

## Visual arts: reflections in psychoneuroendocrinology

### Part 1

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### **Art, artists, life, disease**

Art imitates life from the beginning of the human civilizations until now. It follows that art is best expressed not by making something new, but by telling the old facts in a new way. Illnesses and sufferings are parts of life, so they are daily reflected in our life that reflects in art. From the prehistoric-art, to roman, Greek, gothic, renaissance or classicism, we observe that artists deal with the representation of different neuroendocrine pathology: goiter, hypothyroidism, fertility, obesity, Cushing disease and other. Obsessive pathological subjects like fear, depression, anger, suicide, pain, infertility, our relations with the disabled are presented in XX and XXI centuries art, and are subjects for expressionism, avant-garde and contemporary movements. Artists were fine observers of what much more later scientists studied and defined.

*Domenico di Bartolo (1420-1444), Care of the Sick, 1441-42, Ospedale di Santa Maria della Scala. Siena(Frescoes).*

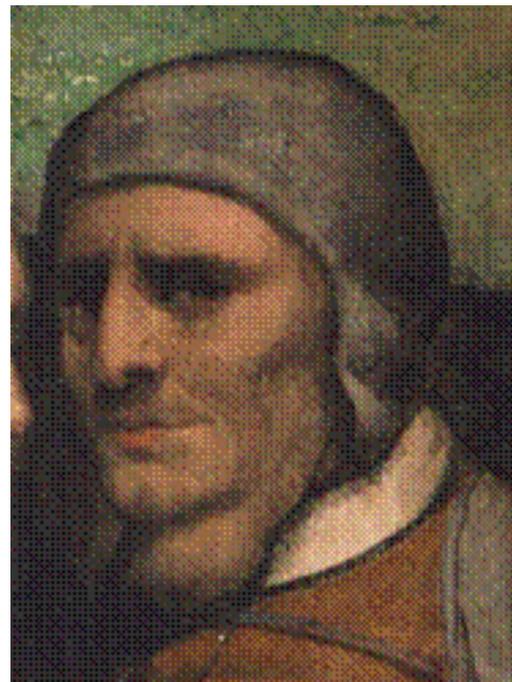


Di Bartolo, along with fellow Sieneese artists Vecchietta and Priamo della Quercia, painted a fresco cycle narrating the progressive practices carried out by the Ospedale staff. Di Bartolo's scene, shows doctors tending patients. On the left, two physicians examine the urine in a glass vessel. A patient below lies on a stretcher, his countenance full of trepidation. The center scene displays a patient with a bleeding thigh wound being prepared for an operation, a thorough washing of the feet among the rituals. On the right, the painter made a veiled critique of the benevolent, corpulent monk who hears the confession of a man in bed. Although the Siena hospital distinguished itself in the Renaissance for its high level of cleanliness and order, Bartolo nonetheless included cats and dogs in the scene, characters not welcome today in medical environment.

*Moretto da Brescia (c. 1498-1554) Nativity , Santa Giulia Museum*

A beautiful scene of the Nativity by Moretto da Brescia (c. 1498-1554) is in the Santa Giulia Museum . It is painted in muted autumnal colors of gold, browns and greens. On the right the ox and the ass peer out from the stable. A flock of sheep grazing in the distance are shown indistinctly. The Christ child fidgets on his mother Mary's lap, his left arm unduly elongated and awkwardly extended, his left leg distorted in classical Mannerist style. Behind the Virgin stands a shepherd who extraordinarily exhibits a protruding sack coming from his neck: is it a goiter or perhaps a cyst? Today, with imaging echography technic, echoes are recorded and transformed into video or photos. You can "see" your thyroid, you can check its consistence you can say if it is a cyst or not.

<https://www.openaccessjournals.com/articles/thyroid-nodule-sonography-assessment-for-risk-of-malignancy-9177.html>



*Francesco Silva, 1560, Sacro Monte of Varese*

Born in Morbio Inferiore, Francesco Silva worked at the Sacri Monti of Locarno, Ossuccio and Varese. He realized statues for ten of the fifteen chapels and for the Chiesa dell'Immacolata. He gave rise to a dynasty of sculptors, architects, and plasterers. In the tenth and highest Chapel is the representation of the Death of Jesus. It includes the highest number of sculptures. The floor represents the summit of Golgotha and in the back is the scene of the Crucifixion. At the center, Christ is raised on the Cross, amidst a large crowd; soldiers stand out on foot and on horseback with lances, swords, flags and banners. In this dramatic and crowded scene, two individuals with ropes try to hoist the cross. One of these two characters has a huge-trilobate goiter, which is also hanging down.



Studies of representations of individuals with goiter are not that rare, but artists probably did not have any intention to illustrate the pathological condition. In fact, the artist had no idea that it was something pathological, that the doctors would discover later, but the indirect, unconscious representation of a state of ill health, or physiological dysfunction that can explain the angry reaction of man and emphasizes at the same time physical and moral ugliness.

Today we know that goiter is a condition where the thyroid gland grows larger and may or may not be associated with abnormal thyroid hormone levels. The most common cause of goiters worldwide is iodine deficiency but many conditions can cause it. Goiter is an adaptive reaction of the cells in thyroid. In México, significant numbers of pre-Columbian figurines in terracotta represent persons afflicted by

some disease. Olmec society (olmec: rubber people) flourished in the Gulf of Mexico region from about 1500 to 400 BC. Despite long-standing cultural domination by Catholic Spain, jade, clay and other materials figurine have survived. The *Olmeca child* (anonymous Olmec artisan) is one of the best known because of an amazing resemblance between it and those portrayed by Diego de Velázquez (ca. 1644) in his famous *The child of Vallecas*. Despite a gap of at least 1500 years between these two art works, differences in their materials and manufacture, the similarity is remarkable. Both artists reproduce with accuracy the image of two young individuals with *congenital hypothyroidism* and *cretinism* or *mental retardation* (diseases associated with endemic goitre and severe iodine deficiency).

*El Niño Olmeca (Jade figurine)-anonymous- Musee Quai du Branly (Paris):* nothing is known about the Olmec artisan who created the jadeite figurine, but sculpting mastery is the hallmark of Olmec culture, its rich legacy including the famous colossal heads.

*Diego de Velázquez (ca. 1644): The child of Vallecas -Museo Nacional del Prado:* it shows a short adolescent (probably fourteen to sixteen years old). With his head slightly tilted to the right and holding a deck of cards in his puffy hands, his stance is indolent and his eyes sad and distant. His arms and legs are short, the face swollen, mouth discretely open. Velázquez has captured the cognitive and physical anomalies typical of a young, mentally retarded dwarf. According to Del Prado Museum catalog, “The child of Vallecas” corresponds to a congenital hypothyroid cretin.

*El Niño Olmeca*

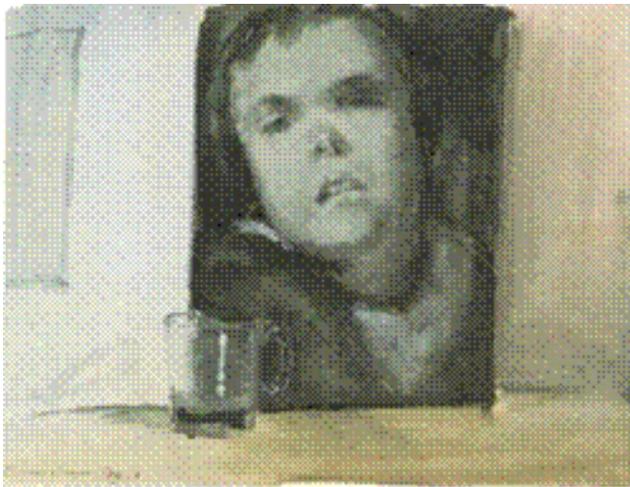


*The child of Vallecas*



Hypothyroidism occurs when the body doesn't produce enough thyroid hormones, myxedema being the term for severely advanced hypothyroidism. Congenital hypothyroidism is a partial or complete thyroid gland function loss that affects infants from birth. Cretinism involves an association with endemic goiter and severe iodine deficiency, cretinism is the most serious Iodine Deficiency Disorder (IDD). Several artists at different times have recreated the Velázquez model may be also proof that hypothyroidism (due to lack of iodine in the diet) has been a constant companion of humankind since ancient times and it is still a worldwide public health concern as some 35% of the human population lives in iodine-deficient areas.

*Variation on The child of Vallecas, 1987, Museo Ramón Gaya, Murcia, Spaine.*



*Fernando Botero, 1971, Museo Nacional de Colombia and Alberto Gironella, The feast on the palace, Mexic, collage (“Queen Mariana,” “Las Meninas, The child of Vallecas-Velazques)*

