## Visual arts: Reflections in Psychoneuroendocrinology Part II

## **Mariana Purice**

National Institute of Endocrinology "C.I.Parhon", Bucharest, Romania

## Art, Artists, Life, Disease

Since time in memoriam artists were perceived as fine observers or precursors of what later scientists studied and defined. Illnesses and sufferings are parts of life, so they are reflected in our daily lives in turn, they're also reflected in art. Throughout the course of art history, we observe that artists deal with the representation of different neuroendocrine pathology. In the first part of this article, I presented a few aspects pertaining to only some thyroid pathologies. Today I'll discuss how artists represented other anomalies: dwarfism, Down's syndrome, Cushing disease, and obesity.

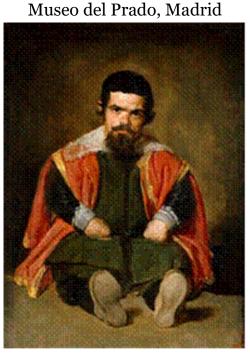
In the visual arts, literature, or in movies, *dwarfs* are rarely depicted as ordinary people but rather as an almost entirely different species. What is a dwarf? Today the definition for a dwarf is an **extremely short human**, usually with *proportional* body parts. If body size is disproportionate, some parts of the body are small and others are of average size or above-average size, this is *disproportionate* dwarfism. Signs and symptoms of disproportionate dwarfism are often present at birth or in early infancy. Proportionate dwarfism may not be immediately apparent. The abnormality occurs due to a **hormonal** imbalance such as **growth-hormone deficiency (dwarfism)**.

The representation of dwarfs began with the depictions of artists in ancient Egypt. One can see the short-stature man, Seneb (court official and a priest for the Ancient Egyptian ruler Khufu), with his wife Senetites, and their children. Short stature is a common placeholder for the term 'dwarfism', especially in a medical context.

Group Statue of Seneb and His Family (Egyptian Museum, Cairo)



Diego Velasquez: The Buffoon El Primo- Bufón don Sebastián de Morra (1644)



The Portrait of Sebastián de Morra is a painting by Diego Velázquez. Sebastian de Morra was a court dwarf and jester at the court of Philip IV of Spain. De Morra is placed against a dark background with no objects in sight. The right side of his face is in the shade due to the tilted angle of his head and the casting of the light source from the left. His hands are resting on his side, which Velázquez did not depict or drew any finger appendages.

Because they were seen as entertainment, dwarfs were no longer painted as symbolic figures and instead were depicted in a more realistic style. Velázquez painted dwarfs because he felt there was beauty in painting truth, not simply to capture ugliness or grotesqueness. Instead of depicting dwarfs as simply deformed entertainers, Velázquez showed

dwarfs with humanity that at times surpassed other men of the court. The depiction of Dwarfs was prevalent during the fifteen the eighteenth centuries respectively, experiencing a steep decline in prominence in the arts in later decades.

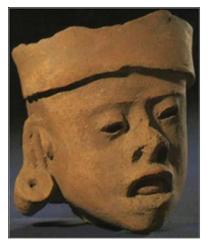
The Hobbit's dwarves (*The Lord of the Rings*, 2001). A study of the remains of the creature, nicknamed the "hobbit", shows that it is possible for it to have been a dwarf version of an early human species (Pallab Ghosh, Science BBC correspondent, 2013). The hobbit co-existed with our species until 12,000 years ago. Dwarfism exists in the real world throughout human history but Romance including in Tolkien is an idealized fictional world with characters sorted into ideal types.



These are beautiful representations of a pretty beautiful human illness. Oscar Wilde believed that what we perceive as beautiful only because "art" has taught us to regard it as such.

In **1862**, **John Langdon Down**, a British physician, fully described this syndrome: delayed growth, characteristic facial features, and intellectual impairment (*Observations of an Ethnic Classification of Idiots*, 1867). It is a genetic disorder caused by the presence of all or part of a third copy of chromosome 21. Because the characteristic epicanthic eye fold of Down Syndrome superficially resembles that seen in some Asian populations, Down Syndrome was for many years called "mongolism". Children with Down's syndrome are at increased risk of numerous *endocrinal comorbidities*. These are the definitions and facts that we know starting with the XIX century. But one can find typical characteristics of Down syndrome figures starting with Ancient Egyptian figures (dated to around 100 A.D), going to clay figures from Mexico (Terra-Cotta Figurine from the Tolteca circa 500 AD).





An unknown Flemish painter (follower of *Jan Joest of Kalkar*) painted **Adoration of the Christ Child**, in 1515, (Metropolitan Museum of Art, New York). This painting is one of the numerous contemporary depictions of the *Nativity*, but one of the relatively few taking place at night. The painting uses a common Renaissance *Nativity* motif, in which the Holy Family is surrounded by admirers, both earthly and heavenly. There are speculations that the painting shows us some typical *characteristics of Down's syndrome* in two of his subjects: the **angel** next to Mary and also in **one of the shepherds**.



In their article, "An Angel With Down Syndrome in a Sixteenth Century Flemish Nativity Painting", Andrew Levitas and Cheryl Reid explain the significance of historical paintings in documenting certain types of disability. No mention is made in the Met's description of that painting may be one of the earliest depictions of Down syndrome in Western art. That is what Levitas and Reid contributed.

https://onlinelibrary.wiley.com/doi/full/10.1002/ajmg.a.10043



Harvey W. **Cushing**, MD (Cleveland, Ohio, 1869-1939), discovered in 1912 an endocrinological syndrome caused by a malfunction of the **pituitary gland**. He described it in his work *The Pituitary Body and its Disorders*. He is considered to be one of the fathers of modern medicine. Cushing's syndrome is a disorder that occurs when your body produces too much of the hormone cortisol over a long period of time. Four centuries before H.W. Cushing had described the illness, we can turn to the history of King Henry VIII (1491 –1547) who became king of England after his elder brother Arthur died in 1502. As a young man, he was fit and healthy.

Detail depicting King Henry VIII of England On Horseback, Friedrich Bouterwerk, 1845 (Versailles and Trianon Castles, Versailles, France).





At the age of 45, he was thrown off a horse while jousting. He remained unconscious for some hours. After that his personality changed a lot: he became irascible, ill-tempered, cruel, paranoid, and subject to depression. Afterward, he began gaining weight and was plagued with ulcers. Some historians believe the accident may have contributed to his erratic behavior later in life. Two queens and many others lost their heads. He also became extremely obese. When he died (1547) his waist had reached 135 cm and his weight over 150 kg. It has been *speculated* that he suffered from Cushing's syndrome. This would account for the bloated face that stared grimly out of later portraits and for the massive bulk of the body. It can cause irritability, depression, aggression, psychosis - and impotence.

**OBESITY** is the oldest and most common metabolic disorder of humans. For adults overweight and obesity are defined as abnormal or excessive fat accumulation that presents a risk to health.

The BMI is defined as the body mass divided by the square of the body height and is expressed in units of kg/m², resulting from mass in kilograms and height in meters. A body mass index over 25 is considered overweight, and over 30 is **obese**( World Health Organization -WHO). Body fat itself is not a disease, of course. But when your body has too much extra fat, it can change the way it functions. These changes are progressive, can worsen over time, and they can lead to adverse health effects. Obesity increases the risk of many physical and mental conditions. These comorbidities are most commonly shown in metabolic syndrome, a *combination* of medical disorders that includes: diabetes mellitus type 2, high blood pressure, high blood cholesterol, and high triglyceride levels.

The sculptures of ancient civilizations, the Greek caryatids, and Egyptian sphinxes and mummies are the first to represent this common metabolic disorder. Who is Venus of Willendorf? This Venus does not look like a real woman. Her private parts, breasts, and large belly are much bigger for her height than they would be on a real woman. Archaeologists think the stone had something to do with fertility. Her tiny arms are folded over her breasts, and she has no face. Her head has what might be coils of braids, eyes, or a headdress. Because she does not have a face, some archaeologists and philosophers say that Venus is a "universal mother." The statue is colored with red ochre. Willendorf is a village in Lower Austria near the city of Krems.

The woman from Willendorf (Venus of Willendorf), Paleolithic 24,000 BCE (collection of the Naturhistorisches Museum in Vienna).





This figurine is known as the Seated Woman of Çatal Hüyük (baked clay) and was sculpted in a large Neolithic settlement in southwestern Turkey Most scholars agree that the sculpture depicts a fertile Earth Mother goddess in the act of giving birth, as she sits on a throne with armrests in the shape of leopard or panther

## **Obesity** is a symbol of **fertility**?

Many artists have painted it on their canvases as seen through the prism of their artistic eye and in accordance with the prevalent conceptions of their time.

Anthonis van Dyck (1599-1641), a Flemish Baroque painter and the best student of Rubens, was the leading court painter in London. His paintings of mythological themes include one of a very **obese** Bacchus.

Obesity is it the **joy** of life?



Charles Mellin (1597-1649) - french baroque artist

Gerard Tuscan, general Alessandro del Borro Charles Mellin Bartholomeus van der Helst (1613-1670) -German painter of portraits

Andriesz Bicker, son of the mayor of Amsterdam





**Obesity**, was it the symbol of **power**? Corpulence was a symbol of **wealth**.

XX century looks different for obesity representation. Fernando Botero Angulo (1932-) a painter and sculptor from *Columbia*, experimented joy of daily human life by showing corpulent people, sometimes playing in **comedy.** 



Lucian Freud (1992-), an English surrealist painter and grandson of Sigmund Freud, painted a sleeping benefits supervisor, depicting an obese naked woman, lying on a couch. It is a portrait of Sue Tilley, a Job Centre supervisor, then weighing about 127 kilograms. Freud painted a number of large portraits of her around the period 1994–96 and came to call her "Big Sue".

Benefits Supervisor Sleeping (Big Sue, 1995 oil on canvas)

Redactors: Guy Dazin Victoria Sara Dazin

