

Medicine Then and Now.

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Gary E McVeigh

The themes presented in this Presidential address are introduced through masterpieces of medicine in art from the very earliest depictions to the modern day. The representations of medicine in art provide a commentary on the place of medicine in society and how it was viewed by society. Some artists used their work both to highlight important health issues of the time and as a “propaganda” tool to promote social change. Others employed art as a medium to convey their emotions and state of mind to the world. The artistic representations provide an opportunity to reflect on the place of medicine in society then, and now, and explore what changes have occurred over time.



Figure 1. Human Confronting a Bull

In September 1940, four teenagers discovered a complex of caves located near the village of Montignac in South West France. The caves of Lascaux represent an astounding repository of paleolithic art dating back 25,000 years¹. Among the hundreds of paintings and etchings of animals across the ceilings and walls of the caves resides the oldest artistic medical representation. The lone human figure among all the animals is a man with the head of a bird, who appears to be in some kind of trance during a confrontation with a bull (Fig 1). Beside him is a staff. It is widely believed that this figure is some sort of Shaman. The word Shaman originated from Siberia and eventually came to be applied to all medicine

men and women of indigenous cultures² (Fig 2). Shamanism predates all established religions and involves working with the spirit or soul either to heal or to gain spiritual knowledge. For the Shaman everything is alive and carries information that can be referred to as the spirit, energy or consciousness. In order to communicate with the spirit or consciousness the Shaman will shift his or her own state of awareness. The shift of consciousness allows the Shaman to “see” what the problem is on a spiritual level and retrieve information in order to heal. Illness is perceived as a lack of power and to heal the Shaman returns power to the individual.

I first learned of the practice of Shamanism when I worked at the University of Minnesota in the 1990's. A large community of Hmong had settled in Minnesota having fled Laos at the end of the Vietnam War. The Hmong were threatened by the intrusion of North Vietnamese troops into Laos so the United States encouraged them to fight and provided them with training and weapons³. They



Figure 2. Hmong Shaman

made tremendous sacrifices fighting for the Americans and many had to flee their country to escape genocide at the hands of the North Vietnamese when the war ended. More than 100,000 Hmong died as a result of the Vietnam war. The Hmong believe passionately in the healing power of the Shaman and it was important to understand and appreciate the role of these traditional healers in Hmong society, and work in tandem with them, to provide holistic care for this indigenous population.

Professor of Cardiovascular Therapeutics,
Dept of Therapeutics and Pharmacology, Queens University Belfast
Whitla Medical Building, 97 Lisburn Road,
Belfast, BT9 7BL.

Correspondence to Prof McVeigh

Email: g.mcveigh@qub.a.uk



Figure 3. Rembrandt Harmenszoon van Rijn

The anatomy lesson of Dr Nicolaes Tulp has adorned the cover of many editions of Grants atlas of anatomy. The portrait is recognised as one of the earliest masterpieces of Rembrandt Harmenszoon van Rijn⁴ (Fig 3). Rembrandt's painting is of great historical, artistic and sociological importance as it epitomizes the spirit of 17th century Holland. At that time group portraits of this type were an immensely popular genre. They were a social institution, the symbol of an up-and-coming middle class. It was highly desirable to be shown in the company of influential citizens to enhance career prospects and clients would pay handsomely for this privilege. Of the figures shown in Rembrandts painting only two were physicians⁵ (Fig 4).

Nicolaes Tulp was one influential citizen who took centre stage in the 17th-century Amsterdam. He was a man of learning, a surgeon and an anatomist. For four years, he was Praelector Anatomiae of the Guild of Surgeons and was the first to describe the ileocaecal valve. However, Tulp was, first and foremost, a political animal: he was city treasurer eight times, and four times burgomaster of Amsterdam. The



Figure 4. Anatomy lesson of Dr Nicolaes Tulp

Guild of Surgeons permitted one public dissection each year and the corpse had to be that of an executed criminal. Undoubtedly, the individual had no say in the disposition of his body after death. The lesson is being given not only for the benefit of the observers in the picture. Professor Tulp is looking beyond those crowding the dissection table towards an audience that the spectator can readily imagine.



Figure 5. Gunther von Hagens

Do parallels exist between this historical perspective and the modern day display of the human body? Some insight into this question is provided by Gunther von Hagens (born Gunther Liebchen on January 10, 1945) a German anatomist who invented the plastination technique to conserve human specimens⁶ (Fig 5). He developed and promotes the "Body Worlds" exhibition and display of human bodies and body parts. The exhibition has met with public interest and controversy with critics condemning the lifelike poses of the plastinated cadavers as degrading and disrespectful (Fig 6). Nevertheless, the exhibition has been a popular success having received over 15 million visitors.

In 2002 von Hagens performed the first public autopsy in the UK for 170 years, to a sell-out audience of 500 people in a London theatre. The dissection was televised on Channel 4. In 2005 Channel 4 also screened four programmes entitled "Anatomy for Beginners" that featured von Hagens. Legal proceedings have been taken against von Hagens for allegedly receiving corpses from prisons, psychiatric institutions and hospitals in Kyrgyzstan and China. The issue of personal or family consent is unlikely to have been a paramount consideration in the minds of the authorities prior to transportation of the bodies. During the hearings von Hagens denied using any of the cadavers in the body worlds exhibition. It would seem that many similarities exist linking public interest and personal ambition with the display of the human body between 17th century Holland and the present day.

Alcohol abuse is not a unique 20th-century problem. William Hogarth's print *Gin Lane* depicts the results of such abuse in the 18th-century England and highlights its social consequences⁷ (Fig 7). Hogarth was interested in many



Figure 6. Figure from Body Worlds Exhibition

humanitarian projects and his zeal with regard to social and moral issues appear in many of his works. In *Gin Lane* the print illustrates the social and economic evils of alcohol abuse and was employed as a propaganda tool to effect change in society (Fig 8). In the early 18th-century gin was introduced into England by soldiers returning from the Low Countries and its popularity increased rapidly and disastrously between 1720 and 1750. It was not taxed initially because the use of fermented barley in its composition provided a market for farmers and because the distillers had a powerful political voice. With the growing problem of alcohol abuse parliamentary bills were introduced in 1729 and 1735 to limit the production and distribution of gin. The result was to suppress the distillation of good gin and to increase the



Figure 7. William Hogarth

production of inferior products referred to as 'Parliamentary Brandy'. The acts were unenforceable and repealed in 1743.

Henry Fielding, a friend of Hogarth's, who became a lawyer and a Westminster magistrate in addition to pursuing his career as a dramatist and author wrote a tract in 1751 entitled *Enquiry into the causes of the late increase in robbers etc with some proposals for remedying this growing evil*. Fielding's tract and Hogarth's print of *Gin Lane* constituted part of a general attempt to reimpose legislation on the sale of spirits. They succeeded with the passage of the Tippling act in 1751. Hogarth's scene is set in the slum district of St Giles' parish, Westminster, where in 1750 at least every fourth house was a gin-shop and numerous brothels and places for receiving stolen goods existed. The only thriving establishment



Figure 8. Gin Lane

was the pawnbroker. The infant in the foreground with large round eyes situated between small palpebral fissures with small cheek-bones and small chin gives an "Orphan Annie" appearance to the child. Hogarth had observed the congenital defects associated with maternal alcoholism that we now recognise as the foetal alcohol syndrome that was not described in modern medical literature until 1973⁸.

In the 20th and 21st centuries, alcohol remains a major public health problem. In particular Russia's transition from a socialist to a market-led economy has been accompanied by a severe decline in the health status of the population, that in large part, can be attributed to the effects of alcohol consumption^{9,10}.

In the 1980's the former soviet President Mikhail Gorbachov made a well intentioned attempt to reduce alcohol consumption driven by statistics that indicated up to 40% of the adult male population was alcoholic. Gorbachov's efforts resulted in huge revenue losses, lengthy lines and a booming black market in alcohol. It led to an increase in production of moonshine liquor that is estimated to have claimed the lives of up to 25,000 Russians from chemical poisoning. Gorbachov lost the affection he expected from the Russian people for introducing glasnost instead he only received their loathing. He reportedly told this story: "This guy", he says, "was standing in line for 10 hours to buy vodka and finally decided to go to the Kremlin to kill Gorbachev". The next day, the guy was back in the vodka line: "It didn't work", he told the others. "The line to the Kremlin is even longer". Clumsy attempts to legislate and control the sale and distribution



Figure 9. Edvard Munch

of spirits that failed in the 18th century were replicated in 20th century Russia only to fail again.

Problems with alcohol abuse have increased in the United Kingdom with accompanying consequences for the health of the population. A plentiful supply of cheap alcohol appears to be the most important ingredient giving rise to an increase in alcoholism in society.

History would suggest vulnerability to lobbying from powerful interest groups and multinational companies will play a pivotal role in determining if and when the authorities will make a concerted attempt to counteract alcohol abuse in the United Kingdom.

The Norwegian artist Edvard Munch is recognised as the pioneer of the expressionist movement in modern painting¹¹ (Fig 9). Munch had a tragic family and personal life. His mother died from tuberculosis when he was 5 years old as did his older sister Sophie when aged 15. His younger sister was diagnosed with mental illness at an early age and of the five siblings only one brother ever married only to die a few months after the wedding. During his life alcohol became a problem and Munch was emotionally unstable suffering from bipolar disorder. In his paintings Munch explored the themes of life, love, fear, death and melancholy. He was quoted as saying “sickness, insanity and death were the angels that surrounded my cradle and they have followed me throughout my life”. His most famous painting, “The Scream”, is described as the first expressionistic picture. As a representation of Munch’s own “inner hell”, the painting visualises a desperate aspect of anxiety and apocalypse (Fig 10).



Figure 10. The Scream

It has been known for years that truly creative individuals have much higher rates of manic depression, or bipolar disorder, than do the general population. The notion that genius and insanity are linked is supported by a wealth of anecdotal evidence¹². It may be that bipolar individuals have a wider spectrum of emotions and during their manic phase

generate a great number of ideas only to highly criticise them during bouts of depression leaving only the most promising work. Or it may be the other way around. Perhaps people who are highly creative and intelligent have a greater tendency to develop bipolar disorder. Critics of the notion that individuals with bipolar disorder are more creative contend that a causal connection has never been proven and point to a number of methodological flaws and sources of bias in the evidence linking creativity and bipolar disorder¹³. Furthermore, even if a link were proven it may be relevant only to a minority of individuals. Although society as a whole may benefit from its so called “mad geniuses” this must be balanced against the cost to the individual as up to one in five sufferers attempt suicide. The excerpt below is taken from Suzanne Johnston’s patient’s journey article in the British Medical Journal¹⁴. It exemplifies the depths of despair suffered during the depressive episodes in patients with bipolar disorder and guards against romanticising this serious illness.

THE DARK SIDE

Breathing In and out. In and out. This makes no sense – it doesn’t seem possible to be alive and yet feel so miserable, so wretched. I feel death parading through my body, calling out to me and mocking my feeble attempts at resistance. A black liquid oozes from my pores and covers my skin in a slick, disgusting sheen that only I can see. Darkness creeps through my veins and launches a visceral attack on my soul. I am helpless and floundering, lost in this relentless hammering of depression, with psychosis scraping its talons sickeningly against the inside of my skull.

The relationship between mental illness and extreme emotional or eccentric behaviour presents a medical diagnostic problem that is both complex and controversial¹⁵. The delineation and classification of mental illness has been as fiercely contested throughout the ages as it is today. Successive editions of the Diagnostic and Statistical Manual, the profession’s diagnostic handbook produced by the American Psychiatric Association, show just how fluid the characterisation of mental illness continues to be. The manual is revised every few years often with incompatible and overlapping terminologies disappearing and reappearing from edition to edition. It is not only cynics that claim political, cultural, racial and gender prejudices continue to shape diagnoses of what are purportedly objective disease conditions. Homosexuality, for example, appeared in the Diagnostic and Statistical Manual as a mental affliction until 1975. It can be argued that in spite of the technological and therapeutic advances that have taken place from the time of Edvard Munch our understanding of what constitutes mental illness has not progressed significantly as the nature of the beast remains obscure.

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