# <ppt3.1>

# Nice Work:

# Employment for Blind People in a Postmodern

# World

by

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Postmodernism and Blindness: From Conforming to Creating

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Abstract: *In the modern era the chief criterion in employment was the ability to conform inside fixed systems but although this played to the strengths of blind people they never reached a rate of more than 33% in any one country; but the crisis of unemployment will deepen in a postmodern era which is much less predictable and relies upon flexibility, fluidity and creativity.*

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## 1. Introduction

Although there is a current trend to persuade major research institutions, particularly those focused in medical research, to publish data on projects that have failed, the major publishing thrust in research is concentrated on proposing the novel. On the other hand, it might be argued that the restraint on change is much less research-based and more likely to depend upon anecdotal data and inherited wisdom. We might then say that one major point of cultural contention is between research and tradition.

In the professional sector dealing with blind people the weight has always been much more on tradition than on commissioning and then taking account of research. This stance is understandable - and, indeed, ethically sound - in the case of research into education where it can be properly argued that children develop through a dynamic process which cannot be arrested or re-enacted although, paradoxically, by far the largest corpus of research on blindness (outside medicine, surgery and eye care) is in the field of education which only demonstrates how little there is in other sectors. I think there are factors which explain this situation: <ppt3.2>

* Philanthropism
* Resources
* Defectology
* Tradition

### 1a) Philanthropism

Virtue, at least initially, does not require research; it responds to a need. If we see blind people excluded from employment and we simultaneously see an opportunity we put the two together which is, we will see, what happened when blind people were first employed. It is only later that people begin to consider how resources might rationally be matched with need and that requires not only user-based research but also a consideration of cost/benefit ratio, bangs for your buck.

### 1b) Resources

Philanthropic organisations are much more inclined to spend their money on direct services than on research. Philanthropists often start out as non-professionals and when organisations professionalise they spend their money on staffing. Research is a long way down the priority list. There is also more than a little arrogance in this position: we know what our clients/customers need without research.

### 1c) Defectology

Although this term grew out of ultra dirigiste Eastern Europe after the Second World War to justify standard provision for all people with particular disabilities, it is only an extreme form of classification which has affected work with blind people in general but has been particularly prominent in the employment sector with the tendency to shoe-horn blind people into reserved occupations. Its origins are, however, Christian. Before the spread of the Industrial Revolution Christian communities were taking an interest in blind people and developing a standardised way of dealing with them.

### 1d) Tradition

There are three factors which contribute to the tendency of work with blind people to be based on traditional models: <ppt3.3>

* The institutionalism of work with blind people up until the late 1960s
* Concern for client welfare which is frequently in danger of sliding from caution into patronisation and
* Innate moralism

Work with blind people was largely institution-based everywhere until a breakthrough in the education of blind children in standard schools in the United States in the late 1950s; but in most countries it is still the default position for education, training, rehabilitation and employment which, particularly in poor countries, concentrates the bulk of resources on a very few beneficiaries in major cities.

Related to my comment earlier on ethics in educational research, we will see that care in ensuring that blind people come to no harm, in the broadest sense, is necessary but protecting people from change rather than equipping them for it is a serious shortcoming.

And because of its religious origins, there is a tendency to adopt a moralist rather than a rationalist approach to work with blind people which I will explore in the first topic of this Lecture.

The topics I will cover are:

* Employment in the modern era
* Models of employment
* The Postmodern era
* Necessary transformations - matching models with reality

## 2. Employment in the Modern Era

Towards the end of the 18th Century Valentin Haüy saw a group of blind people with no work and, as he was by the sea, he also saw a pile of nets that needed mending. He put the two together and for the next 200 years, all over the world, blind people were employed in net mending, basket weaving and related occupations. If Haüy had seen the same group of blind people by the side of an orchard, blind people for 200 years would have been involved in fruit picking.

This tradition of weaving was still alive and well when I worked in the Caribbean in the 1980s, even though the vast majority of the expenditure went on the supervisory staff, so that the blind people would have been better off if the sheltered workshop budget had been divided among them and even though the baskets they produced were inferior to and more expensive than those of their competitor. The factors which held back change were easy to understand: the staff had a comfortable and well paid life; the imperative that blind people should work was moral rather than economic; and until I arrived there had never been any comparison between the goods produced by the blind people and their competitors. It had wrongly been assumed that blind people are better basket weavers because they have "such a good sense of touch". But the problem is that people without eyesight don't have hand-eye co-ordination which is why they are slower at weaving than their sighted peers. There are still hundreds of sheltered workshops all over the world making these basic errors so that the bulk of the budgets go to supervisory staff, the blind people are paid a nominal wage and the products need to be subsidised. On all three counts this is an irrational system that perverts a fair outcome for blind people.

At the beginning of the 20th Century, in spite of the survival of sheltered workshops to this day, there was a slow movement towards 'open employment', i.e., the employment of blind people in the general workforce. This trend was massively assisted by the development of braille which had much the same impact on blind people as Guttenberg had on the general, intellectual population of Western Europe in the 15th Century. The first wave of people in open employment were, naturally, those who could pursue a vocation in a profession; and so lawyers and physiotherapists were at the top of the list. Over the next forty years office occupations were added, including switchboard operators and office workers. At the same time blind people were introduced into light engineering, assembling, gauging and packing.

We will come on later to see that what characterised all these occupations was a limited degree of variability which cannot be automated; and all this took place in a modernist context.

Although we might best characterise modernism in occupational terms as the age of automation, there were major sectors which could not be automated spanning the aptitude scale from the highly professional to the simply manual but there were other characteristics which we ought to note: <ppt3.4>

* Automation
* Capital intensive and therefore
* Modificationally expensive
* Centralised

Before analysing how these characteristics affected blind employees, it might be helpful to explain these four ideas.

### 2a) Automation

Although there has been a steady historical move towards automation, the period from the middle of the 17th Century to the middle of the 19th saw: <ppt3.5>

* New techniques for harnessing water power
* Steam
* Electricity

### 2b) Capital Intensive

The requirements of the age for building automated systems became the name for the age: the age of capitalism. Although the returns on investment were large and long-term, such was the cost that borrowing was essential and individual entrepreneurism was relatively rare.

### 2c) Modificationally expensive

Because production was based on the operation of machinery, changes to processes involved changing machinery, i.e. changes in tooling to meet altered specifications

### 2d) Centralised

An obvious consequence of these three factors was the assemblage of production capacity in one place. The centralised textile factory with its power source replaced the distributed looms of the craft era.

To illustrate the point, think about the production of analogue printed text: <ppt3.6>

* Authoring on a typewriter is laborious and amendment is difficult and labour-intensive
* Type setting for analogue print is expensive and time consuming
* Amending typesetting is relatively cheap but
* When plates are made, amendment is extremely expensive
* Expertise in all areas (except proof reading) must be centralised
* Machinery for mass production of relatively stable text is centralised

Put another way, the characteristics of modern production systems were: <ppt3.7>

* Standardisation
* Preoccupation with process
* Long runs
* Traditional brands

It can be seen from this general description that the central characteristic of the culture was conformity which went way beyond the work place. As its critics pointed out - offering modifications but no credible alternatives - the production system rigidified a class system, although the idea that this simply bifurcated between labour and capital was egregiously absurd: there were still landowners in the modernist era and of course there were capitalists; but the divisions which most people would have noticed in their lives related to the 'class' of occupation just 'above' and 'below' them. a textile worker would have had social relations with the floor sweeper 'below’ and the foreman 'above' but very little relationship with anybody 'above' the foreman. Income related to occupation and, therefore, lifestyle and status related to income. There was a small degree of social mobility (both ways) but by and large people were concerned with peer normative conformance.

The blindness sector adapted well - with limitations which we will explore later - to modernity. Children were educated with braille produced from plates. The skills set they required for various reserved occupations - depending on their aptitude - was well understood; but at a much broader level, in spite of considerable limitations, a certain degree of conformity was possible. Working as part of a production system almost always involved: <ppt3.8>

* A relationship with occupational peers
* Manageable changes in procedure
* Clear output outcomes

And in the wider context there were social and cultural mores peculiar to occupational segments. People knew: <ppt3.9>

How to conform in:

* Dress
* Social and sexual mores
* Leisure
* Lifestyle and ambition

There is no time to go into most of these aspects of modernity in a Lecture largely on employment but I should mention the modernist corollary of production, noted earlier in terms of traditional brands: people knew what they could and should consume according to their class. The contemporary notion that food is not class-based, for example, is very new and only has serious traction in North America where people do not eat according to a class identification.

To summarise, then, as long as you could learn and apply the rules, functioning was relatively simple. This way of life, although still challenging for blind people, was manageable and played to their strengths - or down-played their weaknesses - because:

Modernity Summary <ppt3.10>

* Functions operated within limited data sets with defined outcomes

The other major factor in modernity which was of benefit to blind people was the necessity of a highly centralised state:

The State and Modernity <ppt3.11>

* The regulation of industrial production and the prosecution of world wars required a high degree of centralised government control both in capitalist and socialist systems

Indeed, one of the major paradoxes of the industrial modernist age was the extent to which apparently free market capitalist systems achieved a much broader, deeper and detailed degree of conformity than socialist, centrally planned, systems; the most likely explanation for this outcome is that voluntary compliance works better than compulsion both because it involves less pressure to be exempted (corruption) and distributed responsibility for detailed compliance. If we compare industrial organisation in The Soviet Union and the United States in the Second World War or if we compare the rates of industrial accident after the Second World War you will see the point.

The pressure for conformity in peace and war, built either on socialism or free market liberalism, led to the notion of equality of treatment within the occupational class. This led to extensive state organised and even state funded social security, pensions and then other forms of social organisation seeking to make people with disabilities equal. Some countries develop an employment quota system for people with disabilities and most countries with an industrial base legislated benefits and allowances related to disability.

Taking a backwards look, it is also true that educational systems adapted to industrial needs and so the school experience of blind children was standard over many generations:

* Braille literacy
* Arithmetic/mathematics
* Teacher-defined text
* Librarian-defined reading
* Narrow but clearly defined career paths

In spite of all this conformity and the operation of near-rigid systems for almost a hundred years the employment success rate for blind people never passed 1/3 anywhere in the world.

And so the question which now faces us is whether the transformation from modernity to postmodernity will make matters better or worse but before turning to this subject, we need to say just a little about models of employment and how they fit with the strengths and weaknesses of people with little or no vision.

## 3. Employment Models

Since the beginning of time there has been a perforated boundary between working alone and working collaboratively but it received a sharpened definition with the development in the second millennium BC of irrigation for cereal growing and brick firing which, between them, led to mass agriculture, storage and slavery so that, in time, the great divide in labour was not between the self-employed artisan and the wage earning labourer but between those holding capital and those depending on loans and wages; I put it this way because many sole craftsmen and traders only survived through borrowing money, mortgaging their future profits for current survival.

The pattern of land owning serfdom on the one hand and sole producing and trading craftsmen on the other still survives today in many parts of the world but the capital intensive modernist era, originated in England in the middle of the 18th Century, now accounts for a large portion of global labour. A development which has been less observed by the economic warriors of capitalism and socialism has been the steady rise in every country of public sector workers at every level of administration; even in the most liberal capitalist economies where there is a consensus against 'big government' - the icon of which is the United States - there is still a substantial public sector work force.

The expansion of credit in Western Europe from the beginning of the 16th century led to the development of intermediate enterprises which we now call SMEs; and their number was then increased at the end of the 19th Century by the replacement of steam power with electricity which required a much lower level of capital investment because it was grid distributed and connected with machinery that was much less capital intensive.

The final major development in the modernist era was the growth of financial services which had until the middle of the 20th Century been limited to a handful of brokers in capital cities. With the development of private insurance and assurance for life, fire, accident health care and motor cars there was a rapid expansion of saving and investing.

Now if we look at models of employment and occupational classes we can approximate what blind people can do: <ppt3.12>

**Matrix of Employment Models and Occupations**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Sheltered | Major Manufacturer | SME | Public Sector | Service | Small / Sole | Craftsman / Trader |
| Unskilled Manual |  | x | x |  | x |  | x |
| Manual semi-skilled |  |  | x |  | x |  |  |
| Manual supervisory |  | x | x |  |  | x | x |
| Secretarial |  |  | x |  |  |  | x |
| Managerial | x |  | x |  |  |  | x |

Although it is difficult to be definite, I have shown whether blind people can undertake the jobs in the matrix. You will see that, in principle at least, most jobs are open but there are some major restraints: <ppt3.13>

* Rapid decline of sheltered employment
* Manual jobs automated
* Flexibility problems with SMEs

### 3a) Sheltered Employment

There has been a steady decline in the industrialised world in sheltered employment because of the conjunction of two factors: <ppt3.14>

* An ideological stance in favour of equality/mainstreaming
* A downward pressure on public expenditure

### 3b) Manual Jobs Automated

Blind people have traditionally been involved in assembling gauging and packing but all three of these areas are becoming steadily more automated. We should remember here our provisional general rule - which I will elaborate later - that blind people are best suited to routine jobs with limited variations that cannot be automated. Standard assembly is becoming increasingly automated with parts integrated into solid state arrays comprising a multitude of components. Gauging is now possible through the use of laser technology, as opposed to operating a manual gauge. And only non-standard packing is open to efficient manual operation.

### 3c) Flexibility Problems with SMEs

I include this point here because it has emerged strongly in the latter part of the modernist age. SMEs require a high degree of workforce flexibility and there is a general and not entirely unreasonable perception that blind people are not very flexible or, as I would put it, they are not unconditionally flexible.

For some decades after the Second World War socialist countries reserved occupations in public administration and in nationalised industries for disabled, including blind, people but the recent liberalisation has swept these provisions away. In liberal economies there was, too, a brief period of reserved occupations and quotas in public sector administration and nationalised industries and public utilities but these provisions were withdrawn in the face of public expenditure constraints, denationalisation but the most important factor was the customary 'get out' clause that quotas only applied to 'suitable' jobs.

## 4. The Postmodern Era

Let me start by summarising the differences between the modern and the postmodern era: <ppt3.15>

* From mass production to customisation
* From central production to distributed production
* From Occupational strata to perforated occupation
* From narrow occupational skills to generic, 'convertible' skills

### 4a) Mass Production and Customisation

Although there are still very many goods which require mass production, their manufacture has largely moved to developing and intermediate economies where there is little or no legislation on the employment of blind people, so the shift in location has led to a net fall in the employment of blind people. The digital economy means much shorter runs and more rapid re-tooling. Think, for example, of the design of telephones. IN some countries there was one, standard telephone design used for more than a quarter of a century but now many people change their phone every 18 months. This example also raises another issue in the trade-off between mass production and customisation and that is the conversion of task completion from mechanical procedures to rapidly changing software, contemporaneously in the form of mobile phone apps. There was a very short era when blind people were employed in computer programming; but that was when there were only a few programming languages and bespoke software was written line -by-line. The rise of mass produced software ended this very short era.

The other major factor in the shift from mass production to customisation relates to our third and fourth factors but at this point I want to mention the change in recruitment and training brought about by perforation and generic skills acquisition. While it is perfectly possible for a blind person to acquire good generic skills and to move easily in a perforated environment, there is a complex learning task in coming to terms with the context in which the generic skill is utilised. Even highly competent blind people take some time to learn new physical environments and work layouts. At the same time, much training which was once delivered by training officers is now on-line and the content may not be accessible.

### 4b) From Central to Distributed Production

If we want to understand this phenomenon we only have to think of two occupations long associated with blind people, switchboard operator and physiotherapist. The tail end of the modern era moved telephony from a central switchboard to distributed access so that outsiders dialled a direct line instead of going through an intermediary; this change took place when telephone handsets could be customised. On the other hand, we might feel that physiotherapists are reasonably safe but there are already developments on the horizon which will make this occupation much more limited and 'high level'. We are entering an era of remote, or ambient diagnostics so that patients will not need to attend a clinic to have their symptoms diagnosed; we will soon be able to undertake total body monitoring which will produce a full diagnostic which can automatically be matched with the individual's complete genome map from which a course of action will automatically be dictated, whether this involved medicine or physical activity directed and monitored on-line through ambient technology. Doctors and paramedics will only be needed for emergencies, serious trauma, anomalous symptoms and surgery that cannot be automated and directed remotely.

Distributed production also means moving manufacturing from one site to another, not necessarily in the same country. Production is located in the place with the lowest labour cost and, as I noted a moment ago, such places are generally not advanced in legislating or regulating for the employment of blind people.

So here we have a disruptive factor – distributed production - although this is counter-balanced by another disruptive factor, namely distributed activity which allows people to work remotely and flexibly, often from their own homes. Indeed, at face value, home working should be very welcome to blind people because of the problems which they face, and which were discussed in my first Presentation, of independent travel; but, as it turns out, many blind people are opposed to home and remote working because this deepens an already high level of social isolation. For many people work fulfils a vital social function - many people find their domestic partners at work - and blind people are even more in need of this social function than their sighted peers.

Finally, on distributed production, we should note that blind people have another advantage, or at least, do not suffer from such a great disadvantage as they do with centralised production, and that is that the increase in asynchronous working means that people can take more time to complete a task. This means that while blind people may take longer to complete a task than their sighted peers, they may think this is a price worth paying in order to hold down a job.

### 4c) Occupational Strata

Modern production systems were highly stratified because of the perceived advantages of Adam Smith's division of labour [[1]](#endnote-1) but also because of the physical location of analogue resources: <ppt3.16>

* Diagnostic and measuring equipment was delicate and fixed
* Text creation and communications technologies were bulky
* Telecommunications were cable-based
* Distribution was to wholesalers

Conversely today: <ppt3.17>

* Diagnostic and measuring equipment, based on cameras, laser etc, is portable and robust
* Text creation is totally portable
* Telecommunications are portable
* Distribution is flexible, mainly from manufacturer to retailer

The iconic development - some would argue that this is grossly inefficient - is the transfer of secretarial functions (text generation, appointments scheduling, travel booking etc.) from skilled secretaries 'up' to managerial grades. The whole communications sector has become so perforated that it will soon be an integral part of all production systems, from the Managing Director to manual workers.

### 4d) Skills

We have already noted the shift from vocational to generic skills (in 4a) above). To complete the picture we need to take into account some of the learning from my first Lecture on education and anticipate some remarks on digital technology in my next Lecture. In the modernist era the emphasis was on text which was: <ppt3.18>

* Created deliberatively and slowly
* Intended to have a long life
* Expensive to correct
* Rarely accompanied by graphics

Contemporary communication, on the other hand, is: <ppt3.19>

* Cheap to generate
* Cheaper to iterate than author an authoritative text
* Multi versioned
* Skeletal and interactively iterative
* Increasingly graphic
* Heavy emphasis on style and design

This leads to a new communications skills set: <ppt3.20>

* Rapid
* Flexible
* Multi media/Multi modal
* Entrepreneurial
* Creative

This new way of doing business cuts both ways for blind people: <ppt3.21>

* The environment is less secure
* Communication is simpler
* Graphics present a problem
* Entrepreneurialism is possible
* Trained memory can be helpful

The graphics problem is particularly acute in creative industries and in all operations that sell into a global market or a multi lingual local market but, as we will see in my next Lecture, the cost of clear prose is rising and this presents an opportunity.

Before completing my discussion of models, I wonder if you have noticed the model that is missing, which has had a very mixed track record in the world. The co-operative and the social firm supported by 'soft' loan capital has been very popular in developing countries but has not fared so well in developed economies but I think that is about to change; and here is why: <ppt3.22>

* Peer-to-peer lending (avoiding banks or the public sector)
* Social finance
* Perforation of wages and state benefits

The first two factors are loosely linked. Since the near collapse and then the sclerosis of the commercial banking sector in 2008-09 many businesses have accumulated cash and have seen no advantage in banking it or investing in expansion until the world's financial crisis is less alarming; but organisations and individuals are increasingly keen on lending on a bespoke basis to people who want to borrow, using a broker who matches two parties; so instead of an investor depositing his surplus in a pool and leaving it to the bank to decide to whom that funding is loaned, the investor takes a personal hand. This is one interesting component of the postmodernist tendency to want to participate in transactions rather than being passive.

And this phenomenon relates to the growth in social capital. For hundreds of years rich people have been patrons of the arts. They have, of course, purchased pictures and had musical scores dedicated to them but many have subsidised opera and theatre. This form of investment is now moving over into social finance, although investors expect to regain their funding. The basic idea is that people will invest in good causes and expect a repayment over time; conditions are easy for this at the moment because low interest rates are being offered to savers by banks. People can do reasonably well by doing good, or at least they can lose very little; much less, of course, than they 'lose' by making a straight donation to a good cause. Until recently a donor has been faced either with giving €100 or doing nothing. Now she can lend €100 and in five years she will have all her investment returned and will only have lost through inflation or receiving, when commercial banking recovers, a slightly lower rate of return than she would have gained by conventional saving.

The factor, however, which interests me most is the perforation of wages and benefits. In most countries, a person in work receives a wage and a person out of work receives state benefit. The ideal situation is where the person who receives a benefit can combine this with a lower than commercial wage. The chief objection to this system is that the low wage component paid by an enterprise constitutes unfair competition with commercial companies which have to pay full commercial wages to all employees; but this crude dichotomy can surely be circumvented. There are many tasks in society which will never be commercially competitive because they are too labour intensive, such as restoring heritage, maintaining public leisure spaces, supplying niche products to people with disabilities. A social firm can support a workforce with full- and part-time waged employees, and full- and part-time employees with a combination of state benefit and wage elements.

My final reason for supporting this strategy is quite simple: all the other previous models have failed blind people. As I remarked earlier, in the pre-global economic boom which took place on the cusp of modernism and postmodernism between 1983-2008 employment for blind people never got past 33%, so what are the chances in our emerging postmodern age?

Before turning to that subject, I wish to note some continuities from modernity into postmodernity: <ppt3.23>

* The modernist trend of automation will intensify, particularly with the long-delayed use of robots
* Automation in financial and other calculable transactions will continue to rise
* Self-service in physical retail is being increasingly followed by internet self service
* Manufacture will move from socially progressive to socially conservative societies

Overall, the general trend will be for creativity and design to remain in the most developed economies and this will be reinforced by the postmodernist trend towards self and SME creativity and publishing.

This set of factors adds up to a challenging agenda but if we view our situation rationally rather than traditionally, we may find that there are some intriguing possibilities.

## 5. Necessary Transformations - Matching Models with reality

There is nothing more powerful and more damaging in social advocacy than the conflation of "is" and "ought", the alloying of the real with the ideal so that people say such things as "People with disabilities are equal to their peers" when what they actually mean is: "People with disabilities are entitled to be equal to their peers and this should be enshrined in rights legislation" but, even then, the acquisition of a right does not by any means guarantee its enjoyment. If we look at an array of national constitutions across the world which talk of all kinds of equality of opportunity, concern and respect, status, and so on, this tells us nothing about the actual conditions of people, the extent to which they enjoy rights. In the industrialised world the tendency to have some regard for the life chances of people with disabilities stems largely, I believe, from the following: <ppt3.24>

* Philanthropic tradition, largely of religious origin
* Concern for military veterans
* The combination of ideological affirmation and state enterprises
* Perceived niche specialisms

For a variety of reasons I believe that these four factors are declining in salience and traction: <ppt3.25>

* Philanthropy in its traditional sense is declining
* Although there are many wars they do not compare with the two 20th Century world wars
* State enterprise is declining
* Niche occupations are declining

With respect to philanthropy, in many countries its absolute amount is rising but I believe that much of it will convert from traditional donation to social capital investment and this, as I pointed out earlier, will lead to a different kind of employment pattern for people with disabilities which is much less patronising and protected.

As for the role of the state and ideology, there is a perceptible trend almost everywhere for states to give people with disabilities more rights 'in exchange' for lower budgets enabling their enjoyment.

And so the first reality to recognise is that the modernist provision following the Second World War has ended or is coming to an end.

The second major factor, which we have dealt with at length, is the shift from vocational to generic skills, from the division of labour to perforation.

The third major factor which we need to take into account is the decline in traditional, 'reserved' occupations for blind people.

And, finally - although this is a topic I have not had time to deal with in these Lectures - we have to acknowledge the medical demographic of blindness. From the late 1940s the use of oxygen in incubators produced a generation of blind children either born to rich parents in private health care systems or born in countries with state health systems which might be expected, in parallel, to have some concern for state educational and social provision; and with this novel situation combined with post Second World War veterans provisions, notably in the United States. Together these two factors brought about a substantial improvement in the education of blind children and it also raised hopes - and partly met them - of more diversified and remunerative employment.

The reality today is that in many countries, particularly those with advanced medical provision, the very earlier 'viability' of foetuses means more blind children with additional disabilities; there are also many fewer babies damaged by oxygen; and fewer suffering from industrial trauma; and in many rich countries even the rate of blindness from road traffic accidents has gone down.

At the other end of the demographic, the global initiative on cataract has reduced blindness among people of working age. Everywhere in the world blindness will increase in the next 20 years but that will result from ageing and the presentation of eye diseases such as glaucoma and macular degeneration that currently cannot be cured and shoe adverse effects are difficult to arrest.

There will continue to be a small number of highly skilled, deeply motivated blind professionals in such areas as law, teaching, religious leadership and corporate management but we must be careful not to use this as a paradigmatic cohort, not least because once stable professions with canonic texts are becoming more subject to change.

The majority of blind people of working age will divide into two clusters: <ppt3.26>

* Congenitally or paediatrically blind people, a high proportion multiply disabled
* Adventitiously blinded people struggling to retain their occupation or migrate to one which as nearly as possible accords with their skills set

If we relate the demographics to the prospects of employment, I think it is fair to make the following generalisations: <ppt3.27>

* Congenitally blind people, many of whom are multiply disabled in addition to their data deprivation, face an acute employment problem
* Newly blinded people should represent almost the same aptitude distribution as their seeing peers, although blindness tends to onset earlier in poorer population segments

Let me, then, move to the two sets of variables which we need to examine in detail: <ppt3.28>

* Range of occupation
* Employment model

### 5a) Range of Occupations

Let me revert to my earlier definition of occupational range but give it a slight elaboration: <ppt3.29>

* Blind people are optimally employed in all classes of task - professional, skilled, manual - which do not rely on visual acuity and which involve variables in routine that cannot be automated

While there is not the space to conduct a whole labour market survey, the following are examples which illustrate our rule: <ppt3.30>

* Fast food preparation
* Food and drink quality assessment
* Niche retail
* Areas of law with low legislative churn
* Settling claims at mid-level triage
* Creative output requiring minimal input, e.g. breaking news, radio phone-ins

This occupational range relates quite closely to the variation criterion in Margaret Boden's creativity model which I discussed in the Lecture on children. To summarise its relevance here, creation from collage requires a large range of inputs and creation which involves disruptive change requires a level of aptitude close to genius; but most creativity involves exploring known space with an infinite supply of variation. That criterion fits well with the last item of news and radio phone-in. At first sight the volume of input looks daunting but it is much less than, say, the input required to write a documentary from scratch, even if you are an expert in a given field.

Locating the proper position in triage is quite difficult but very important. A first level which involves a massive variety of questions presents a blind person with the problem of finding the appropriate data; and other triage systems automate their first level in, for example, financial services where the decision to loan or not depends upon the automated application of an algorithm. Ideally, the level should present difficulties but be narrow enough to allow for ready resolution.

I noted a moment ago that professional churn is becoming something of a problem as legislators pass ever more law ever more rapidly and this same phenomenon is affecting other professions as the result of the accelerating change in our societies. There will still be relatively calm havens but these must be sought judiciously.

Niche retail is ideal but it usually requires capital and I will come on to this requirement when I deal with models.

Ever since I first came across a blind whiskey taster in Canada almost forty years ago I have wondered why this area is not more widely promoted. I recently met a wine correspondent losing her sight and was surprised that she had not assumed that she could go on wine tasting and writing a column.

As for fast food preparation, this looks slightly anti intuitive because of the immediate worry about heat sources and spitting fat but there are two very positive factors: first, fast food ordering can be anticipated using Bayesian logic [[2]](#endnote-2); and, secondly, unlike the offering in a more sophisticated restaurant, the range of dishes is limited. RNIB has a small catering outfit that caters for conferences and this is ideal because it can prepare the same food every day for different conferences whereas a restaurant is more likely to provide different food for the same people.

### 5b) Models

It is time to summarise the stage we have reached in considering employment models for blind people: <ppt3.31>

* Sheltered - expensive and declining
* State administration/industries/utilities - quota failure, declining
* Major corporates - under global pressure, declining
* Reserved/specialist occupations - subject to automation and churn, declining
* Social firms - relatively untried, possible
* Self-employment - relatively untried, possible
* Low capital portfolio - emerging, possible

It is good to end on a positive note, so I want to explore the possibilities for growth in the employment of blind people.

I have already been into some detail in respect of the social firm. I think that combining state benefit and a partial earned wage offers much and is eminently realistic as it shares the responsibility between the state and the individual; it also provides peer support for employees with disabilities and it is nearer the 'real world' than sheltered employment but not so harsh as the global market.

I am also persuaded that self-employment, usually in conjunction with family or a trusted friend, is possible; but this has only been tried on a large scale in developing countries where traditional solutions have not been available. Here the key factor is the control over capital. Most self-employment for blind people has failed because the client has not been in control of the capital and, therefore, has been seen not to be in control of the business.

Whereas the first model requires an income from existing state benefits and a partial wage from the proceeds of the sale of goods and services below market price, self-employment involves the deployment of capital, on a revolving loan basis with a realistic assessment of write-off. The emergence of peer-to-peer lending leads me to believe that another option is that a peer-to-peer loan from an interested party might be combined with mentoring instead of using the traditional banking intermediate model.

But my model of choice for the 21st century is low capital portfolio working which has the following advantages and disadvantages: <ppt3.32>

Advantages:

* Risk spread
* Flexible
* Control and self-esteem
* Modest intermediary cost

Disadvantages:

* Moderate risk
* Diverse environments
* High cost of brokering

I suggest that the disadvantages can all be mitigated if agencies traditionally concerned with employment change their policies.

The majority of agencies concerned with employing blind people have spent a very high unit cost placing clients in full time employment. the same funding could be deployed to provide agents for portfolio workers, part funded by the agency, part funded by client commission so that the agent is not entirely philanthropic nor entirely client dependent.

Although there is definitely a risk of under employment this has to be balanced against the definite problem of 66% unemployment and the risk of being made redundant.

The third risk, of too much variation in the activities for the portfolio can be managed, for example: <ppt3.33>

* Radio broadcasting
* Motivational speaker
* Occasional columnist
* Community broadcasting trainer

While these activities may take place in different locations you can see that they are skills which are clustered around a common theme; and while an individual might not be able to occupy herself with any of them on a full-time basis, each might yield enough to add up to a modest portfolio. At the same time, a client in this situation will be able to depend on a friendly and competent agent who does not charge the standard market fee.

## 6. Conclusion

You can see from this extensive discussion that the employment of blind people has been and still is deeply problematic and that the postmodern trend presents very particular new challenges which are likely to make prospects even more challenging than they were in the modernist era of mass production, heavy public administration and relative professional stability with a blindness cohort whose only major problem was blindness; but we are in a new era which requires new occupational and structural solutions.

An integral element of the problems we face and the solutions that can be offered is the rise of digital technology; and I will turn to this in my next Lecture.

Contact Details <ppt3.34>

1. Smith, Adam; *The Wealth of Nations* <http://en.wikipedia.org/wiki/The_Wealth_of_Nations> [↑](#endnote-ref-1)
2. [Thomas Bayes](http://en.wikipedia.org/wiki/Thomas_Bayes) (1702–1761); <http://en.wikipedia.org/wiki/Bayesian_probability> [↑](#endnote-ref-2)