the private UK-based health provider ProFam, to women under 40, the technology delays menopause via ovarian freezing techniques (henceforth: OTCT, or ovarian tissue cryopreservation and transplantation). It has the dual aim of preventing menopausal symptoms and extending fertility, according to individual need and choice. Like other reproductive technologies, control over the body is also control over time and in this case, control over ageing itself.

In this chapter I look in more detail at menopause discourse as it appears in the medical and popular literature associated with this new technology, focusing particularly on the continuities and discontinuities with earlier forms of menopause discourse. I also take a broader view in placing technologies for delaying menopause in the context of reproductive technologies used by women at all stages of the life course particularly in terms of the claims made of reproductive technologies to give women choice, freedom and control over time. Finally, and by way of summing up, I will explore whether menopause itself, rather than its delay, can actually bring freedom.

**Menopause discourse: contemporary and historical**

Menopause, though recognised in medical history for centuries as a time of crisis and change in a woman’s life, has not always borne negative connotations. For example, in Greek medicine, whilst women’s bodies were considered to be inherently flawed, this notion of pathology was fundamentally arranged around the reproductive system and the menses. Menopause was helpful in bringing a woman’s body closer to that of a man’s (Foxcroft, 2009: 37). The beginning of ‘menopause as a problem’ discourse came in the eighteenth century with the advent of early modern medicine. Physician Edward Tilt produced the first full length book on menopause and it highlighted a vast array of problems, albeit very different ones to those featured in our contemporary accounts: one would not find today menopause linked with pseudo-narcotism, for example, or aphonia, or, as in the work of A.F Currier, a comparison with epilepsy, hysteria or malaria. Within such medical texts, the uterus and later the ovaries were considered the source of women’s problems. Moving to the early twentieth century, the discovery of the endocrine system introduced a hormonal explanation to the understanding of menopause and this explanation stressed ‘deficiency’ rather than change (which indeed has become medicine’s approach to ageing particularly since the late twentieth century.) Indeed in medicine more generally, the ageing body is necessarily viewed as being in decrement, with the youthful body the standard, health itself being associated with the maintenance of youthful bodily norms and functions (Pickard, 2012). That is, in this scientific framing of women’s bodies, as in the cultural discourse, there is no sense that post-fertility is a valuable developmental stage in a woman’s life course. It is also linked with a particular view of ageing and decline in women that begins early in the life course, depicted in terms of ovarian reserve; indeed one recent article on the subject notes, among many criticisms, the necessity of women’s youth for this technique to work ‘with 25 years already possibly being too old for many women’ (Kolibianakis, 2020: 65).

Today, in the west, menopause is associated with a vast range of symptoms, both physical and psychological, which are extensive but often elusive: as Louise Foxcroft notes: ‘These myriad symptoms take in every bodily system – vasomotor, cardiovascular, metabolic, sensory, digestive, skeletal, glandular and the central nervous system’ yet the only (near) universally agreed symptom is the hot flash (2009:7). It is also considered to usher in a prolonged time of poor health and to signal a risky future state. This experience is certainly not universal and furthermore it is inflected with class and other positional attributes; women with social disadvantage and a previous experience of anxiety and depression are more likely to experience severe menopausal symptoms and these persist longer than for other women (Avis et al, 2014: Newhart, 2013). Indeed feminist sociologists have seen menopausal symptoms and experiences as a product of ‘local biologies’ which, in serving as expressions of social suffering, make menopause a ‘cultural syndrome’ (Mattern, 2019) through which to express somatically, for example, role conflicts and other friction and tensions that cannot be otherwise articulated. Recent cross-cultural research suggests here that social class cultures and, relatedly, the comparative degree of male domination may be more important in menopausal experiences than geographical cultures (Delanoë et al, 2012).

By contrast, the contemporary biomedical discourse sees it as entirely in disease terms with HRT as the potential ‘cure’ for the changes in a woman’s body which are referred to as pathological. These discourses themselves play a large role in the devaluing of older women; Gullette makes a careful distinction between menopause and menopause discourse and suggests that it is the latter that make many women sick because ‘they accept the culture’s conclusion that it’s a biological marker of decline’ (1997: 184). Many women report how menopause is a central element to their devaluation from mid-life onwards, including being blocked from opportunities for promotion and professional development and more generally finding work environments unsupportive. The British Medical Association (BMA) recently reported a strong pattern of senior female clinicians in menopause leaving work or reducing their hours, which also indirectly suggests the harm that the biomedical emphasis on decline and pathology has on its own practitioners (Hill, 2020). Beyond the impact of attitudes to menopause and a lack of flexibility at work, women are likely to be impacted by accumulated disadvantage impinging on mid-life, inequalities bearing bitter fruit in terms of stalled career, poor health and well-being and associated relationship difficulties that are ‘explained’ by the menopause event, as if biology itself were the one and only problem. This reductionism also impinges on the interpretation of symptoms themselves; for example so-called ‘sexual dysfunction’, associated with menopause, and/or vaginal dryness may simply signify a woman being less likely to feel ready for sexual intercourse because of stress, fatigue, or the vagaries of a long-term relationship, or alternative priorities, and indeed may have little or nothing to do with menopause.

A new answer to the, by-now undisputed ‘problem’ of menopause, according to one pioneering clinical company based in Birmingham, UK, is provided by interventions that delay its onset for up to twenty years. I turn to this next.

**ProFaM and contemporary menopause discourse**

Cryopreservation of ovarian tissue has been a viable technology for some years and its potential role in reversing or preventing menopause has been theoretically possible also. Based on decades of both research and clinical practice with younger cancer patients, ProFam, led by Professor Christiani Amorim, is the first commercial organisation to offer healthy female customers the preservation of fertility together with the possibility of a continuation of ‘natural hormones’ – their own, as compared with HRT – for use in delaying menopause. The CEO is Professor Simon Fishel who worked, at an early stage of his research career, with the clinical pioneers involved in the first IVF baby in 1978. The procedures involve small portions of the ovary being removed, processed into tiny strips and cryopreserved for later use. In the future, possibly even decades later, they can then be thawed and grafted back into the body of the older woman, providing eggs for reproductive purposes or hormones to postpone menopause.

ProFaM opened its doors in 2019, as a collaboration between industry, the NHS and the University of Birmingham and offers customers paying between £7-£11,000 an elective procedure for delaying menopause, via OTCT, involving ovarian freezing with the intention of replanting this at a time when menopause may otherwise be starting and thereby introducing a continued supply of hormones. ProFaM claims that this procedure may delay menopause for up to twenty years (a claim that has been contested by many reputable organisations, such as the British Medical Association (eg BMS, 2019). More interesting than a debate over the veracity of its claims for the purposes of this paper, however, is the nature of the menopause discourse appearing in the clinical literature on this technology. For example, looking at a critique of the technology (which advocates HRT as a preference) in one of the most recent publications (for the writing of this particular article), namely a 2020 article in *Maturitas,* (Kolibianakis et al, 2020) the authors begin by highlighting the ‘problem’ as one occurring because of increased life expectancy on the one hand and the fixed age of menopause on the other, meaning that women will potentially spend decades in this post-menopausal phase. This means, according to the authors, that they will face ‘physical and psychological challenges’; the critical literature goes onto talk about ‘management of these women’ (recommending use of HRT). Whilst sharing the same points about the negative nature of menopause, the literature that is positive towards this kind of technology also highlights the role that technology can play in helping younger women juggle careers and motherhood citing reasons that women may delay pregnancy including education, career planning, financial instability or difficulty in finding a partner (Rivas Leonel et al, 2019).

Indeed, the latter thread has acquired increasing prominence in ProFam’s approach (see Gregory 2019 where the benefits of delaying menopause were emphasised over beating the biological clock). Certainly, the benefits of the treatment are presented as that of controlling time, or rather, of being less at a disadvantage in temporal terms, for both biological and social reasons. ‘Years of meticulous research has now allowed women to delay their biological clock’, ProFaM’s website proclaims (see <http://www.profam.co.uk/>).This is echoed in the following comment made by the daughter of Professor Fishel. In an interview with the BBC, Savannah Fishel, aged 22, waxes enthusiastic about her father’s procedure, telling BBC’s Today and Victoria Derbyshire programmes that she is “definitely not wanting to pop out babies anytime soon” and notes that she is “definitely not focused on…having kids’ at this point. She goes on: ‘I love my job and there’s so many other things I want to do before then’. She refers to mental freedom from planning or worrying about motherhood, made possible by her father’s technology, declaring: ‘I don’t want in the back of my mind that if I do want kids, I’ve got to get it done now, get a ring on my finger.” (see <https://www.bbc.co.uk/news/health-51269237>).

In the next section I explore how this new technology is viewed by women themselves, and here I will be drawing on two articles in *The Guardian* and *The Sunday Times* respectively, both published fairly soon after ProFaM opened its doors. These articles are not intended to be representative but rather illustrative of cultural attitudes towards delayed menopause, and emanate from women writers at two distinct points in the life course, one approaching the end of her childbearing years and the other post-menopausal. These articles illuminate two contrasting positions : (i) its beneficial nature for childless women in extending their child-bearing years and; (ii) the degree to which the technology, along with HRT and its related discourse, devalues women’s ageing and the post-reproductive stage as a life stage making it difficult to see in anything other than negative terms. I will also include in my analysis themes as they appear in the readers’ comments below the line (BTL).

‘**For women like me, postponing the menopause would be a blessing’, Sodha (2019)**

Regular Guardian columnist Sonia Sodha’s interest in ProFaM’s technology focuses on its promise of extended *fertility* and she describes reading about it with ‘a sense of excitement’. She explains that, like most childless women reaching the end of their childbearing years (she is in her late 30s), the reason she is not a mother is that she has not yet met the right partner, although, she adds quickly, ‘Even though I shouldn’t have to, I would have made the choice to sacrifice career progress to have had children at this point.’ In the event of structural inequalities and norms that undermine professional women’s ability to have children she observes: ‘It is time to grapple with the fact that the profoundly positive social development of women’s increased educational and professional success might mean that we need to use science to rethink aspects of our biology.’

Readers’ BTL comments can be grouped into some of the following broad themes: (i) a negative approach to delayed menopause in terms of resisting the emphasis on individual change, one reader noting ‘don’t alter the body to fit the world, alter the world to fit the body’; (ii) Some suggestions that women need to prioritise reproduction at earlier points in their life course with one reader stating:

‘I prioritised finding a good man early on… to the detriment of my career, but we got three years together before having our first at 25/35 and eight years on, thanks to hubby earning a good wage and our decision to live just out of a small town, I’m happy at home growing food and teaching my kids. I’ve no regrets. I have always been mindful of the extra risks past 35 and started young to ensure I would be finished by 35, tops.’

One minor theme was recognition that this technology fed into women’s temporal indecisiveness: ‘Could the technology just increase the time available to procrastinate?’ Finally, some readers suggest that menopause is not a problem for them but one of the best times of their lives. One example: ‘Menopause is one of the best things that ever happened to me. My depression disappeared as a result of the massive chemical changes in the body that menopause produces. On top of that, I no longer bleed every month and have no premenstrual symptoms.’

The second article amplifies this latter aspect and thus implicitly highlights the role menopause might play in a society which valued women’s ageing and maturity.

**‘If I thought the menopause would last 17 years, I would leap at this treatment’, Knight (2019)**

India Knight, a woman in her early fifties with three children, presents a different viewpoint. After sympathising with women who struggle with menopausal symptoms, and confessing that she had dreaded the menopause as a young woman, ‘largely because I knew so little about it and it sounded both shameful and horrible’, Knight pens a eulogy to the post-menopausal stage of life. Knight reflects:

‘There are good things about the menopause. I really like being middle-aged. I feel far more confident and competent than I did when I was younger, and I have stopped caring about things that don’t matter. I am comfortable in my skin. All of these feelings crystallised around the time of menopause. I’d been waiting for them all my life. They are not something I’d want to delay’.

This suggests that the long-standing embodied norms of femininity can be disrupted at menopause and a new selfhood constructed, where, by contrast, delaying menopause serves to extend those norm of gendered sexuality. Several readers’ BTL comments also echo Knight’s sentiments. One reader notes: ‘I have felt better than I have in year since I went through the menopause… having found my new quality of life, I wish it could be brought forward rather than delayed.’ Another declares: ‘I’m much calmer, have more perspective and emotional balance than I ever did. The fertile years are full of drama… glad I’m out the other side.’ A third reader agrees enthusiastically: ‘The other side is great!’

I will return to this theme later in the chapter, but first I will explore in more detail the argument developed by Sonia Sodha, and highlighted by ProFaM itself, concerning ‘buying time’ . To do this, I will take a life course perspective, including how women approach a variety of other reproductive technologies, with the intention of exploring how they are perceived generally to work to help women manage time in a number of ways.

**Reproductive technologies, gender and temporality**

Lived time and temporality, as a social structure working with spatiality, have been highlighted as factors in women’s continued inequality in contemporary times. The context for this lies in the entry of women *en masse* into the workplace, whilst retaining responsibilities at home. As a lived experience, this has been described in relation to the concept of ‘timescapes’ (Adam, 2000) which refers to the multiple times that co-exist and intersect with some (e.g work) hegemonic over others (such as care-giving or child care) together with the qualitative difference in the rhythm structure of these temporalities between, for example, relational and clock-times, which has to be managed at an individual level (see Pickard, 2018; 2020). In short, women struggle to juggle these contrasting times, and struggle too with a related ‘lack’ of time as compared to men.

Whilst OTCT joins a number of other technologies that claim to buy women time, for women making reproductive choices, however, there are a number of deeper, invisible structures that also shape their temporal experience. One of these is femininity itself which, as a learned embodied mode, comprises a number of unique dispositions, including spatial and temporal dispositions. These gendered dispositions can be approached analytically through the concept of ‘habitus’ (Bourdieu, 2000) which Bourdieu describes as embodied history that works to reproduce the social hierarchy including in its class but also gendered dimensions. They persist, Bourdieu suggests, at a deep, tacit and pre-conscious level that is hard to grasp, perceive or articulate, and are enduring despite new contexts of broader experiences of social change. The contemporary context involving both public work and caring responsibilities may introduce ‘hybrid’ gendered dispositions (Budgeon, 2014) including both those associated traditionally with masculinity and those associated with traditional femininity This is what Bourdieu describes as the ‘habitus clivé’ or divided habitus, which describes a subjective sense of self ‘torn by contradiction and internal division’ (2000: 16; quoted in Friedman, 2016: 130). So, whilst planning and forward-projection are ‘masculine’ temporal dispositions, which women may acquire through their presence in the work economy, they hold these alongside a more quiescent, relational temporal disposition of ‘gendered expectation’ (Leccardi and Rampazi, 1993) associated with the feminine realm of caring, relationality and domesticity. Gendered expectation is not a clear intentional arc towards the future but a ‘gendered representation of the future’ (Leccardi and Rampazi, 1993: 369) and thus a constrained form of agency.

In this sense, reproductive technologies such as the contraceptive pill and egg freezing, whilst providing women with a more immediate sense of control and freedom, may also feed, and be fed by, the temporal disposition of gendered expectation. This can be understood through a phenomenological approach to time and temporality, wherein ‘lived time’ involves both ‘protentions’ and longer trajectories, the former comprising action directed to everyday concerns, which are mostly implicit, and the latter a more reflexive approach, directed at future plans and ambitions. Reproductive technologies which buy time, and put off decision-making (e.g. Szewczuk,2012) are compatible with protentions but are entangled with expectation rather than underpinning long term planning of the kind associated with career trajectories and ambitions (Tavory and Eliasoph, 2013).

This is borne out by a number of empirical studies. For example, in Carroll and Krolokke’s study of women mostly in their later child bearing years (over 35 and into their early 40s), women freeze eggs in order to have time to establish a traditional heterosexual marital-style relationship. They note: ‘Participants were banking on a particular normative understanding of love, defined as finding the right guy and establishing a nuclear heterosexual base, which we call “anticipatory coupledom”. Romantic love became a pre-requisite to several participants yet also a sign of respectable femininity and maternal qualities’ (2018: 999). Catherine Waldby found in her study that egg freezing as a process promises to enable women (both heterosexual and lesbian) to orchestrate the various, incompatible, temporal strands running through their lives, something that is particularly necessary in what she describes as the ‘high-stakes game of family formation’ (2015: 473). That is, it presents itself as a way of managing the ‘different trajectories of career, relationships, ageing – that interweave at different rates through the lifecourse’ (2015: 475). Here ‘freezing’ can be read on both a literal and metaphorical level, as cryopreservation allows eggs to be removed ‘from its web of temporal, biological interactions’ (p. 475). Some strands – for example, the biological trajectory – that would demand faster attention, once frozen can be addressed *after* career and household formation (which exists on a slower trajectory). However, the decision to reproduce is not made but effectively put off for a later date. Similarly, this does not necessarily facilitate harmonious synchronisation of the other temporal threads of a woman’s life and nor is it particularly rational and pragmatic as it still incorporates elements of expectation linked to a heteronormative ideal of coupledom and family life. Waldby reflects: ‘Women purchase this synchronic power not in the service of immediate conception, but as a way to create a margin for deliberation and relational negotiation’ and in this sense, ‘their actions were not prudential but hopeful, oriented to the creation of future possibilities for life and family’ (p. 480). The terms ‘deliberation’ and ‘hopeful’ describe the mentality of gendered expectation perfectly, and one that is compatible with work on the self of the kind that opens up the possibility for fulfilment to come from the outside, a constrained agency, in which work is done on the self whilst waiting for that external agent, that is typical to the kind of mentality encouraged in self-help literature (Taylor, 2012). Carroll and Krolokke note: ‘By freezing their eggs as a form of acting in the present, some women in the study believed it would optimise their potential romantic future by making their reproductive potential a risk-managed asset to create their own genetically related “perfect” children’. They continue: ‘As noted by Rosa in reflecting upon her current dating situation: ‘People often ask me, like, “Oh, do you have eggs?” and it’s like “I do have eggs!” (2018:1000). Indeed, the looping back of an anticipated future into the present serves to construct what Nowotny (1994) has termed an ‘extended present’ in which women live suspended between present and future and which is further associated with chronic ambivalence towards the making of choices (Leccardi and Rampazi, 1993; Pickard, 2020).

This raises important questions as to how much reproductive technology in fact facilitates a woman’s agency and choice. Hopes of romantic love lie as much in the realm of ‘fate’ as in that of choice, a fact that Sodha’s retrospective regret at prioritising career over love does not acknowledge. Further, those spheres that lie outside the reproductive domain may also be compromised. Although the freezing of the ’biological clock’, theoretically gives space for women to fulfil other trajectories, in practice, in feeding gendered expectation, it acts as a brake on developing long-term plans for example in career-terms, a fact Sheryl Sandberg famously observed in her observation that women fail to ‘lean in’ (2013) and indeed women using reproductive technologies in several studies acknowledged holding back on career ambitions in order to keep their personal options ‘open’ (Baldwin, 2019; Brown and Patrick, 2018), a term that captures the ethos of relational time. Similarly, empirical studies suggest that most women did *not* carry out egg freezing in order to ‘lean in’ career-wise, but rather to enable a focus on ‘pure’ relationships disentangled from family plans. This suggests that the gender gap associated with motherhood starts much earlier than studies relying on quantification can identify, and that it impacts not only actual mothers but women planning for and hoping for motherhood, however vaguely, including those engaged in both IVF and egg-freezing practices and now indeed in delaying menopause, none of which may lead to the birth of a(nother) child. In all cases, in the discursive emphasis on individual ‘fixing’ of time problems, whether this be a mother fitting work and child care into her life, or a childless woman searching and failing to find the ‘right time’ for motherhood, the underlying social inequalities, both interpersonal and institutional, are barely identified, much less challenged.

Maude Perrier’s research with mothers, moreover, suggests a high chance that these different strands of time in a woman’s life can never be satisfactorily brought together, even for those women who achieve motherhood. For the women she interviewed, as she points out, it ‘was more a case of finding the least “wrong” time’ (2013: 82). This again suggests that ‘planning’ is not an accurate term to describe reproductive choices. As Perrier reflects, in a way that resonates with the above: ‘Indeed for my participants the timing of their pregnancy had been shaped, in varying degrees, by the coming together of biographical, psycho-social and biological circumstances and so was not purely the outcome of choice’ (p. 71). Whilst the notion of the ‘right time’, moreover, is embedded in middle-class trajectories of the life course involving self-actualisation and a slower track to full adulthood, these same trajectories both fit the middle-class women’s bodies imperfectly and also influenced young working class mother’s perceptions of being ‘derailed’ or suspended from their own planned trajectories, trajectories which similarly emphasised self-development. That is, like the notion of the biological clock, the concept of the ‘right time’ serves to obscure the fact that there are multiple co-existing times and that these times related to deep social structures beyond a woman’s individual control.

As Vicky Boydell shows in her chapter in this volume, and drawing on the work of Catherine Rottenberg (2018), for women who are at the point in their lives when they are propelled to choose, ‘ambivalence’ may be replaced or joined by the quest for ‘balance’ an aspirational notion of finally getting the temporal juggling right. Among the women Boydell interviewed, multiple kinds of regret are in evidence as they look back on their reproductive choices: leaving it too late for conception, finding that even carefully planned careers were disrupted by motherhood; finding that the assumptions of equal parenthood have not been born out in practice. The ‘hermetic ideal of family life’ (McRobbie, 2020: 7-8) means that more equal kinds of parenthood, involving a fair contribution by fathers, as well as robust state support for childcare, are no longer prioritised with the emphasis instead being placed on an individual mother’s successful juggling of temporal conflicts and priorities. Similarly alternatives to motherhood – such as childlessness and/or singlehood – become undesirable. Yet for Boydell’s respondent Helen, who decided fairly early on that she did not want children, ‘the veil of balance fell away much easier, and many previously unthinkable possibilities emerged for her’ (INSERT PAGE NUMBER HERE)

Many of the women in Boydell’s study were prompted to make the decision to become mothers for fear of running out of time. Indeed, both the individual fear of running out of time and the negative attitude towards ageing are fed by broader social currents around future time. For example, Adams et al (2009) suggest that a future orientation is germane to late modern governmentality entailing a politics of anticipation. The privileging of the future also makes the present knowable only through the future, mediated through a lens of risk and surveillance and with an onus on the self to be prepared for future contingencies in a way that is never completed. In relation to technologies of reproduction, this temporality fits less with medicalization, concerned with control, than with biomedicalization, concerned more with transformation in anticipation of future risk (Clarke et al, 2003). As the ProFaM website asks rhetorically: ‘Will you be ready? You never know what the future holds, so freeze the biological clock and prepare for the future!’ Whilst linked here to women’s reproductive body such perceptions of the future are also embedded in a broader biogerontological discourse which sees biological ageing as synonymous with illness, viewed not only as curable (as with HRT) but potentially preventable, meaning action is required even if one has ‘beaten’ the biological clock. Ultimately, and going much further than cryo-preservative techniques, Aubrey de Grey, controversial co-founder of the SENS Research Foundation in California, talks of creating new ovaries through tissue engineering as well as replenishing stem cells eliminating, rather than delaying, the menopause altogether (Devlin, 2014).

The sentiments expressed by India Knight, however, and by the readers who concur with her, suggest that something is missed in the medical ‘solutions’ to menopause, both in the view of ‘health’ as equivalent to youth and beyond this in the rendering of existential questions as ones whose only reasonable answers lie in the medical field. For example, it could be that one feature of a post-menopausal timescape is that temporal frictions, manifesting in ambivalence, to a degree are resolved once the potential for conception is over . If that is the case, delaying one’s menopause effectively prolongs such ambivalence and expectation and thus delays access to such temporal freedoms and agency as otherwise available to the menopausal woman. To be clear, while menopause does not bring an end to ‘hybrid’ temporalities altogether nor the juggling of complex timescapes in many cases, especially for women of the ‘sandwich generation’, it does facilitate entrance to a more comfortable temporal existence and a more integrated subjectivity.

**Discussion and concluding remarks**

There are a range of reasons why menopause may be difficult and undesirable, however these can only be understood with reference to a woman’s experience of her reproductive body as she attempts to negotiate multiple roles and temporalities over the whole of her life course. Increasingly, however, the medicalization of menopause, which removes menopause from any sense of context either in the life course or in society, is being replaced by biomedicalization, and that includes cryopreservation of ovarian tissue for the transformation (and rejuvenation) of the older body. Entirely absent from these approaches, also, is any sense of the positive factors associated with menopause, and indeed this has its roots in a conception of the life course as linear, and one moreover framed by the ‘decline narrative’ (Gullette, 2004). Older conceptions of the life course, however, hinted at in a history of medicine’s approach to the menopause, recognize the post-menopausal stage as a powerful, meaningful period equal to that of the other ages and stages of a woman’s life (and indeed one that may be characterised by the best health of all). Scholar of women’s myth, Christine Downing, reminds us that the ancient Greeks posited three seasons of a woman’s life, ‘growth, flowering, ripeness’, which corresponded to three aspects of the goddess Hera, ‘Hera Parthenos’, ‘Hera Teleia’, and ‘Hera Chera‘ ie ‘maiden, wife and post-connubial woman’. The underworld ‘is ruled by the Eleusinian triad – maiden, mother, and crone’. She notes that these three seasons to a woman’s life apply ‘irrespective of whether she is heterosexual, homosexual, or celibate, quite apart from whether she has ever conceived or borne or nursed a child: from birth to menarche, menarche to menopause, menopause to death’ (1987:13). This tripartite division also echoes Beauvoir’s analysis of women’s subjectivity, divided into an androgynous and free subjectivity, associated with childhood, a ‘second sex’ comprising a fragmented subjectivity, comprising irresolvable temporal and spatial tensions, and a post-menopausal ‘third sex’ stage in which she once more regains her full subjectivity (or, as she puts it, a time when ‘she is unsexed but complete’). Beauvoir’s system, unlike the ancient Greek, highlights the structures associated with the hierarchical gender system.

In both cases, the positive vision of ageing conjured is difficult to convey, especially to younger women, in a culture that devalues age and the ageing post-reproductive woman’s body. However, illuminating the temporal dimension associated with gender, and its part in constructing the ‘second sex’, may well begin to make the benefits of this stage more transparent, as well as fostering feminist formulation of a deeper criticism of hegemonic time, into which reproductive technologies at all stages feed. Finally, women’s positive, lived experience of the post-menopausal phase may also make the attraction of delaying menopause less obvious and in that sense give all women ‘more time’.

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