#M0054441NC

T2074

NC 0021197 4

NATIONAL COLLEGE OF ART AND DESIGN

Faculty of Fine Art.
Department : Painting.

Interpreting Character In The Nineteenth Century (The Emergence of Phrenology)

By

Julie Robinson

Submitted to the Faculty of History of Art and Design and Complementary Studies in Candidacy for the Degree of Bachelor of Arts in Fine Art Painting

1998

ACKNOWLEDGEMENT

I wish to thank my Tutor Elaine Sisson.

TABLE OF CONTENTS

List of Plates

9. 'Bertillon Card, 1913'
Sekula Allen. "The Body and the Archive" *October* No. 39. Winter 1986 p.27

10. 'Francis Galton, Criminal Composites. 1878'
"The body and the Archive" *October* No. 39. Winter 1986 p.49

11. 'Specimens of Composite Portraiture'
Sekula Allen. "The body and the Archive" *October* No. 39. Winter 1986 p.45

Thought and Character

By Sending Us Your Photographs

Front and side views, we can develop your Character through directing your Thoughts in the right channels, and pointing out your opportunities in life. Think this matter over; and think quickly. Write to

FOWLER & WELLS CO.

18 EAST 22nd STREET, NEW YORK.

Fig.1. Thought and Character, 1910.

The above advertisment appeared in the *Phrenological Journal* in 1910. It illustrates the Victorian emphasis on the importance of character, and the influence photography had on the Victorian Science of phrenology. This study explores the evolution and change in phrenology, from its beginnings as a scienfitic discipline involving brain functions, to quick character analyses, aided by the invention of photography. The photographic method of interpeting character continued into other fields of human study, such as criminology and forensic medicine. This thesis examines phrenology in relation to history, culture and society in England between 1830 and the 1910s

using original material from the leading phrenological journals of the day.

Victorians chose the head as an object of scrutiny as there was already in place a tradition of phrenological study which dated back to the Seventeenth Century. Johann Caspar Lavater, (1742 - 1801) deduced a method of reading external features which he published in five volumes, The Physiognomische Fragmente in the late Eighteenth Century. Physiognomy and phrenology both shared the belief that the surface of the body, especially the face and head, bore outward signs of inner character.

The first chapter examines how phrenology emerged in Britain during a period of social change. Successive Parliamentary Reform Bills threatened to change the structure of English Society forever. People were no longer sure of their place in society. The development of an industrial infrastucture increased the speed of life, revolutionizing the English economy. Men were drawn away from the land opening up new careers in industry. Never before had people experienced this rapid expansion of urbanization and industrialization. Religion was also questioned with the publication of Darwin's theories on evolution, creating a more secular society. "Nobody knows what to believe and most people believe nothing." (Houghton 1957, p.21). With the disintegration of rural communities people needed a method of quickly assessing the character of strangers, in the ever increasing urban landscape. Phrenology fitted the bill perfectly.

The second chapter discusses phrenology as a scientific method of deducing character. Phrenology was developed at the end of the Eighteenth Century by Franz Joseph Gall (1757 - 1828) a Viennese physician. It was a combination of brain theory and character analysis which led to the discovery of the forty two faculties, that combine together to produce character. Each 'faculty' or 'Organ' was denoted by a slight bump on the surface of the skull. Johann Gaspar Spurzhiem (1776 - 1832), also a Viennese physician, became an associate of Gall. Spurhiem lectured throughout Europe and in England between 1814 and 1831. However it was to be a Edinburgh lawyer George Combe who was to make phrenology popular. Combe's publication The Constitution of Man in1835, was a populist, manual style book which provided ordinary people with an understanding of phrenology.

Phrenology was informed by anthropology and ethnology for its studies on facial features. As a scientific discipline it was made credible by the use of various instruments, which were devised for measuring 'faculties' and skull size. People used phrenology as a method of knowing others and themselves. Employers sent prospective employees for phrenological readings. Its implementation was also used in the search for a partner or friend, to ensure compatability. The Constitution of Man proved valuable, as a educational tool, in many large proletarian orientated institutions. It introduced the science in order to assess the development of people's "moral and intellectual facutlies." (Cooter 1984, p.148)

Even as early as 1830 nearly every village in Britain was pursuing phrenology as a mode of education. Phrenology allowed people to examine themselves objectively, by utilizing the forty two 'faculties'. The pseudo-science of phrenology permitted people to accept that they had certain limitations, and provided a means of how best to cultivate and suppress certain faculties to their best advantage. It also considered all people as equal since everyone had the same amount of 'faculties' or 'bumps' on the head, "The Monarch has 40 mental faculties of the human mind so have you" (Houghton 1957, p.185.) Phrenology had an curious conflict of interest, it was conservative in its view towards human nature, yet had an anti-establishment appeal. Phrenology outlined guidelines for moral behaviour, and self development. However it was also egalitarian allowing people the possibility of status, regardless of social class.

With the invention of the photograph (the first photograph was shown to the public in Paris in 1839) phrenology changed; more emphasis was placed on physiognomical features of the face and less on the 'bumps'. The head continued to be of central significance, the eyes being the window to the soul. Victorians believed photographs to be true representations of nature. Photographs were used to predict the facial features of unborn children using a process called composite portraiture, and the possible direction of their education. Photographs made it tenable for political leaders to be phrenologically read and scrutinised.

Chapter three examines the influence of photography on phrenology. Photography began to be used in the 1860s to document criminals. The photograph owed a debt to phrenological analysis because it employed the formal front and side view of the head used by phrenologists. Francis Galton (1822 - 1911) a English statistician implemented photography for the documentation and classification of criminals. In his book Inquiries into Human Faculty (1883) he describes the procedure for composite portraiture, allowing certain criminal types to be identified.

As a science phrenology was popular as it assured people that their weaknesses were not their own fault, but the failure of parents who were ignorant of the natural law of heredity. " To the insane and even to criminals, therefore sympathy could be extended, since cerebral malformation was no fault of one's own". (Cooter 1984 p181) Phrenology allowed people to have aspirations for a better future, it also limited people to what the faculties permitted. However it did enable individuals to assert themselves in a rapidly changing world.

CHAPTER 1

The Emergence of Phrenology 1830 - 1860

The science of Phrenology evolved during a period of great change in Victorian life.

> It was only yesterday, but what a gulf between now and then: Then was the old world, stage coaches, more or less swift, riding horses, pack horses, highwaymen, knights in armour, Norman invaders, Roman legions, Druids, Ancient Britons painted blue, and so forth - all these belong to the old period. (Houghton 1957 p.3)

Feudalism, a medieval political system based on the holding of land in return for service, was disintergrating. Rural communities began to dwindle and move to urban areas gaining factory employment. The speed of life was increasing at a rapid pace, with the expansion of economic infrastructure. Canals, tarmacadam roads, railway and steamboats allowed business to flourish. Demand for material goods increased, and Victorians had to struggle for material things of which their fathers had been unaware.

Victorians also lived in the shadow of revolution similar to the French in 1789. English class systems prevented such a revolution taking place, as its hierarchial structure remained relatively intacted. According to Houghton the English character was strongly inclined to adopt the opinions of those above them. (Houghton 1957 p.103).

Religious beliefs were in decline as scientific disciplines grew. Diminishing belief was a source of distress and after Darwin, no one knew what to believe. Phrenology was the first popular science to provide people with an interest in scientific naturalism and evolutionary theories. George Combe published his studies in a populist version of the Constitution of Man in 1835. David De Guistino describes it as the "New gospel of practical ethics a proper blend of modern science and traditional morality" (De Guistino 1975 p.33). The book was hugely successful and sales amounted to 80,500 by 1847.

Books similar to the Constitution of Man cushioned the shock which accompanied Darwin's Origins of the Species (1857) and his later publication The Descent of Man in 1871. These studies produced secular concepts of the creation of man. His theories were strongly resisted by the public. The book of Genesis was in serious doubt, could man be simply a higher ape! Even though Victorians had strong moral and Christian values scepticism was evident. Society feared, with such scepticism, that faith would collapse simultaneously with morals, and society would disintegrate.

Phrenology stepped in as the new secular Religion. Phrenology had organized systems easily understood unlike the arbitrary laws of God. Dwindling religious faith, generally among working class, led to a fear of revolution among middle class. The ethic of knowing one's place' was undermined by the decline in religious belief and the increase in new socially aware texts and ideas. Phrenology enabled

people to combat some of the confusion that surrounded them. As early as 1820 it was used as a teaching tool and as a means of independent development in the London Society of Mechanics. Phrenology had quite an ambiguous position, it was used to replace disorder, but was in itself subversive.

Phrenology's main appeal lay in the fact that it was not academic. The Constitution of Man was the true voice of the populace. It was anti aristocratic, anti clerical, anti monarchical. (Cooter 1984 p.184) It crystallized everything the under privileged had been denied. Also in the mid 1800s, there was a flood of cheap publications by American phrenologists, Lorenzo Niles Fowler and his daughter Jessica Fowler. Their phrenological publications described a simple, empirical, practical science, containing clear examples of 'faculties' illustrated in an easily understood way. (Fig 2) It spoke of equal opportunities, social justice and self improvement.

Socialists such as Robert Owen (1771 - 1858) used the discourse of Phrenology as a vehicle to preach social reform and to incite working class groups to "end all monoply and opression" (Houghton 1984 p.163) Phrenology was not exclusive to working class and social reformers, many physicians, surgeons and scientists had an interest in phrenology also. Case studies of observable phenomena were not easily rejected. The 'Organ' of 'destructiveness' found above and behind the ear, was observed in many criminals and therefore believed to be true. Phrenological brain dissection, a practice long disfavoured by the clergy, changed opinions and established methods of brain

Fig. 2. A Pictorial head with Numbered Faculties

disecting. The unsophisticated state of medicine in the early 19th Century goes some way to explaining the interest so many surgeons, anatomists and physicians had in phrenology.

Phrenology was opposed by the establishment, as it was believed not to have come "from the highest circles of science, but from men of the lower order of the intellect". (De Gustino 1975 p.32). Publication such as the *Edinburgh Review* or *British Quarterty* considered the cream of British literature attacked phrenology by calling it "continental quackery", simply because of its lack of British origins. British people believed themselves to be "the greatest and most highly civilised people that ever the world saw". (Houghton 1957 p.39)

Phrenology made its deepest impression among a predominantly young and self improving section of the working class. Literary and mechanics institutions in Britain by 1851 had a total of over a hundred and twenty thousand members. Mutual improvement societies were being established in conjunction with mechanic's institutions. Working people were being educated in huge amounts and they were beginning to display a new confidence in their abilities, although the Bishop of Chichester claimed "that education and especially easily learned science was leading to discontented servants and national ruin". (Cooter 1984 p.186). This was an indication of the unease at social reform experienced by many establishment figures.

Workers were beginning to find a political voice with their new

found economic and social confidence. Influences in the form of Chartism, democracy movements, suffragism, socialism, and the need for a proper voting system led to unrest among working people.

The middle and upper classes for the most part, were indifferent to the suffering of the poor, and to the lessons of the French Revolution. They believed in the principle of 'Laissez faire' which left factory and mill owners free to pursue a career in making money. Workers had no government aid and they inhabited slum conditions. It was clear that social reforms needed to be implemented. "There is no hope for working men until they shall become dissatisfied with ignorance and dirt, with crowded ill aired houses with hard toil and the absence of refined recreation". (Cooter 1984 p.186). Combe gave this speech in Glasgow in 1851 encouraging people to change their situations.

Revolution suddenly erupted in Europe in the first months of 1848 in France, Italy and Austria. In March riots began in London, Liverpool and other large towns, government troops suppressed the riots. In order to avoid another worker's rebellion successive Reform Bills were passed in 1832, 1867 and 1882. This brought about the introduction of co-operatives, trade unions, prison reform, improved sanitation, factory acts, mine acts, laws for the prevention of cruelty to children and animals. Housing was also improved since it was believed that "good drains, good water, decent light and air, could reduce the amount of vice by making the workers more content with

their lot, could make them more law abiding and less dangerous". (Houghton 1957 p.41). Improvement in social reform lessened the threat of revolution.

With the emergence of democracy political power transfered from ruling classes to the people, allowing people more opportunities and freedom. Class barriers were also being eroded the aristocracy was prepared to inter marry with the new rich, the commoner who bought an estate and title. Possibilities for respectability were attainable, one could work one's way to the top. "To be left behind in the race of life was not only to be defeated, it was to be exposed to the same kind of scorn and humiliation visited upon poverty". (Houghton 1957 p.191).

Work was equated with money respectability and sucess, idleness was considered a social evil an unforgivable economic sin. Victorians were proud of their capacity for work "in short - England is emphatically the history of progress" (Houghton 1957 p 39). The 'Great Exhibition ' in London in 1851 displayed Englands industrial achievements to the world, younger generations obsessed with self improvement were determined to push and buy their way into the upper classes.

Both the industrial and democratic revolution caused great anxiety among all groups. Barriers were being broken and people displaced. Increased education among working classes, furnished them with a veneer of culture and respectability which enabled them progress up the social ladder. In a society which was in transition

phrenology was perceived to provide a vital tool in deciphering the character of strangers, and thereby helping to alleviate social suspicion.

Even though phrenology's main aim was self improvement, socialists such as Robert Owen added to its anti establishment appeal. Robert Owen believed one's character was formed by one's social circumstances, which was dramatically opposed to Gall's, Spuzheim's and Combe's theory of innate mental endowment. Phrenology was almost exclusively regarded as the voice of the populace, however the scientific world took on board to a certain extent, its radical new brain theories, which considered each convolution on the brain, to represent a facet of character. With the meaning of each convolution established, character analysis was possible, enabling advice to be given in relation to all personal and social problems.

CHAPTER 2

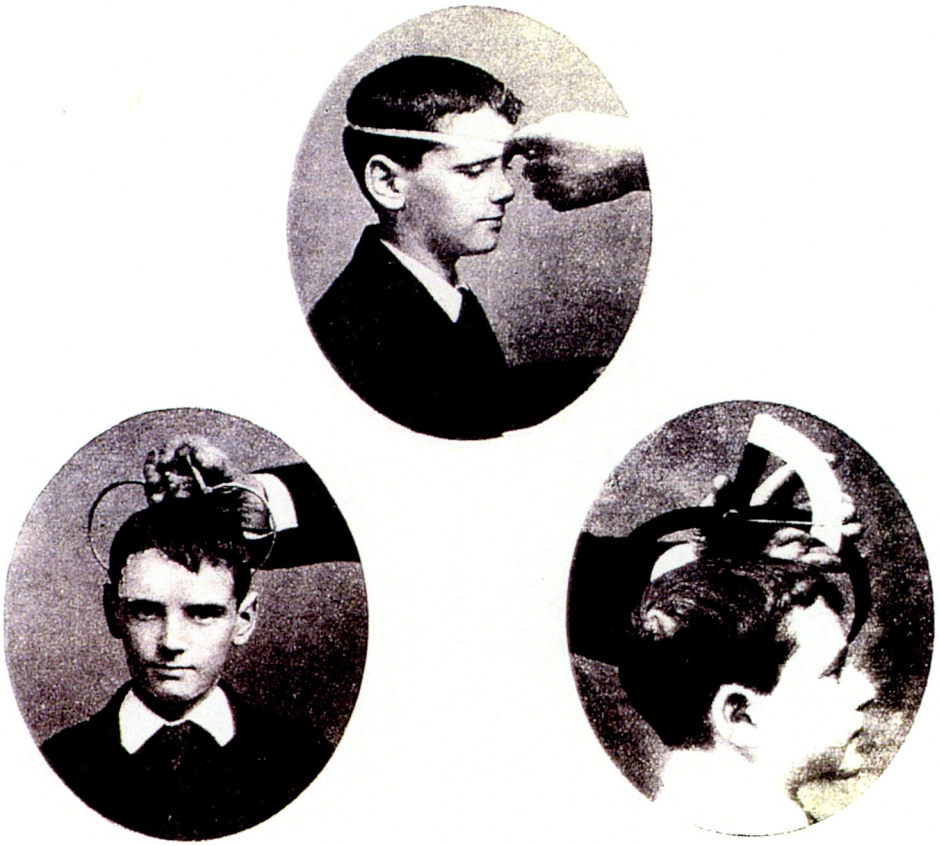
Phrenology as a Scientific Method of Deducing Character.

Phrenology had two facets a scientific and a social. Various scientific instruments validated empirical phrenological readings, appearing to attach creditability and importance to phrenology as a science. Phrenology had three scientific principles. First that the brain shaped the skull: that the brain is an organ of the mind: and lastly, that the brain is composed of a congeries of organs each of which has a special function to fulfil. (L.N Fowler 1880 p.213).

Franz Joseph Gall was the first to achieve important anatomical discoveries in dissecting convolutions of the brain. He maintained that the brain consisted of separate 'organs' or 'faculties'. These 'faculties' grow and develop producing their own 'bump' on the skull and thereby enabling the character of an individual to be deciphered by feeling the exterior of the head. Gall's craniometrics was based on measuring individual areas of the head using callipers. (Fig 3). He pioneered a new concept in cranial knowledge, relying solely upon observation from nature and statistical conclusions.

Animals were also used for phrenological experiments, to try and isolate specific brain functions. Particular parts of the brain were cut away and other parts of the brain injured, to observe the effects of these injuries on the feelings of the animals. Dr. Ferrier and his school subjected animals to "extreme torture by uncovering their brains and

This figure was assumed to be the perfect Phrenological Head.



Measuring a child's head.

Fig. 3. Measuring the head with Callipers.

electricising the parts". (Spurzheim 1881 p.230). Along with experimentation on animals, neurological information was also obtained by observing animals in nature and humans. Brain and skulls were separated, to show that the development of the brain was in proportion to the configuration of the head. Professor Tiedemann compared Negro brains with European brains, by measuring the brain capacity of the skull. The greater the volume the greater the intellect. He concluded that a Negro skull was 1/10 smaller than a European. (Combe 1833 p.13 - 15). This data endorsed the fact that English and European people considered themselves superior beings.

Brain and organ size were thought to be a measure of mental power. A head measuring 22 inches was believed to be of average intelligence. A woman's head that measured between ½ inch and 3/4 inch less than the average man was considered "good quality". 19 inches was representative of a weak incapable character, a head of 18 inches or less was seen as that of an idiot lacking in brain capacity. Intelligent heads measured between 23 to 23½ inches, superior intellect measured 24 to 25 inches.

Another factor that phrenologists took into consideration, was the actual over all structure and shape of the head. There were three recognisable catergories or 'Temperaments', which gave an insight into the physiological make-up of an individual. 'Vital Temperament' supposedly suggested a person with powerful circulation and large lungs. 'Motive Temperament' was indicated by the existences of prominent features, large muscles and bones. Finally 'Mental

Vital Temperament.

Motive Temperament.

Mental Temperament

Fig. 4. Vital Temperament, Motive Temperament, Mental Temperament.

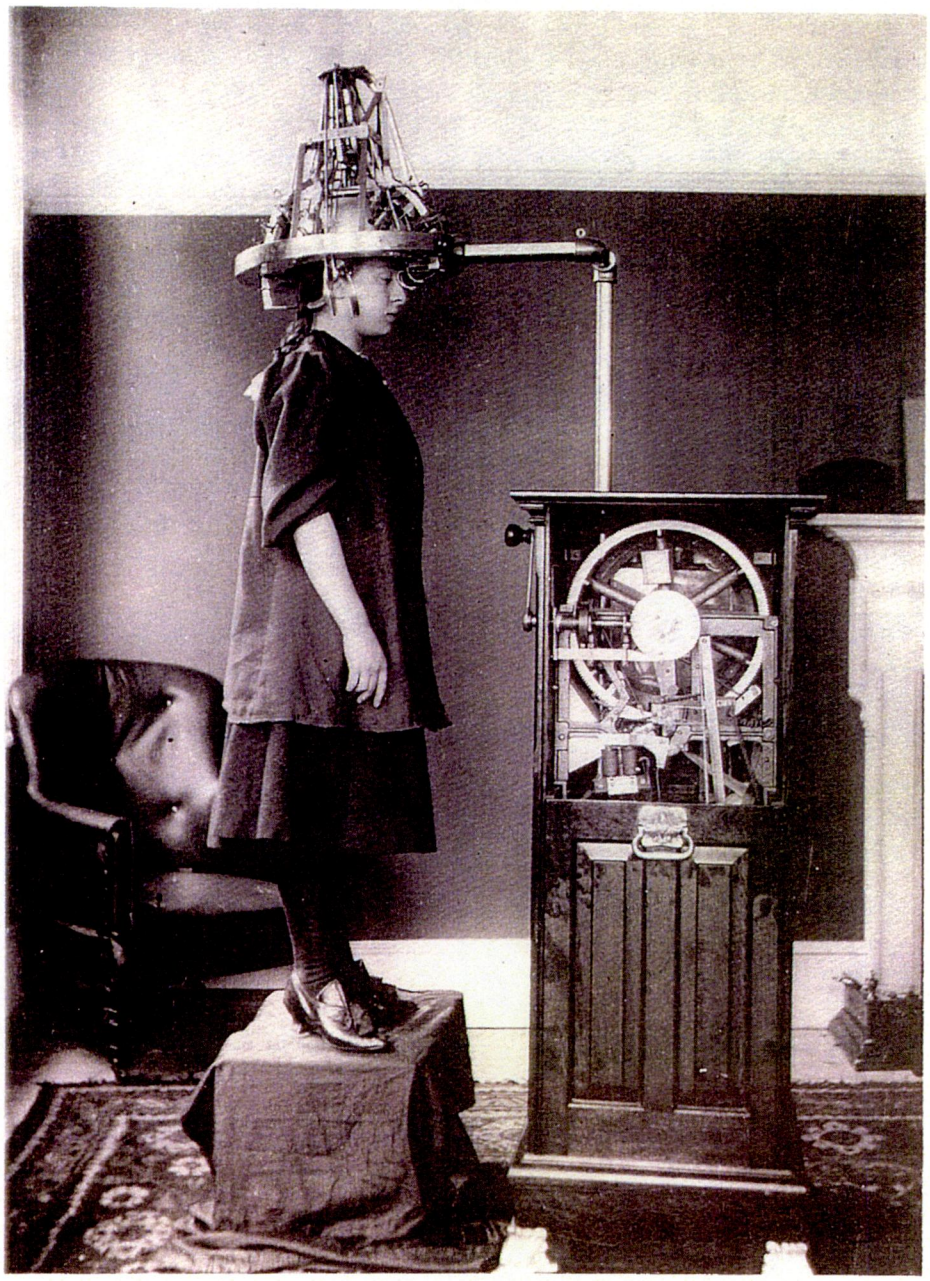


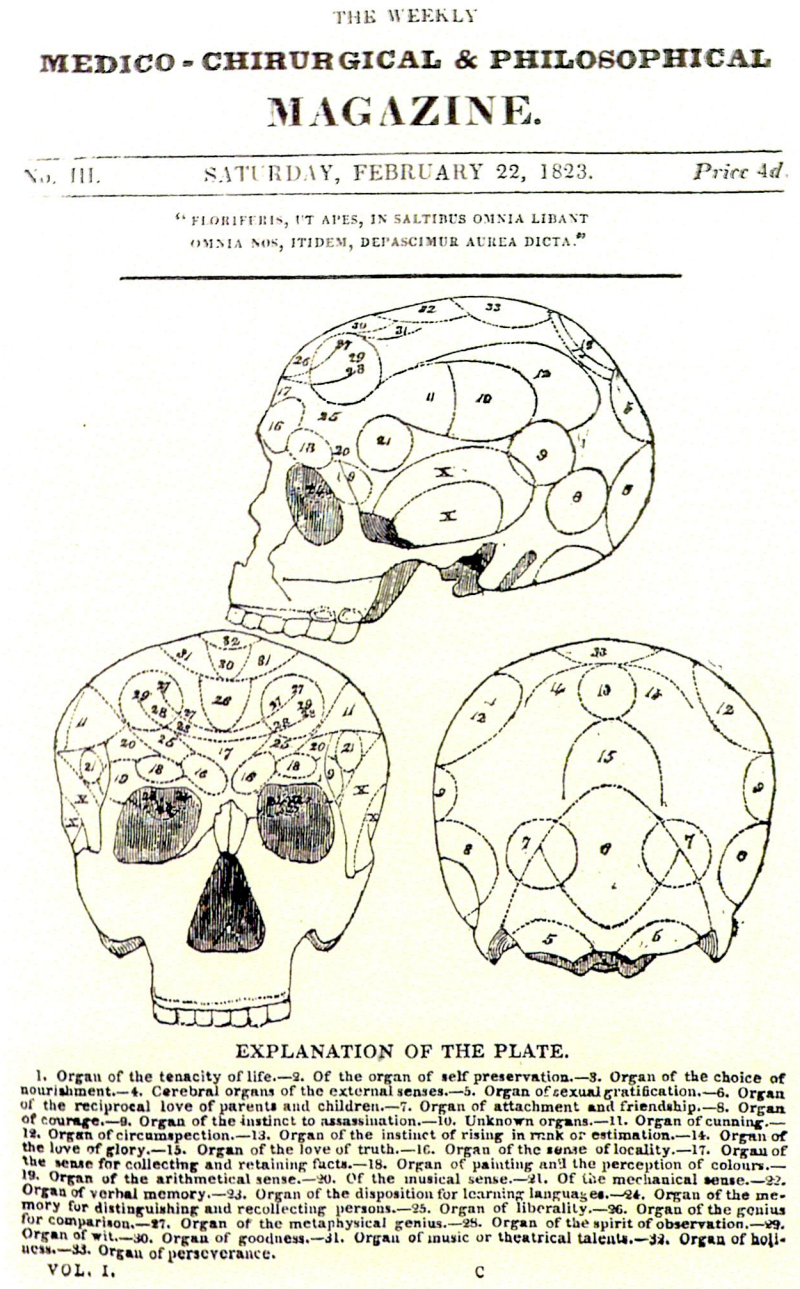
Fig. 5. Lavery Electric Automatic Phrenometer.

Temperament' was defined as having a delicate nervous system (Fig4). This Temperament' was primarily associated with women. These groups were derived from Lavater's investigation into physiognomy.

Callipers were used most frequently when measuring the head, however an experienced phrenologist could tell by eye alone. Various methods of measuring were employed. Organometrics, a system devised by Surgeon M. David Nicol, was considered more accurate. It was clamped into the ears and surrounded the head with a moving radius, allowing for more precision in the measuring of 'bumps'. A phrenometer was an amazing piece of engineering which gave a printed description of character. (Fig 5)

Forty two phrenological faculties combined together to produce character, however this varied between phrenologists. Fundamental faculties set down by Gall remained the same, while other phrenologists such as Dr. Spurzheim and George Combe made improvements in analyzing and classifying data. Faculties allowed character to be split into individual compartments, enabling every facet to be isolated and acknowledged. (Fig. 6, 7)

In a series of lectures by Dr Spurzheim published in *The Phrenological Magazine* in 1881, Dr. Spurzheim drew similarities between human faculties and comparable ones in animals. Phrenology's interest in scientific naturalism and evolutionary theories culminated in the publication of a booklet in 1861: - The Elements de Philosophie Phrenologique by Henry Scoutetten. This booklet



THE WEEKLY

MEDICO - CHIRURGICAL & PHILOSOPHICAL

MAGAZINE.

No. III. SATURDAY, FEBRUARY 22, 1823. *Price 4d.*

"FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

EXPLANATION OF THE PLATE.

1. Organ of the tenacity of life.—2. Of the organ of self preservation.—3. Organ of the choice of nourishment.—4. Cerebral organs of the external senses.—5. Organ of sexual gratification.—6. Organ of the reciprocal love of parents and children.—7. Organ of attachment and friendship.—8. Organ of courage.—9. Organ of the instinct to assassination.—10. Unknown organs.—11. Organ of cunning.—12. Organ of circumspection.—13. Organ of the instinct of rising in rank or estimation.—14. Organ of the love of glory.—15. Organ of the love of truth.—16. Organ of the sense of locality.—17. Organ of the sense for collecting and retaining facts.—18. Organ of painting and the perception of colours.—19. Organ of the arithmetical sense.—20. Of the musical sense.—21. Of the mechanical sense.—22. Organ of verbal memory.—23. Organ of the disposition for learning languages.—24. Organ of the memory for distinguishing and recollecting persons.—25. Organ of liberality.—26. Organ of the genius for comparison.—27. Organ of the metaphysical genius.—28. Organ of the spirit of observation.—29. Organ of wit.—30. Organ of goodness.—31. Organ of music or theatrical talents.—32. Organ of holiness.—33. Organ of perseverance.

VOL. I. C

Fig. 6. Title page of the Weekly Medico Chirugical and Philosophical Magazine.

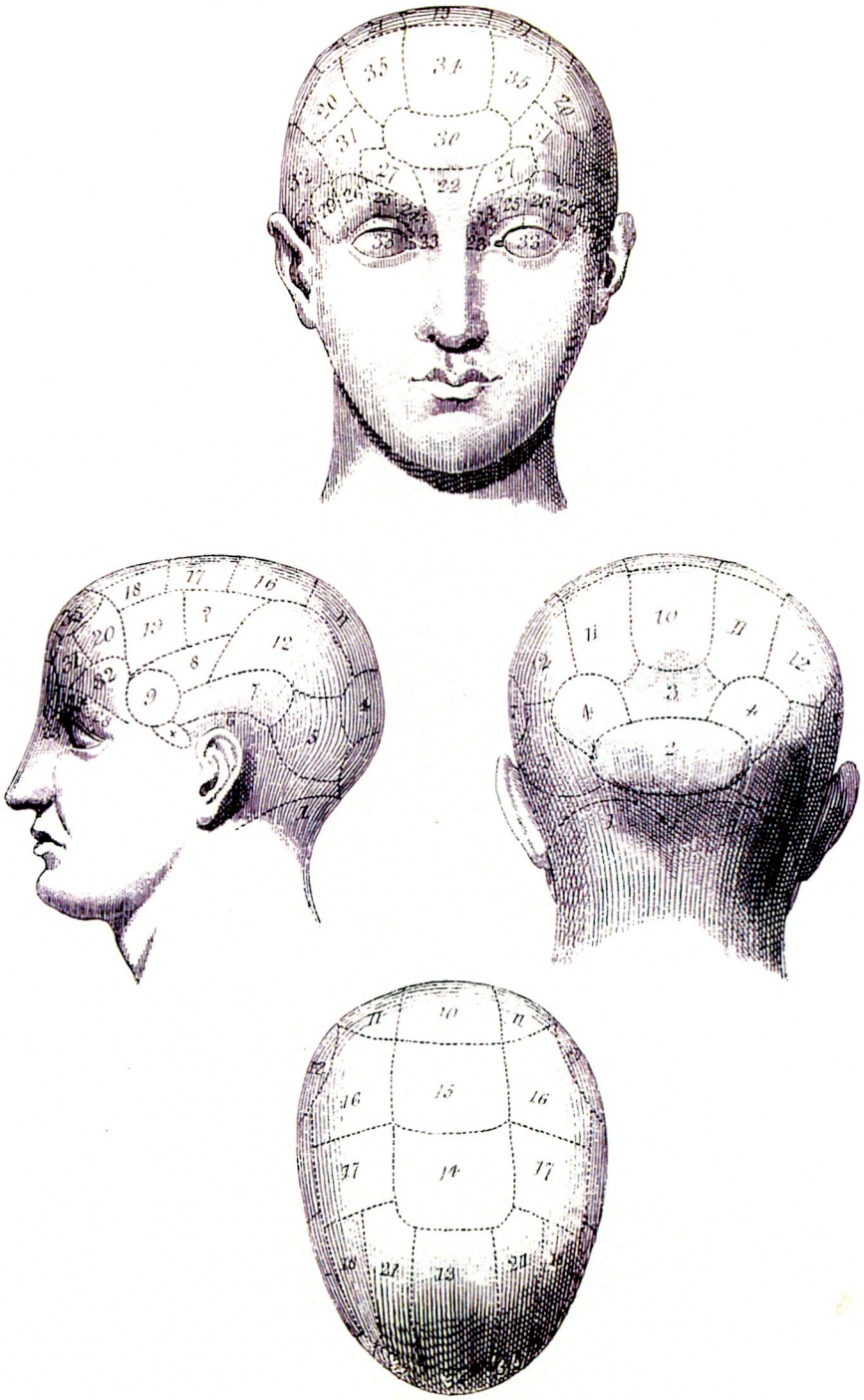


Fig. 7. The head divided into Cranial Faculties.

included a fold out page which showed the progressive developement of man in twenty four heads. Beginning with a tadpole and concluding with the head of a noble man. (De Gustino 1975 p.51).

The 'Organ' of 'Destructiveness' could be observed in animals and humans. This organ was situated above and behind the ear. 'Destructiveness' in herbivorous was observed as being small, however carnivorous such as the wolf have 'Destructiveness' largely developed. Men where seen as having more of a tendency towards omnivorous than herbivorous behavior, because of the development of their teeth. Therefore man was supposed to have a propensity towards violence. Dr. Gall observed several murderers and found "that their brains were very large hereabout". (Fowler 1881 p.370). Organs were either small, medium or large. Men with a largely developed organ such as 'Destructiveness' were considered dangerous.

Another organ similar to that found in the animal kingdom was 'Combativeness'. Large 'Combativeness' was seemingly recognisable by broadness at the dorsal region of the head. The broader the head, the more personal courage one was supposedly found to possess. Dr. Spurzheim believed a comparable organ existed in birds, "if you look at the fighting cock and compare them with the dunghill cocks you will see that the former are much broader in this part of the head". (Fowler 1881 p.369).

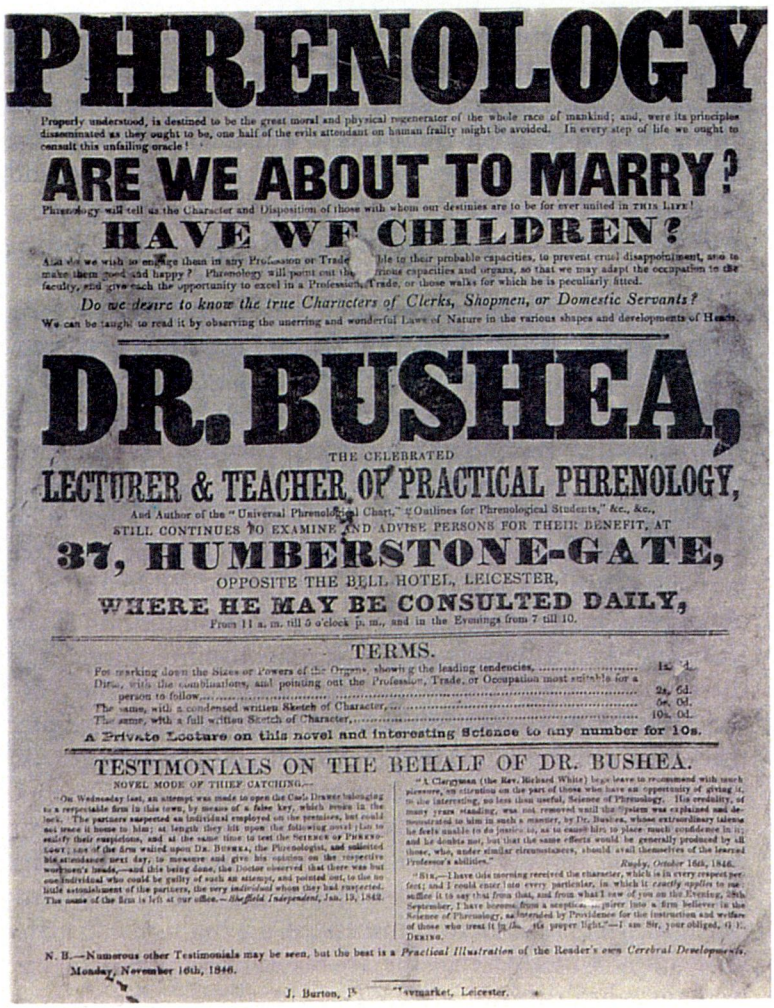
Some organs were particularly well evolved in women. 'Amativeness' which was supposedly concerned with love and attraction towards the opposite sex, was located in the Cerebellum or

the small brain at the base of the head. 'Philorogenitiveness' was another which was apparently concerned with love of one's offspring, denoted by the cerebral part of the skull being quite large. There was a organ or faculity for every conceivable aspect of character.

Moral and religious faculties also existed and were fundamental to one's moral betterment. By nature Dr. Spurzhiem accepted man to be a moral and religious being. Moral faculties such as 'Benevolence' illustrated an innate need to do good. 'Veneration' was a feeling given to man in order to guide him in his actions. Animal propensities or natural instincts innate in all creatures were also represented in man's faculties.

The organ of 'Secretiveness' exemplified sly cunning behaviour, similar to a fox. 'Acquisitiveness' expressed a selfish conduct, in animals it epitomized a need for territory. Others in this category included 'Constructiveness' as the name suggests, a capability to build and construct. 'Self esteem' was a natural pride in oneself. Finally 'Love of Approbation' which was apparently evident among children was necessary for learning and the emulation of older individuals, this 'organ' was reputed to decrease as the child grew older.

'Organs' 'faculties' or 'bumps' were used to judge people's compatibility. "When both phrenology and physiology are properly understood and applied, we shall not go far astray in marriage, in parentage, in the rearing and training of children, in selecting calling in life". (L.N. Fowler 1880 p.35) (Fig. 8). It assisted parents and teachers in understanding what the human mind consisted of. It



PHRENOLOGY

Properly understood, is destined to be the great moral and physical regenerator of the whole race of mankind; and, were its principles disseminated as they ought to be, one half of the evils attendant on human frailty might be avoided. In every step of life we ought to consult this unfailing oracle!

ARE WE ABOUT TO MARRY?

Phrenology will tell us the Character and Disposition of those with whom our destinies are to be for ever united in THIS LIFE!

HAVE WE CHILDREN?

And do we wish to engage them in any Profession or Trade [illegible] ble to their probable capacities, to prevent cruel disappointment, and to make them good and happy? Phrenology will point out the [illegible] rious capacities and organs, so that we may adapt the occupation to the faculty, and give each the opportunity to excel in a Profession, Trade, or those walks for which he is peculiarly fitted.

Do we desire to know the true Characters of Clerks, Shopmen, or Domestic Servants?

We can be taught to read it by observing the unerring and wonderful Laws of Nature in the various shapes and developments of Heads.

DR. BUSHEA,

THE CELEBRATED

LECTURER & TEACHER OF PRACTICAL PHRENOLOGY,

And Author of the "Universal Phrenological Chart," "Outlines for Phrenological Students," &c., &c.,

STILL CONTINUES TO EXAMINE AND ADVISE PERSONS FOR THEIR BENEFIT, AT

37, HUMBERSTONE-GATE,

OPPOSITE THE BELL HOTEL, LEICESTER,

WHERE HE MAY BE CONSULTED DAILY,

From 11 a.m. till 5 o'clock p.m., and in the Evenings from 7 till 10.

TERMS.

For marking down the Sizes or Powers of the Organs, showing the leading tendencies,	1s. 6d.
Ditto, with the combinations, and pointing out the Profession, Trade, or Occupation most suitable for a person to follow	2s. 6d.
The same, with a condensed written Sketch of Character,	5s. 0d.
The same, with a full written Sketch of Character,	10s. 0d.

A Private Lecture on this novel and interesting Science to any number for 10s.

TESTIMONIALS ON THE BEHALF OF DR. BUSHEA.

NOVEL MODE OF THIEF CATCHING.—

"On Wednesday last, an attempt was made to open the Cash Drawer belonging to a respectable firm in this town, by means of a false key, which broke in the lock. The partners suspected an individual employed on the premises, but could not trace it home to him; at length they hit upon the following novel plan to satisfy their suspicions, and at the same time to test the SCIENCE OF PHRENOLOGY: one of the firm waited upon Dr. BUSHEA, the Phrenologist, and solicited his attendance next day, to measure and give his opinion on the respective workmen's heads,—and this being done, the Doctor observed that there was but one individual who could be guilty of such an attempt, and pointed out, to the no little astonishment of the partners, the very *individual* whom they had *suspected*. The name of the firm is left at our office.—*Sheffield Independent*, Jan. 19, 1842.

"A Clergyman (the Rev. Richard White) begs leave to recommend with much pleasure, my attention on the part of those who have an opportunity of giving it, to the interesting, no less than useful, Science of Phrenology. His credulity, of many years standing, was not removed until the System was explained and demonstrated to him in such a manner, by Dr. Bushea, whose extraordinary talents he feels unable to do justice to, as to cause him to place much confidence in it; and he doubts not, but that the same effects would be generally produced by all those, who, under similar circumstances, should avail themselves of the learned Professor's abilities." *Rugby, October 16th, 1846.*

"SIR,—I have this morning received the character, which is in every respect perfect; and I could enter into every particular, in which it *exactly* applies to me; suffice it to say that from that, and from what I saw of you on the Evening, 28th September, I have become from a sceptic, a firm believer in the Science of Phrenology, as intended by Providence for the instruction and welfare of those who treat it in its proper light.—I am Sir, your obliged, G. U. DERING.

N. B.—Numerous other Testimonials may be seen, but the best is a *Practical Illustration* of the Reader's *own Cerebral Developments.*

Monday, November 16th, 1846.

J. Burton, [illegible] Haymarket, Leicester.

Fig. 8. Handbill for Dr. Bushea's Practical Phrenology 1846.

allowed one to discover one's predominate faculties and those that were deficient, enabling more informed life decisions. It was perceived that with a single consultation with a practical phrenologist many agonizing problems could be solved. As it was considered to be objective and impartial it could weigh and measure more accurately one's character.

During the 1860's populist publications such as L.N. Fowler's *Phrenological Magazine* began to increase their emphasis on hereditary diseases. Insanity and criminal behaviour were thought to be hereditary. L.N. Fowler believed society to be

> groaning under the burden that has been cast upon it by not duly considering the influence of parents on children. It is as true to-day as ever it was that the sins of parents are visited on their offspring to the third and fourth generation. Prisons hospitals and asylums are full and many more are wanted, especially for imbeciles, because the laws of hereditary descent are disregarded. (L N Fowler 1880 p.35).

This semi religious rhetoric instilled fear into people.

Phrenological ideas of race perfection were to continue and expand, however phrenology as a scientific discipline was slipping into easy character analysis. By the 1860s new technological advancements led to the invention of photography. Phrenological readings or 'phrenoscopes' could now be received in the post, provided

a front and side view of the head was received. 'Answers to correspondents' an article in *The Phrenological Magazine* analysed and examined photographs of a correspondent. The reply indicates

> it will take you nearly all your time to keep full account of yourself, you are not an evenly made-up young man. Your head seems to be built somewhat after the pattern of your western mountains; there are hills and valleys. The hills are strengths and vales weaknesses, but if you keep the bridle hand will in you will probably come out all right. (L N Fowler 1884 p.522).

Readings of this type are similar to contemporary horoscopes. Articles on how to delinate your own character from photographs also began to appear in phrenological publications. Phrenology also experimented in hypnotism, 'Phrenomeserism' a type of thought transference. An individual was coaxed into a deep trance, a particular organ was touched such as 'tune' (the organ of musical ability) and spontaneous singing supposedly incurred.

Phrenology by this stage had been vulgarized beyond all recognition. Gone were its pioneering developments in brain surgery, and its genuine interest in social behaviour. Phrenology also achieved leniency in the treatment of criminals and the insane, it shifted the blame to hereditary factors. By the late nineteenth century phrenology was largely obsolete, however its proto-eugenic ideas of race continued. Formal front and side view photographs initially employed in 'phrenoscopes' were now being implemented, in the study of

psychiatric patients, and criminal research. Lithographs which were in use previously to photographs, were not totally truthful representations, as they were subjected to artistic interpretation. Photographs concentrated on physiognomical aspects of the face, and suddenly every detail in the face had special significance.

Reproducible photographs allowed for greater development of phrenological ideas. Francis Galton continued this theme, by classifying individuals into types by a method called Composite Portraiture. Phrenology in many ways planted the seeds for later progress in the development of forensic techniques, criminology and discourses on eugenics.

CHAPTER 3

Phrenology to Eugenics and the Rise of Forensic Photography.

Phrenological scrutiny of the criminal head was a pursuit that gained credibility in the late nineteenth Century through the work of Italian criminologist Cesare Lombroso (1835 - 1909). Lombroso was a firm believer in Dr. Gall's theory of 'crainology'. He clearly states in *The Phrenological Journal* of 1909 that "phrenology is the result of an immense and diligent series of studies in nerve centres, which make it the precursor of Criminal Anthropology". (Fowler 1909 p.401). In L'uomo de linquente, published 1876, Lombroso describes the criminal as an atavistic, biological specimen, who could be identified by a number of physical stigmata. (Encyclopaedia Britannica Vol 15, p.283). He also endorsed the fact that criminal tendencies were hereditary, and encouraged the idea that diseased persons were victims of a strange mental illness over which they had no control. (Fowler 1909 p.401). Criminal behaviour was expressed as 'Moral Insanity'.

Phrenologists were very influenced by anthropology, and were sometimes know as 'Phreno anthropologists'. In 1880 the phrenologist L. N. Fowler visited a great many distinguished criminals and having examined them phrenologically, he detected that their moral and religious faculties were defective. Similar to Lombroso he subscribed to the fact that criminals were prone to evil courses from hereditary influences. (L.N. Fowler 1880 p.375). Fowler did however question

Lombroso's theory of the 'natural born criminal' suspecting that environmental circumstances might act as a contributory cause to deviant behaviour. Phrenology also aided in the diagnoses of criminal types. An example of such is the case of Miss Otis who negotiated with a private detective agency to murder her mother of $2,500. Phrenologist Dr. Baldwin diagnosed her as suffering from moral degeneracy. However this fact was not apparent to police during the interview process and Dr. Baldwin's diagnoses brought the proceeding to a halt. (L.N. Fowler 1909 p.28).

Anxiety regarding social deterioration magnified the possibility of an increase in criminal behaviour and vagrancy. Eugenics thus became a utopian philosophy. Eugenics and evolutionary theories became very much intertwined. Herbert Spencer in 1850 pointed out that the 'purifying process' by which animals kill off, the malformed, and the aged was equally at work in human society. (Houghton 1957 p.209). The struggle of existence within social groups and society, could be reduced to Darwin's notion of the 'Survival of the Fittest'.

Articles such as Nathan Allen's 'Hereditary influences' discussed in 'The Phrenological Magazine' reiterated this fear.

> Few persons are aware of the immense importance of the laws of inheritance . . . the time will come when these hereditary influences will be better understood . . . if they could be strictly observed by all parents, it would diminish the suffering the sickness, and mortality of infants and children by more than one third, (N. Allen 1883 p.335).

The most efficient way to prevent the proliferation of degeneracy and the reciduum (or a pool of people who are likely to reoffend) in an ever increasing secular society was firstly to recognise it. Photographs allowed this to happen as they were reproducable and easily circulated. Photographs enabled physiognomical characteristics of the face to become much more important. "Photography as an interpreter of character is a great aid to its unfoldment". (J.A. Fowler 1908 p.4). Phrenologists considered that changes that took place in the head registered themselves in the face. (J.A. Fowler 1908 p.4.) Photography was seen as an unbiased medium, and therefore it functioned as reality itself. The photograph was also thought to be invested with magical power which could penetrate appearances, to reveal secrets of human character. (Sekula 1982 p.94).

In this capacity photography was used as a means of rationalization in an attempt to classify, identify and define characteristics of race and class, and act as evidence of existances of fact. Photographs had legal status as they operated as objects of truth. In the 1860s photographs were systematically introduced into the daily life of the asylum, and in police stations, for the documentation of prisoners and the insane adding to the criminalising powers of photography.

Many individuals attempted to locate the differences within human population and among particular social groups. Adolphe Quetelet (1796 - 1874) a Belgian, was a statistician who became absorbed with anthropmetrical research. He focused both on the

skeletal proportions of the body and upon the volume and configuration of the head which was an obvious phrenological concept. A Paris police offical, Alphonse Bertillon, invented the first effective photographic method of criminal identification in the 1880's. For identification purposes he insisted on a standard focal length consistent lighting and fixed distances between camera and the sitter, taking a profile view and a frontal. Information on each criminal was stored on a card and filed resembling a mugshot (Fig. 9). Bertillion also held the view that the body's surface, especially the face, held clues to identity - scars and other deformations of the flesh were clues to one's history. Bertillon's system of classification proliferated widely in forensic areas of criminal investigation, and received an enthusiastic reception especially in the United States.

Galton also attempted to regulate social deviance by means of photography. The difference was that he endeavoured to construct a purely optical apparition of the criminal type, by a method of composite portraiture. His commitment to racial betterment led him to join in the search to find a criminal type, it was also a practical response to the demands of urban police work. Galton first introduced the term 'Eugenics' in Inquiries into Human Faculty published in 1883. He sought to analyse human society and hereditary differences among individual groups. Based upon conclusions from these analyses, he advocated a programme of social control to ensure the general improvement of the species, through selective breeding. Bertillon and

POLICE DEPARTMENT, SAN DIEGO, CALIFORNIA

Height	1 m 60.0	Head lgth	18.0	L Foot	23.5	Color of Eye	Class	Age	24
Stretch	1 m 57.0	Head wdth	15.5	L Mid F	10.3		Areola	Apparent Age	
Trunk	87.0	Cheek width	13.1	L Lit F	8.0		Periph Mar.	Nativity	Mexico
Curve		R. Ear lgth	5.9	L Cubit	42.4		Pecul	Occup	Laborer.

Eng. Height 5-3 Remarks relative to Measurements

Forehead	Inc. I	Nose	Profile	Bridge R.	R Ear		Hair Black.
	Height M			Base El. Root M		L.Att.	Complexion M-Dark.
	Width M		DIMENSIONS			Teeth Good.	Weight 112
	Pecul.		Height P / Projection M / Breadth G			Chin Ball.	Build P
			Pecul				Beard Black.

Right	14 A	Examined	1-17-13.
Left	22 A	By	Gabrielson.

Fig. 9. Bertillon Card 1913.

Galton were pioneers in the modern organisation and handling of visual documents. They endeavoured to rationalize social order over social disorder.

Galton's composite portraiture consisted of blending individual characteristics into a single composite image. This was achieved by the following steps; in Galton's own description:

> "(1) I collected photographic portraits of different persons, all of whom had been photographed in the same aspect (say full face) and under the same conditions of light and shade . . . (2) I reduced their portraits photographically to the same size . . . (3) I superimposed the portraits like the successive leaves of a book . . eye in front of eye and mouth in front of mouth. Thus I obtained a book . . . all the portraits lay exactly in front of one another. (4) I fastened the book against the wall in such a way that I could turn over the pages. (5) I focused my camera on the book, fixed it firmly, and put a sensitive plate inside it. (6) I began photographing, taking one page after the other in succession without moving the camera, but putting on the cap whilst I was turning over the pages. Only a fraction of the exposure required to make a good picture was allowed to each portrait". (Galton 1907 p.6).

Galton composed composites of the healthy, diseased and the criminal individuals (Fig. 10)(Fig. 11) Healthy represented a combination of twelve officers of the Royal Engineers and twelve privates, the result according to Galton was a "Composite having an expression of considerable vigour resolution, intelligence and

Fig. 10. Francis Galton, Criminal Composites 1878.

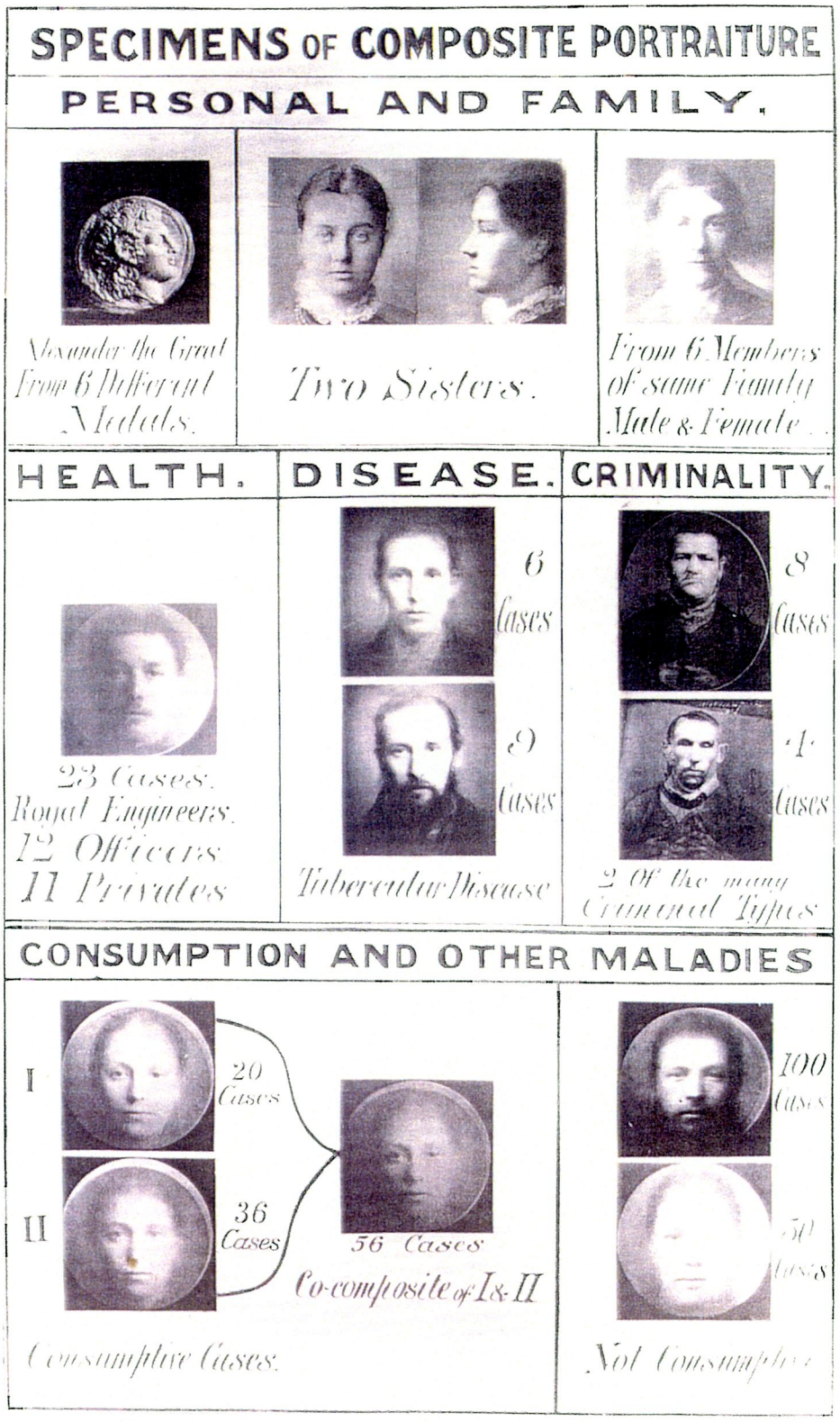


Fig. 11. Specimens of Composite Portraiture.

frankness" (Galton 1883 p.10). Criminal portraits were extracted from two large groups. Group one depicted men undergoing severe sentences for murder and violence. Group two portrayed thieves (Fig. 11). Composites resulted in two fairly distinct types implying to him that criminals were breeding "true to their kind" concluding in "one of the saddest disfigurement of modern civilisation" (Galton 1883 p.10). Diseased faces were illustrated by two groups, thin featured and thick (Fig. 11) both remarkably similar since both had wan and withdrawn faces. The Royal Engineers composite could be described as the 'Central type' or 'average man'. It offered an indication as to the future direction, the English race might take, and how it could be strengthened and improved. "It is only necessary to encourage as far as practicable the breed, of those who conform most nearly to the central type, and to restrain as far as may be, the breed of those who deviate widely from it." (Galton 1883 p.10).

In a more lighthearted tone, composites were effective in obtaining "ideal family likeness", and in forecasting results of union made between married couples. An article in *The Phrenological Magazine* by J.A. Fowler, in 1906 uses composite portraiture to predict "What the future New Yorker will be". New York was represented by twenty one nationalities. To create composites Fowler sampled eleven girls and eleven boys in a public school. Resulting female composite suggested a strong fusion of 'Vital and Mental Temperaments', the male composite displayed 'Motive Temperament' and locomotive,

executive, and businesslike qualities. (J.A.Fowler. 1906 p253,254). The concluding composites anticipated the evolution of a strong national character.

Even though composites were sophisticated images they were also generalizations. L.N. Fowler believed them to be confused and misleading pictures (L.N. Fowler 1882 p.100). Galton's criminal composites dissolved into a common low type, because the process caused individual characteristics to merge causing the boundaries between the criminal and the working poor to be brought together, becoming one overall image; "the lunatic, idiot and pauper asylums, the prisoners, the patients in hospital, the sufferers at home, the crippled, and the congenitally blind". (Green 1984 p.9). The residuum represented social, political disorder and "if allowed to procreate freely, these social elements would lower the hereditary complexion of the nation to such an extent that it's superiority would be severely weakened. Galton did not believe it reasonable to preserve sickly breeds for the sole purpose of tending them. (Galton 1883 p.18). There was only one way to prevent this : deny the residuum the possibility of reproduction.

In Britain the philosophy of eugenics was cultivated almost exclusively as a study of differences between social classes. Galton's theories remained theory, however he did encourage people to keep records of their children such as weight measurements and also photographic studies of the features in full face and in profile. Galton wanted to record people's growth patterns from childhood till

adulthood so he could estimate the effect of external condition upon their development. This data was to become part of a large anthropmetric register, in an attempt to discover, the conditions under which 'men of high types were produced'. (Galton 1883 p.30).

CONCLUSION

The decade preceding the outbreak of the First World War, was the only period in which there was any serious consideration given to Eugenics in England. Marie Stopes a member of the Eugenic Society campaigned for birth control, especially among the poor, as a method of positive Eugenics. Stopes and others such as Galton, despaired at the fact that all the strong young men, were going to War, and that the cowards and the unhealthy ones remaining would continue producing unfavourable offspring. (Richard A. Soloway. 1996 p.55). In the early 1930s there was a growing anxiety about the alleged decline in the intelligence of the English race. (A. Soloway 1996 p.67). The Eugenics Society began promoting negative eugenics, they wanted legislation to permit the voluntary sterilisation of a minority of mentally incompetent people, whose fertility could not be contained by birth control alone. Thankfully eugenics, under the camouflage of family planning was never made compulsory. In hindsight (especially post Holocaust) these ideas seem extremely dangerous.

Eugenics was however taken a step further than theory in other countries. In Indiana in 1907 a Bill was passed to prevent the procreation of certain criminals, which involved the sterilization of confirmed criminals, idiots, imbeciles, epileptics and rapists. (J.A. Fowler. 1907 p.256). By 1931 sterilisation laws had been implemented in twenty seven states in the United States. California had the highest number of enforced sterilisations, with an adverage of

350 cases per year, amounting to a total of 9,931 cases by 1935. Also by 1935 sterilisation laws had been passed in Denmark, Switzerland, Germany, Norway and Sweden. Most of these laws provided for the voluntary or compulsory sterilisation of people, thought to be mentally deficient. Only in Germany did eugenics serve as a racial and political weapon, by exploiting the concept of the master race. (Encyclopaedia Britannica Vol. 6, p.1024).

Eugenics in the form of sterilisation was still in effect until relatively recently. Later instances of enforced sterilisation took place in Australia on Aboriginal women in the 1950s, and on Canadian women as late as the 1970s. These countries shared the same ideas held in the 1930s, that the quality of a race could be managed by controlling fertility.

Phrenology and eugenics both held the view that the English character was superior, and the quality of its stock must be maintained. Phrenological magazines promoted eugenic ideas, by teaching people the importance of hereditary traits. Both disciplines sought to classify individuals. Galton's composites portraits fixed labels onto facial features, which allowed people to be categorised into certain types, criminal types, diseased types, a very limited system if a person was thought to resemble a criminal 'type'. Reproducible photographs allowed this to happen on a much broader scale, making redundant the slower phrenological analysis.

Phrenology endeavoured to interpret physical differences among races by carrying out extensive anthropological studies. Galton also

initiated the collection of anthropological information, in the form of a national register. Phrenologists measured heads and skulls, from every race imaginable, in an effort to assess their intelligence. Many phrenological studies validated the belief that the white race was most superior.

During phrenology's short existence, it allowed people access to information that would otherwise be inaccessible. Phrenology introduced concepts such as evolution, scientific naturalism, ethnology, anthropology and eugenic ideas in a simplified albeit somewhat superficial form. Phrenology might have been seen as a method of controlling people as it informed people who to marry and who to avoid. For all its failures it was a genuine attempt to educate the masses, making people more aware of their potential as individuals.

Popular Darwinism, the Eugenics movement, the First World War, and the growing influence of the 'New' science of Psychoanalysis, contributed to extinguishing the science of Phrenology altogether. Phrenology was a gradual step towards modern thinking, and away from mediaeval superstition, it was also a balance between old and new, integrating familar elements such as religion with new innovative scientific ideas.

Phrenology dealt with human relationships and investigated social behaviour. It took confusion out of marriage, career and children. Social reform was also brought about in some small measure by phrenology. It analysed and discussed personality and feelings.

One-to-one contact was available between phrenologist and client similar to the psychotherapist and client relationships of today. Cooter believed phrenology was a percursor to Freud, "a radical form of self enlightenment through individuation and reason". (Cooter 1984, p.196). Phrenology also aided scientific progress; "The very fact that various faculties of the mind have been named, even though imperfectly, is of itself an advance in medical philosophy." (L.N. Fowler, 1880, p.33). Gall discarded the old theories of the brain containing ventricles and he demonstrated that the mind and the brain work in association with each other.

Some aspects of phrenology were scientifically credible. Gall discovered the grey matter to be where the organs of intellect lay. In 1861 the Anthropological Society of Paris tried to disprove phrenology as a science. Instead Pierre Broca identified the area of the brain that articulated speech, and it was shown to correspond with the faculty of speech identified by phrenologists.

Phrenology's popularity was due to the fact that it was presented in an non-intellectual way. People were interested because it was amusing, the large amount of visual charts, signs and symbols were learned sublimally. Judge Henry Cockburn noted that (in 1836) even though it was an absurd philosophy it captured people's imagination and convinced them of the possibility of self improvement. (Cooter, 1984, p.142).

Even though phrenology was a quack science, a mixture of scientific research, human behaviour and bizarre charts it did lay the

ground work for future developments in the 'modern' sciences of psychology, forensic medicine and photographic anthropology which are indebted to the notion of phrenological enquiry.

BIBLIOGRAPHY

BOOKS

BURGIN, Victor. Thinking Photography. Basingstoke, Macmillian press Ltd. 1982

COOPER, Helen, COOPER, Peter. Heads or the Art of Phrenology. London, London Phrenology company Ltd. 1983

COOTER, Roger. The Cultural menaing of Popular Science. Cambridge, Cambridge University Press 1984.

CURTIS, Perry L. Apes and Angles. Washington, Smithsonian Institution 1971.

DE GUISTINO, David. The Conquest of Mind Phrenology and Victorian Social thought. London 1975.

GALTON, Francis. Inquiries into Human Faculty and its Development. London, J.M Dent and Co. 1883.

GILMAN, Sanders, L. Disease and Representation. New York, Cornell University Press. 1988.

HOUGHTON, Walter, E. The Victorian Frame of Mind 1830 - 1870. New Haven, Yale University Press 1957.

LAVATER, Johann, Casper. **Vignettes** essays on physiognomy. London, Printed by T. Bensley for John Stockdale 1810.

MESZAROS, Istvan. Karl Marx 1818 - 1883. London, Merlin Press 1970

PEEL, Robert. A. The English Birth Control Movement. London, Galton Institute. 1996.

JOURNALS

ALLEN, Nathan. "Hereditary Influences".
The Phrenological Magazine. 1883.

COMBE, Andrew. "Remarks on the fallacy of pro Tiedemann's Comparison of the Negro brain and intellect with those of the European".
The Phrenological Magazine. p.13 - 16.

FOWLER, J.A. "What the future New Yorker will be".
The Phrenological Magazine. 1906 p.253 - 256.

FOWLER, J.A. "How to Delineate Character from Photographs".
The Phrenological Journal. 1907 p.137 - 146.

FOWLER, J.A. "A Bill to prevent Procreation of certain Criminals".
The Phrenological Journal. 1907 p. 256

FOWLER, J.A. "Physiognomy or the Study of the Face".
The Phrenological Journal. 1908 p.1 - 10

FOWLER, L.N. "The uses of Phrenology".
The Phrenological Magazine. 1880 p.33 - 102.

FOWLER, L.N. "Are Criminals Responsible"
The Phrenological Magazine. 1880 p.373 - 377

FOWLER, L.N. "Mr. Galton's Pictorial Averages"
The Phrenological Magazine. 1882 p.98 - 100

FOWLER, L.N. "Answers to Correspondents"
The Phrenological Magazine. 1884 p.522 - 525

FOWLER, L.N. "The Study of Character from Photographs"
The Phrenological Journal. 1906

FOWLER, L.N. "Aid of Phrenology in Criminology"
The Phrenological Journal. 1909 p.28 -29

FOWLER, L.N. "Dr. Lombroso the Criminologist"
The Phrenological Journal. 1909 p.401 - 402

GREEN David. "Viens of Resemblance Photography and Eugenics"
Oxford Art Journal, Vol. 7, No. 2, 1984 p.3 -15

NICOL, M. David. "On the Necessity of a Fixed Standard in the Phrenological Estimates of Development"
*The Phrenological Journal.*1839 p.236

SEKULA. Allen. "The Body and the Archive"
October, No.39, Winter, 1986 p.3 - 64

SPURZHEIM. Dr. "Lectures on Phrenology, lecture II"
The Phrenological Magazine. 1881 p.228 - 237

SPURZHEIM. Dr. "Lectures on Phrenology, lecture IV"
The Phrenological Magazine. 1881 p.312 - 319

SPURZHEIM. Dr. "Lectures on Phrenology, lecture V"
The Phrenological Magazine. p.364 - 373

SPURZHEIM. Dr. "Lectures on Phrenology, lecture VI"
The Phrenological Magazine. 1881 p.407 - 418

SPURZHEIM. Dr. "Lectures on Phrenology, lecture VII"
The Phrenological Magazine. 1881 p.449 - 457

SPURZHEIM. Dr. "Lectures on Phrenology, lecture VIII"
The Phrenological Magazine. 1881 p.505 - 514

STAFFORD, Maria, Barbara. "Peculiar Marks; Lavater and the Countence of Blemish Thought".
Art Journal. Vol.46, No. 3 Fall 1987.

STEMMLER, Joan, K "The Physiognomical Portraits of Johann Caspar Lavater".
The Art Bulletin. Vol. LXXV No. 1, March 1993. p.151 - 166

'Cesare Lombroso'. Encyclopedia Britannica, Vol. 15, p.283