That aspiration is painful is not surprising, given that tranquillisers have no anaesthetic properties. The piercing instrument used to extract the eggs must thus be inserted while the woman is fully conscious and awake. As mentioned above, anticipation of this procedure often caused considerable anxiety, as Ruth Levy recalls:

And if you can imagine that in your mind, you're sat there, all prepared, and you know within thirty-five hours you've got to go down there and all you know about is this needle going through your abdomen . . . and you're trying to imagine the pain before you get there, and I'm thinking 'Oh my God . . . what's it going to be like to have that needle going through my abdomen', and I couldn't come to terms with that at all, all I could think of in my mind was this big needle going through my tummy, and it wasn't going to be numbed, I was only going to be sedated slightly, but they weren't numbing it like the dentist would do ... and I thought, 'God, that needle's going to go through my tummy', and I'm looking at my tummy thinking 'where's that needle going to go through', because I just could not imagine it.

Exceptionally, women do not find the aspiration excrutiatingly painful. Jennifer Young, who was, perhaps significantly, pregnant as a result of IVF at the time of the interview, even described it as enjoyable:

I actually rather enjoyed the aspiration, I mean everybody was saying wasn't it awful and it was painful and this that and the other, and I actually was quite excited by it, really.... I was very aware of what was going on, and I found it quite exciting actually, they kept saying 'oh, got an egg' as they kept yanking these eggs out and I was really excited, I mean I was absolutely fascinated by how they were doing it, how they could retrieve these eggs.

As it is undoubtedly the case that a person's attitude can influence the experience of pain, and/or its interpretation, such comments are not surprising, though they were rare. Likewise, retrospective accounts of pain are not only altered through intervening circumstances, but also by the tranquillizers, which can have a mild amnesiac effect.

Far more common than Jennifer Young's excited fascination and enjoyment of aspiration were descriptions of the procedure as very painful and traumatic:

Now the actual experience of having the eggs retrieved, they gave me the valium and the pethadin, and I thought oh this is lovely, this is a lovely feeling, I was sort of floating on air, you know, laying there, and all of a sudden it felt, well, I can imagine as though someone had stabbed me. The pain, oh I just couldn't believe it, and I just lay very still because I remember him saying if you move Mrs Lewis we will lose the eggs, and they will go into your body and that will be it. So of course I had to suffer it and I just lay there and I was sort of moaning sort of thing. When it was done I said to my husband oh it was agony.

(Catharine Lewis)

The operation itself was excruciatingly painful, I mean [the clinician] said he thought I was very unlucky because they actually got eighteen eggs out of me which was a lot more than they thought they would. He said the more eggs they get out of you he reckons the more painful the operation gets, because you know you are not under general anaesthetic, you are just, I was just doped up to the eyeballs with valium and everything and I remember bits of the operation, I remember crying during the operation, I could hear myself crying, and I could hear the nurse saying you are doing very well, it won't be long now, and I could hear [the clinician] saying there's one and there's another one.

(Jane Caldwell)

These descriptions not only convey the pain experienced by several women during aspiration; they also reveal certain features of women's self-image during treatment which are perhaps significant. For example, there is in the latter extract the comment: 'I remember crying during the operation, I could hear myself crying', suggesting two different points of view on the self, one from within and one from without, as it were. The shift in point of view denotes the presence of a dual self-consciousness, of a direct self-consciousness ('I remember crying during the operation'), and of a consciousness of self as seen by others ('I remember hearing myself crying'), which is spoken from a point of view analogous to those of the nurses and clinicians, as if Jane Caldwell were outside herself. Lying on the table, looking at her inner abdomen on an ultrasound monitor, which is also being watched by the clinicians as they locate the follicles, it is clear the woman is instantiated in a complex web of mediated gazes, including her own, through which her body is objectified at the same time that her insides are 'disembodied' via the monitor. This complex process is revealing of the dramatic respatialisation of conceptive events produced in the context of IVF. It is also suggestive in relation to women's position as both subjects and objects of reproductive science.11

THE EMOTIONAL DEMANDS OF IVF

Despite the number of women who remarked upon the considerable, and unanticipated, physical demands the programme made of them, nearly all agreed the physical demands were secondary to the emotional and psychological ones. Frances Keating explains:

I've never in my life experienced anything so much as that, as after I'd been through the programme [and failed]. I thought I'd get on, I'd cope, I'd pick myself up, but I didn't, I didn't, not for a long time.... You've gone so far, but you've still come back, and that's the hardest thing. I felt as if I'd gone all the way up to 99 per cent and then I'd had to come all the way back to zero again. And I think that's what it is. You build yourself up, you get yourself so psyched up, I've done it, and then you think, like, I haven't, and I think that's the hardest part. Because I don't think the IVF programme itself is hard.

A similar description is provided by Mavis Norton:

Because it is, psychologically I think it's a lot worse than physically, and that's even with all the dashing around and the injections in your bottom every morning. . . . Paying for it and doing it is nothing compared with the psychological part of it. . . . It strikes you in your mind ... because it's easy to get carried away with it.

Mary Chadwick adds:

Women can take the physical pain. We wouldn't have gone through four attempts of all that pain if we couldn't take the pain. It's the emotional side that's more traumatic than anything.... I just literally fell apart through all this treatment because of the emotional side of it. . . . It's difficult to overcome treatment, and I think when couples go in for IVF treatment they have absolutely no idea what they're going in for, or what it actually involves, because going in for IVF treatment you really are on your last resort . . . and also, it's very difficult to explain, but one of the reasons I did come to the end of it is, as I say, I was so emotionally drained, the physical side I could take, the pain, but the emotional strain that you go through.

As these descriptions make clear, it is impossible ever to forget the importance of the basic, underlying purpose of IVF, which is to have a child. Underlying the demands of the daily IVF regime, the way it 'takes over' as a 'way of life' and the physical demands of the procedure is the continual awareness that the procedure is a woman's 'only hope', her last resort in the attempt to have a child. The impact of this underlying awareness upon all of the other facets of treatment, and its significance in and of itself, cannot be overestimated. 12

Dealing with failure

Dealing with failure is undoubtedly the most emotionally wrenching feature of IVF. The importance of failure as a component of IVF. again, derives in large part from the way IVF comes to feel like a series of hurdles. This has two consequences. One consequence is that each hurdle represents another point of potential failure, and there are many more hurdles to overcome than are initially appreciated, due to the apparent straightforwardness of treatment. Related to this is the consequence that the more hurdles that are successfully overcome, the harder failure is to accept, having 'come so far':

I mean we were told, we were given details of the programme at the hospital, we were told that on day one you take this tablet and day so and so you start taking the injections and then the eggs start developing and day so and so you have more scans, blah, blah, blah, but you may ovulate normally and then you may abandon the cycle. Well, what happened with me was that the drugs that I was taking and the injections and the tablets which was the drug regime at the time didn't or had very little effect so I didn't even produce one egg in the month so obviously they had to abandon it. Now that wasn't something [we'd been told], the assumption I believed was that I would at least produce one egg, although they would expect me to produce anything up to twenty-odd, so that was very disappointing.

(Meg Flowers)

Hence, there is a considerable amount of emotional work involved in coping with the demands of the IVF procedure, particularly when it fails, which is almost always the case. Again, the intensity of the emotional and psychological demands of treatment are often unanticipated, even when a couple has undergone several cycles and know the routine.

Personal boundaries

Emotional difficulties are also encountered in the context of information management, as it might be described, concerning both fertility problems and their treatment. In response to questions about who they told about IVF, women reported several difficulties related to personal boundaries concerning their treatment. This came up often in relation to paid employment, as discussed below. In addition, decisions had to be made about the pros and cons of telling family and friends, both about infertility and IVF. Some women felt that openness was the best policy, but others felt conscious of continually having to 'keep up a front'. Some women simply lied about their treatment, saying they had to visit the hospital for some other reason. Many found it hard to tell people even if they felt this was the preferred solution. Others found it hard to explain the nature of treatment itself, given the complexity of demands it presented. When telling people about their treatment, some women also found the reactions difficult, thus creating awkward responses to negotiate in addition to the difficulties of disclosure:

My hardest part was keeping it from the girls at work. And every time I had to go down to [the clinic] during the day I used to tell them I was going to the hospital to be treated for a urine infection. The lies I told, honestly, it's a wonder I didn't have white spots all over my tongue!

(Ruth Levy)

[Telling people] made it so much worse because there are all the more people to say well it hasn't worked, and there were too many people feeling sorry for me, and I couldn't cope with that either, oh, you know, we are all so sorry, we are so very sorry, and why didn't it happen, what went wrong, and you know, it just went wrong.

(Mavis Norton)

It's just a difficult topic to sort of talk about, I mean once it's been broached it's not so difficult, because a lot of people have had problems, but just that initial deciding to tell is difficult.

(Sylvia Newton)

The one thing I got fed up of, I got fed up of talking to people I had to explain the treatment to ... because it can get quite tedious to actually sit there explaining to someone. . . . They don't know the technical part, and you can be sure they don't know the emotional part.

(Jane Caldwell)

Most of the women interviewed found that going through the cycles as part of a group provided the best forum in which to discuss issues related to treatment. As they shared time together in the waiting room of the clinic, which was itself decorated much like many of their sitting rooms at home, the immediate demands of treatment could be discussed with other women at the same or different 'stages'. Although some participants in the study felt that organised support groups, or counselling services, would have been helpful, many had reservations about sharing their feelings among a group of other infertile couples. When asked about support groups, ten of the interviewees said they had reservations even about sharing their feelings among a group of other infertile couples. When asked about support groups, ten of the interviewees said they either had gone to a support group meeting, or would do. Of the remaining, nine said they would not go and in three cases the woman would have gone but her male partner would not.

For three of the women interviewed, organising support groups and acting as informal counsellors to many of the other women on the programme became a major component of their relationship to IVF. In one case, continuing in this capacity after having stopped treatment served as a means of coming to terms with ending treatment. This volunteer work provided by women was thus a contribution over and above the demands of treatment itself, constituting a traditional form of 'women's work', that of nurturing and caring in a volunteer capacity, and by so doing also servicing the clinic by providing a much needed, and freely provided, support service. At the same time, it is also understandable how work of this kind might function as a means of coping with the difficult emotional demands of IVF, including those of serial failure.

REPRODUCTIVE WORK AND PAID WORK

As has been described so far, the IVF routine itself requires a considerable amount of work by the women who undergo it. This work takes a variety of forms, including the work of organising 'the routine', the work of travelling back and forth to the clinic, of monitoring and coordinating the various tasks involved in the treatment cycle, and the physical, emotional and psychological work of coping with the technique's demands. The work of managing information about infertility also occupied the concern of many of the women interviewed, and is usefully described by Sandelowski in her study of US couples undergoing IVF as 'face work' (1993: 81-6). In addition, a number of issues related to paid work were raised during the interviews. Although all of the women interviewed had been involved in paid employment at some point, fifteen out of twenty-two (70 per cent) had either already left or were planning to leave full-time paid employment for reasons directly related to their treatment. It was not only logistical difficulties, but other issues as well which account for the tensions between women's 'productive' (i.e. paid) and reproductive work.

Arranging for cover and time-off were the most significant logistical difficulties encountered by women in the attempt to adjust their paid work with the demands of IVF. Significantly, it was often easier for their male partners to arrange time off work to accompany them to the clinic than it was for the women themselves to do so. Whereas most of the men worked in white-collar, professional jobs, where they had comparatively greater control over their time and their work schedule, most of the women were in jobs which required being continually available in a supervisory or service capacity. A lack of a sense of fulfilment or of future prospects in their paid employment also became apparent in several women's comments about their paid work. While many women expressed a reasonable degree of job satisfaction, many also felt there was little or no opportunity for career advancement, and, by their mid-thirties, most were looking for a change. This ambivalence stemmed in part from the competing demands women felt between their lives as paid workers and the lives they hoped to lead as mothers. As women's lives were likely to be more dramatically transformed by the birth of a child than those of their partners, many had for long periods of time pursued part-time or temporary work in the expectation that they would soon become pregnant, and felt they had essentially put their work futures on hold for a period which had extended much longer than they anticipated:

IVF only makes life more difficult. . . . I would have had to accept it a long time ago if it weren't for IVF. At twenty-eight I could have either gone for adoption or accepted my situation so I'd be five years down the line towards that and getting on with my life. Now, you're in a better position to do that when you're twentyeight than when you're thirty-eight. If you've missed all your career boats, burned all your career bridges because you've spent the last ten years chasing fruitless treatment, you've actually missed out a lot on life.

(Beth Carter)

As Beth Carter, a successful saleswoman, explains, there is not only an evident tension between the demands of productive and reproductive work or identity, but this also introduces an important feature of the IVF experience: how it changes women's views of their life choices over time. This theme is developed further in subsequent chapters. For the purpose of this section, this reflection demonstrates the familiar kinds of difficulties women face in having to choose between motherhood and paid work outside the home, only in this instance it is the attempt to become a mother in the first place which is the source of tension.

Reconciling paid employment with the work of achieving a pregnancy demanded by IVF caused difficulties at both the practical and the emotional level. Logistically, women found it exhausting to maintain full- or even part-time employment during treatment:

I mean it really does take it out of you. I mean I've been getting the earliest appointment possible at [the clinic], nine-o'clock, which means leaving here at half-seven and quarter-to-eight, you dash to [the clinic] because you are in all of that rush-hour, you sit and wait with your bladder bursting, and then you are straight out of there and you are tearing down the motorway again to get back to work.... You are breaking your neck, and you feel as if you've done half a day's work by the time you get there, and then before you've even got your coat off it's do this, do that, do that, and you are worn out.

(Mavis Norton)

In the explicit reference to how the demands of IVF come to feel like 'half a day's work' is apparent the appropriateness of considering the demands of IVF in terms of labour. Often invisible as such, like the work of femininity, which, similarly, involves consumption, bodywork, emotional and psychological work, IVF can be described as a form of reproductive labour, or the professionalisation of fertility management.¹³

For some women, paid employment was helpful as a means of coping with the emotional demands of treatment, despite the added burdens it imposed. Meg Flowers found it an essential means of escape:

Well the job I do, it is an office job but it is very very busy, very very hectic, so luckily most of the day I just don't have time to think about anything to do with me.

Especially as a means of coping with failure after unsuccessful treatment, many women noted the usefulness of paid employment in taking them out of themselves. Catharine Lewis, who had become a nurse after losing a pregnancy very late in term, expressed the following:

Now they say it either kills you or cures you with nursing – to get yourself stuck into something - and it certainly did the trick. That cured me, and even then I'm feeling depressed but doing the nursing and seeing other people in desperate situations it made me feel well my worries are nothing, that's how I felt.

On the one hand, women's work experiences were an important source of solace and relief. On the other hand, comments such as 'I just don't have time to think of anything to do with me' or 'it made me feel my worries were nothing' are also typical of the ways in which women often neglect their own needs and concerns, or see them as trivial or 'silly'. 14 In addition, such comments reflect the British emphasis upon keeping a 'stiff upper lip' and avoiding disclosure of personal hardship, especially if it is emotionally related.

Paid work provided a fall-back option for many women, who were self-conscious of the risk of 'putting all of their eggs into one basket' (or into a Petri dish) and were careful to protect their work identities. Jane Caldwell, a social worker, was well aware of the dangers of investing too much of herself in the pursuit of achieved conception:

I was very wary at the beginning, I mean I've come across women who seem to let it [infertility] control their every thought, gesture, life, their whole life is one of failure because they haven't had children and I was very anxious not to end up like that. So I have always, all the way down the line, put a lot of effort into having something else in my life.

(Jane Caldwell)

Interestingly, Caldwell's comment also indicates the thoughtfulness with which many women decided to undergo IVF. It is important to stress that, at least in this study, women were well aware of the risks they were running by opting for IVF. They were not blindly opting for a wonder cure. Yet also evident here is the kind of 'it's going to work for me' attitude, in the form of not wanting to fail in the ways other women have (see Williams 1988). The wariness described here is a prudent one: it is evidence of having not only seen, but having seriously considered, the dangers of over estimating the likelihood of success.

Despite awareness of its advantages, both in terms of coping with the immediate stresses of IVF, and in terms of preserving future options in case it failed, women often found their paid jobs both exhausting and dispiriting. This was particularly true for women in jobs such as teaching, nursing or social work, where providing cover for absences proved difficult, and was often impossible. Jane Caldwell continues:

When I left work, which was partly due to the treatment because I knew I was going to have to start going up to the clinic daily. there was no way in my sort of job I could get the cover I needed, because if you are not at work there's only two staff on duty, you can't just pop off to the clinic.

Remaining in full-time, or even part-time work, was also difficult because some women felt their absences were used against them in an exploitative manner. In addition to taking unpaid leave and often less pay, some women felt their employers took advantage of the difficulties their treatment presented:

We are talking about a firm that is doing extremely well, knows I'm underpaid, uses this [IVF] as an excuse not to give me any more money because they are not sure how long I am going to be there, but I am loathe to leave because I don't know how I will stand benefit-wise if I am out of work for any length of time, and of course if it [IVF] doesn't work, where are you then?

(Mavis Norton)

In this instance, the tension between paid productive labour and reproductive labour was exacerbated by the employer appearing to pit the one set of demands against the other. This is an important reminder of the tensions produced for women in combining paid work and parenting.

Two kinds of work

Going through treatment had, for some women, the effect of concentrating their desire for a family and increasing their dissatisfaction with paid work:

When I first decided to get pregnant . . . I think I was more philosophical about it, just, well, if I get pregnant I do and if I don't I don't. And then the longer it went on, the more I realised I really did want a family, and now I don't know what I am going to do if I can't become pregnant, if I can't have a family, I really don't know how I am going to cope with it. I decided that I'm not really interested in my career anymore. In fact, while I've been off this time we've discussed it and I am going to give up. ... I think it changed my values and my attitudes, it put a different perspective on things, because I've always been conscientious at work and I've always felt it was extremely important, and I'm not saying it isn't important, and I've invested a lot in it, and then when I was pregnant [IVF pregnancy which failed] I realised it wasn't as important to me as I had always thought it was.

(Kate Quigley)

In this statement, as in the opening comment to this section, in which IVF was said to 'only make life more difficult', the experience of treatment has changed the perception of paid work. Here, the initial feeling is described as 'philosophical' towards pregnancy. But with the concentrated attention on getting pregnant involved in IVF, the perception of work changes, 'I realised it wasn't as important to me'.15

Dissatisfaction with paid work outside the home, and a sense of its shallowness, of not getting enough back, was also framed in terms of the contrast between waged work in a professional and/or service capacity and the work of being a mother. As Patricia Evans notes:

My job was always second best to what I really wanted to do, and it got on my wick, and I think it showed in my working capabilities, definitely showed. . . . Longing for a little-un really put the kybosh on that job. . . . You think what am I doing? Why aren't I pregnant? Why am I still at work? Why aren't I at home looking after a little-un? You know you want to be a mummy and it really gets on your wick that you aren't pregnant.

(Patricia Evans)

The feeling of dissatisfaction with paid employment, and the desire to 'be home looking after a little-un', compounded by the fact that serial attempts at IVF can increase the desire for a child, may also be accompanied by an explicit desire to do the 'job' of being a mother particularly well. It is likely, for example, that women in infertile partnerships will have more fully investigated their desire for children, and given greater thought to what is involved in parenting than many women who have children without these obstacles. Part of the difference between achieved pregnancy and other pregnancies is the amount of careful thought focused around the demands of parenting, and for women especially, the demands of mothering:

I wish people could see that if every mother did a good job the world would be a twenty-times better place than it is, because that mother is responsible for creating a worthwhile person who is going to live in this world.... To do that is such a vital role in life.... It's so important and that's why I think part of me drives me on.

(Jane Caldwell)

Here again, the reference to mothers doing 'a good job' underscores the way in which women perceive the work of mothering both as analogous to paid work, and also as of equal, if not greater, importance. Also evident is that they are holding two systems of labour value, the one productive and the other reproductive. 16

Finally, it is useful to note that in experiencing the conflict between the reproductive work involved in IVF, and their paid jobs, the women interviewed can be seen to be inhabiting merely a different variation of a theme which runs through most women's lives: that of balancing the demands of reproductive work against the demands of their careers. With IVF, the conflict differs in that it is the work of becoming pregnant, of achieving pregnancy, rather than the work resulting from pregnancy, of raising children, maintaining the household and belonging to a kinship network, which poses the conflict.

CONCLUSION

It is because the demands of IVF are so intensive that the procedure comes to feel like a 'way of life', something you 'eat and drink', that you 'live' twenty-four hours a day. This intensity is also produced by the 'obstacle course' nature of the programme itself, involving a constant build-up at each stage, which either leads to another cycle

Chapter 4

of build-up at the next stage, or leads to the cycle being abandoned, which produces all of the demands of coping with failure. Understanding how IVF becomes a 'way of life' is also important in terms of the wider issues women have to make sense of while they are going through it, concerning their identities, their lives, their relationships and their futures. It is also particularly important in understanding the momentum IVF acquires as a process, and the difference between what it looks like going into it (pre-IVF) when IVF is an option about which a woman may have a lot of information, but by definition no experience, and what it looks like once it has begun, or 'taken over'. Repeatedly, women emphasised that they did not realise how demanding the technique would be, how intensely it would affect them, and how much their lives would feel as though they had been 'taken over' by the technique.

This feature of the IVF experience is also significant because it explains how and why some women change during treatment. As their assessments of the success or failure of the technique itself changed, for example, so too do their assessments of other things, such as how much they want a child, how much they like their job, what a future with or without a child would be like, and so forth. In this sense, IVF is like a rite of passage, through which an individual moves from one state to another. Not all women are changed significantly by experiencing IVF, but all are changed to some degree, and the potential for the technique to shift a woman's perceptions of herself, her needs or her goals is clearly evident in the descriptions of how intense the procedure can be.

This intensity is important to understanding the differences between how women go into IVF, how they then experience IVF itself, and ultimately how they leave it. It is necessary to look at all three of these dimensions of IVF, before, during and after, in order to provide a thorough account of the experience of treatment. Representations of women's experience which focus solely on the way women feel going into treatment therefore exclude much of what is most significant about the experience as a whole. This experience is not static; it is a process, which may turn out to involve considerable and unexpected change. In the next chapter, some of the ways in which the experience of IVF can change women's definitions of wider issues external to treatment are explored, as well as features of IVF as a process over time.

'It just takes over': IVF as a 'way of life'

INTRODUCTION

In the last chapter, women's experience of IVF was investigated in terms of the most immediate demands posed by an IVF programme, the impact of these on women's lives and the ways in which women 'manage' the procedure. In this chapter, the focus moves to a wider frame, taking into account women's perceptions of their needs, desires and expectations of the technique. It is argued that these are important factors in understanding how women make sense of the experience of IVF not only as a procedure, but as a process over time which involves continual re-evaluation.

In order to understand women's expectations of IVF, then, it is first necessary to consider how these are framed in relation to the experience of infertility. In the first section, the experience of infertility is explored in terms of how it disrupts certain assumptions women held about how they would live their lives, and how they make sense of these disruptions. In other words, this section addresses the ways in which the discovery of infertility contradicts certain features of an assumed worldview, an assumed trajectory of the lifecycle, an assumed sequence of events. In turn, these disjunctures create the opportunity for women to reflect explicitly upon certain needs and desires they feel in relation to parenthood and reproduction and to redefine their reproductive choices accordingly.

It is the way in which women evaluate the disruption posed by infertility, the losses they feel in relation to it, and the options they see before them which will determine their course in relation to expensive, high-tech infertility treatment such as IVF. Cost alone makes this an option available to some women more than others, and some women not at all. But many other factors influence a woman's

Embodied Progress

A cultural account of assisted conception

Sarah Franklin



CLEM GN 296 .F13 1997

First published 1997 by Routledge 11 New Fetter Lane, London EC4P 4EE

Simultaneously published in the USA and Canada by Routledge 29 West 35th Street, New York, NY 10001

© 1997 Sarah Franklin

Typeset in Times by
Ponting-Green Publishing Services, Chesham, Bucks
Printed and bound in Great Britain by
TJ Press (Padstow) Ltd, Padstow, Cornwall

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the
British Library

Library of Congress Cataloguing in Publication Data
A catalogue record for this book has been requested

ISBN 0-415-06766-9 (hbk) ISBN 0-415-06767-7 (pbk)

Contents

	Acknowledgements Introduction	v i
1	Conception among the anthropologists	17
2	Contested conceptions in the enterprise culture	73
3	The 'obstacle course': the reproductive work of IVF	101
	'It just takes over': IVF as a 'way of life'	131
5	'Having to try' and 'having to choose': how IVF	
	'makes sense'	168
6	The embodiment of progress	198
	Notes	215
	Bibliography	230
	Index	245