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"Homo Caloricus": The epistemological construction of lipophobic stigma in public health media discourses

"Homo Caloricus": La construcción epistemológica del estigma lipofóbico en los discursos mediáticos de salud pública

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ABSTRACT The case of obesity in Mexico constitutes an emblematic example of how, in the messages emitted by public health television campaigns, strong beliefs regarding the issue of body weight prevail. The main objective is to reflect on certain epistemological effects that abound in biomedical media narratives related to obesity. To do so, aspects of the rhetoric employed in two initiatives of the Ministry of Public Health – *Muévete y Métete en Cintura* [Move Around and Slim Down] in 2008 and the 5 Steps Program in 2011 – are analyzed, as is the discourse surrounding the tax measure introduced by the Mexican tax service in 2017. This study also looks at other similar practices that, although taking place outside of Mexico, stoke the fires of lipophobism, such as the "Cormillot industry" in Argentina. As a result, a strong discursive influx stemming from a reductionist vision of bodily diversity has been identified, supported by the pathologization of fat bodies through moral prejudices and biased generalizations.

KEY WORDS Body Weight; Body Mass Index; Communications Media; Government Programs; Mexico.

RESUMEN El caso de la obesidad constituye, en México, un ejemplo emblemático sobre cómo prevalecen, en los mensajes emitidos por las campañas televisivas de salud pública, creencias fuertemente arraigadas en torno a la cuestión del peso corporal. El objetivo principal de este trabajo fue reflexionar sobre ciertos efectos epistemológicos que abundan en los relatos mediáticos biomédicos referidos a la obesidad. Para ello, se analizan algunos aspectos de la retórica propulsada por dos iniciativas de la Secretaría de Salud Pública –Muévete y Métete en Cintura, de 2008 y el programa 5 Pasos, de 2011– y por el discurso que giró en torno a la medida impositiva instaurada por el Servicio de Atención Tributaria del gobierno mexicano, en 2017. Por otra parte, este estudio se amplía a otras prácticas similares que, aunque teniendo lugar fuera de México, contribuyen a aceitar los engranajes del lipofobismo, como la "industria Cormillot" en Argentina. Como resultado, se ha identificado un fuerte influjo discursivo emanado de una visión reduccionista sobre la diversidad corporal, sostenido por la patologización de los cuerpos gordos mediante prejuicios morales y generalizaciones sesgadas.

PALABRAS CLAVES Peso Corporal; Índice de Masa Corporal; Medios de Comunicación; Programas de Gobierno; México.

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INTRODUCTION

There is extensive literature about the limitless power that language has to influence others and influence ourselves. Words do not simply serve to "represent" things or facts but essentially aim at producing an effect. Through the specific usage of words in certain contexts, an allegedly objective and impartial description can become an evaluation and judgement of certain courses of action, be it unnoticeably or inadvertently. Consequently, as participants, we act as users and creators of the complex network of meaning in which we experience life. We generate category frameworks, classification systems, and explanatory patterns which we consider useful to satisfy our need for understanding, controlling, and predicting the frightening field of uncertainty. Language makes the most prosperous human achievements possible, but the most mundane miseries too:

> The same ability that allows us to amend a date makes it difficult for us not to imagine several worrying stories if the other person arrives late. A bear may be caught in a bear trap, but, because it does not have the "gift" of language, it does not wonder why it woke up that morning. [...] Language makes people susceptible to deeper suffering and despair than members of other species.[1] [Own translation]

As several philosophers already acknowledged in the past, it is not the "facts" that hurt us but our particular way of interpreting those facts. Therefore, it should be considered that language can change everything; as stated by Humberto Maturana:

> ...language hurts: hitting people with a piece of language may be as powerful as hitting them with a piece of wood [...]. Words, just like bullets in a gun, change the structure of people and their lives.[1] [Own translation]

Undoubtedly, the pragmatic capacity that language has to generate ideas and spread "obviousness" does not occur in a social vacuum; on the contrary, the impact of words depends almost directly on the type of *relationship* maintained between the person who is named and the person who gives him or her that name. If, for any reason, the latter does not embody a recognized authority for doing so, any enunciation made by him or her would lack credibility and, therefore, would not be a reason for concern. Words, adjectives, or labels have a questioning, inspiring, or transformative effect when they come from a figure whose beliefs we trust.

Currently, scientific knowledge has the most unquestionable credibility. A privileged role is assigned to the person who makes an argument based on some professional expertise in the scientific field of a topic. For this reason, descriptions and classifications provided by professionals regarding our behaviors, lifestyle, decisions, or thoughts tend to have such a strong impact on the specific and moldable perception of ourselves. Being "professionally" placed inside or outside normality may be the reason for one's self-acceptance or self-loathing.

Ian Hacking[2] listed a series of operations that work conjointly to generate such an idolatrous state of affairs. Frequently, we tend to confer an exceptional degree of pureness to scientific knowledge and assume that all of its remarkable achievements result from methodical research studies whose success is rationally explained by the compliance of strictly endorsed epistemic rules. Thus, many of these epistemic strategies (which, from the public perspective of science, act as remarkable "engines of discovery") also simultaneously function as "shapers of subjectivities." In other words, they generate ways of thinking that turn into an authentic oasis of classification, highly influencing those who are being classified. In many professional contexts, the "sense of self" is affected by the diagnosis received by the individual. It is very likely that once an "objective description" is given by a specialist, subjectivity will not

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remain the same (and the treatment received by others will not be the same either).

The epistemological gears that give power to the great machinery of knowledge are diverse and changeable. However, what helps increase the legitimacy of scientific words is the excessive endorsement given to the academic training of specialists, guaranteed by a network of institutions in which we tend to trust implicitly. As accurately explained by Hacking,[2] knowledge held by a professional is presented as being supported by complex explanatory processes (through the development of causal theories), which provide counts, quantifications, and correlations, among other operations which are useful for the better mathematization of the phenomenon under study. Additionally, when it comes to understanding the human condition and social conduct, the epistemic resource that appears to have the privileges of objective knowledge will often be privileged. For this reason, biological, medical or genetic explanations are increasingly considered to have a professional dominance which, at the same time, smooths the path for the bureaucratic administration of this problem.[2,3,4,5,6,7,8]

There have been many disciplines which, focused on the comprehension of health conditions, sought to move forward on the path of *standardization*. In those cases, the statistics infrastructure has been a key to the consolidation of many fields of study that have been empowered by their close connection with medicine. In a statistical sense, this field has imposed an idea that "healthy" and "normal" are equivalent. Taking a closer look, however, such a comparison produces questionable consequences. For example, if something that is statistically typical is considered healthy, we should as well accept that a deviation of behavior in relation to this statistical rule is unhealthy (pathological).

However, as George Canguilhem already highlighted in his masterful work *The Normal and the Pathological*,[9] there are anomalies (deviations from the typical average) that do not decrease the quality of life of the individual and do not impose limits or restrictions on it; therefore, these anomalies could not be treated as pathologies. In fact, these anomalies could even represent real "achievements" for such individuals, which increase their opportunities of choosing how to live. Rarities are not intrinsically pathological, as they can even be creative. In Canguilhem's words,[9] an individual affected by heterotaxy (abnormal arrangement of internal organs) can enjoy very robust health; he or she can live a very long time. Usually, it is only after his or her death that the presence of an anomaly, which the individual had been unaware of, is detected. Moreover, Hindu yogis succeed in breaking statistically constant biological rules. Their religious discipline based on mental concentration allows them to control almost all of the functions of vegetative existence: pulse, breath, electrocardiogram, and the measurement of basal metabolism, among others. Hindu yogis manage to place their body in a state of slowed existence comparable to that of hibernating animals, and, in doing so, they change their heart rhythm and rate and suppress cardiac contraction almost completely. Clearly, these achievements would not be considered as "pathologies" despite differing from "population means."[9] The exceptional accomplishments of many high-performance athletes also serve to illustrate that the notions of "anomaly" and "pathology" should not be immediately associated. When these athletes show that they are able to break records which seemed unattainable, physiologists acknowledge that they can learn from professional selections in physical education institutes, where the individuals themselves determine the margins of variation tolerated by biometric values, rather than learning from the laboratory subject in an *artificial* situation. With regard to the athlete, Canguilhem is convinced that "it is the record figures, not physiology, that answers the question: 'how many meters can a man jump?'"[9] For these indicators among many others, it cannot be asserted that a statistically obtained average permits us to decide whether the individual before us is "normal" or not. In this regard, Canguilhem reminds us that if we are to believe in tradition,

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Napoleon had a pulse of 40, even when he was in good health:

> If, with 40 contractions a minute, an organism is up to the demands imposed on him, then he is healthy and the number of 40 pulsations, though truly aberrant in terms of the average number of 70, is normal for this organism.[9]

In light of the significant amount of examples that could be mentioned against the "rule-health" formula (as opposed to "disease-deviation"), it is possible to affirm that, in nature, there are no symptoms or conditions waiting to be discovered as "diseases." For anomalies (deviations from the statistical norm) to be treated as diseases, the following requirements must be met: (1) a culture that defines certain suffering as *morbid*; (2) agents that the society recognizes as competent in tackling that suffering, such as physicians, shamans or priests; (3) individuals who consult such professionals because they or their relatives consider that they *are going through* that suffering; (4) a network of institutions that entitles these agents to act on their behalf; (5) true, objective, efficient and useful knowledge that they have as experts.[10]

No disease is "predetermined," the distinction that each culture makes between health and disease is not factual, natural, but rather *conventional*. This is evidenced by the fact that abnormalities that permit us to achieve things which are highly admired in a certain culture do not count as diseases. For example, if the widespread speculation that Einstein's brain contained an *abnormal* number of particular cells that were responsible for his brightness was verified, this abnormality would certainly not be considered a disease, specifically when one takes into account the consequences in this case, which were highly desirable.[11,12,13] Wherever a distinction between health and disease is made, a more profound difference lies between what is socially accepted and rejected – what is preferred and what should be avoided, what should be promoted and what should be discouraged.

However, what is considered "normal" is presented to the society not only as "desirable" (and correct) but also as what is "determined by nature" (and shown on the average). Basically, in this epistemic strategy, two notions that belong to different conceptual levels are conveyed by the same word, "normality." By stating that a condition or behavior is "normal," both descriptive/quantitative information (*measurable, factual* normality) and an evaluative judgment (what is *desired* to become a statistical norm) are referred to. This second evaluation criteria remains *undercover*, because of the objectivist premise that science only deals with facts, without taking into consideration any value. Presumably, one of the most subtle and powerful effects of this semantic confusion is that, in the name of the professional expertise of those who boast about having objective knowledge, social practices of degradation, belittlement, stigmatization, and segregation of "less-than-ideal individuals" (deviant from normality) are justified. Additionally, these individuals are exhorted to consider themselves as "having a disease," to receive "treatment" or to involuntarily enter healthcare institutions.[14,15]

EPISTEMOLOGICAL CONSTRUCTION OF OVERWEIGHT AND OBESITY AS DISEASES

Quite often, whenever a significant increase in the statistical data about a particular situation is reported, the course of events is immediately considered to have changed. For example, an increase in the percentage of patients diagnosed with depression leads people to believe that, at present, there are more depressed people than before; an increase in the rate of child sexual abuse cases suggests that at no previous time such a level of abusive conduct towards children was shown. A long compilation of cases that exemplify this "statistical realism" could be prepared.

However, the circumstances are considerably more complex. Statistics alone are not the wake-up call, but so is their functioning

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within the professional-institutional-social-political-cultural network in which they become pertinent, valuable, and legitimate. Statistics are part of the "engines of discovery,"[2] and they work together to develop certain ways to explain a problem. Much of the opacity in the management of this statistical data is simply ignored to such an extent that, after a considerable time, it seems that the phenomenon under study cannot be visualized or explained in any other way. This utter confusion between the explanation and the thing explained draws the attention of epistemology, based on the premise that, as Gregory Bateson states, "the map is not the territory, and the name is not the thing named."[16] The assertions we make about things are not in fact those things. However, as we already anticipated, what is said is offered as a possible description and may acquire a sense of reality for the person who adopts it as a true belief).

Let us analyze the following case: in recent years, a belief has been established in the Mexican media, by which it is assumed that "Mexico is a country of fat people," or even worse, that "Mexico is the country with (nearly) the highest rate of obesity in the world." These messages originate from official discourses, which are based on statistical information that supports such assertions. This alarming diagnosis provides the basis for the implementation of public health campaigns aimed at raising awareness of such a situation. Nevertheless, these campaigns promote ideas which are epistemologically debatable, but which are presented as undeniable truths. For example, some assertions were that "most Mexicans have a disease," that "body weight is an easy-to-control phenomenon, a simple *arithmetical* matter based on a calculation of how much is consumed and how much is expended," or that "overweight and obesity are inevitably morbid conditions which can be detected simply through *measurements*."

While the circumstances surrounding this discourse have been very particular in Mexico, it should be noted that the way of conceiving obesity has been changing globally. As highlighted by Poulain,[17] medicine has rapidly changed the epistemic status of this condition, which "has passed from simply being considered a risk factor to [being considered] a chronic disease and, more recently, a global epidemic."[18] Particularly, in the case of Mexico, it is important to emphasize that in 2010, the then president, Felipe Calderón Hinojosa stated that Mexico was the country with the highest rate of adult overweight in the world. Such declaration was rectified by the Organization for Economic Co-operation and Development (OECD), which stated that, in fact, Mexico is the *second* country with the highest rate of obesity in the world: according to OECD, approximately 70% of Mexicans are either overweight or obese.[19]

After these shocking "facts" were presented, government agencies introduced numerous health initiatives aimed at "correcting" bad eating habits, promoting physical exercise even in the workplace and at school, and emphasized the crucial importance of "self-diagnosis." In that spirit, mass media campaigns, particularly those broadcasted on television, generated a growing enthusiasm for developing confidence among the audience in strategies of *quantification* of the phenomenon. The method for measuring body mass index and the method for measuring waist circumference are two prototypical cases.

The examples are numerous: in 2008, the Government of the Federal District (FD), through the Secretariat of Health and Public Health Services of the FD, launched a campaign named "Move Around and Slim Down" [*"Muévete y Métete en Cintura"*]. As a part of the agenda of this social movement, members of the Secretariat who were in charge of physical activation visited squares and public parks, and organized Health Fairs and dozens of events at the 16 municipalities of Mexico City. In relation to this matter, it was asserted that "during these events, clinical nutritionists and specialized personnel carried out measurements of body mass index (height and weight), and also offered nutrition plans."[20] Another paradigmatic case is the "5 Steps" campaign, which was derived from the National Agreement for

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Healthy Feeding: Strategy against Overweight and Obesity, in 2010. After "Step 1: Activate yourself," "Step 2: Drink water," and "Step 3: Eat vegetables and fruit," The fourth step was "Measure yourself." Briefly, the instruction was the following: "Measure your abdominal circumference. A simple manner to know if you are obese or overweight is to measure your waist."[21] Another more recent example is the photograph that appeared along with the content of a news article in January, 2017, in which it was announced that the Tax Administration Service (TAS) would refund taxes to people who lost weight.[22] The news article was accompanied by the picture of a man measuring his waist with a measuring tape (his face was not shown in the photograph).

Regarding the use of these instruments of detection, self-diagnosis and prevention of overweight and obesity, we can initially distinguish two levels of problems. On the one hand, these instruments are limited and questionable as a means of verification (they can even be deceitful). On the other hand, however, they promote a hyper-simplified understanding of weight-related problems, in which weight is considered as only dependent on the amount of food consumed and energy expended. A brief revision of one of the abovementioned, and most popular, instruments for body weight measurement – the well-known body mass index (BMI) – and a subsequent reflection on its most incisive implications are detailed below.

Body mass index measurement method

The BMI, or Quetelet's index, is a method designed to determine the *healthy weight* of a person, and is obtained by dividing the person's weight (expressed in kilograms) by the square of the body height (expressed in meters). As stated by Gracia Arnaiz,[18] the decision about the moment when excess weight/fat becomes unhealthy has its roots in a critical biomedical issue, as the definition of obesity is primarily based on an epidemiological-statistical relationship between BMI and pathology. The critical threshold to be diagnosed with obesity, and therefore be considered as having a disease, is 30 kg/m^2, while the optimal BMI is set between 18.5 and 25 kg/m^2.

Despite the somewhat generalized acceptance of these parameters, it is necessary to indicate that BMI does not refer directly to body composition or fat distribution.[18] There are several biomathematical models that, considering the several dimensions of the topic in question, divide or adjust such parameter into different parts. For instance, the *four-component models*: fat, muscle, bone and residual tissue, or fat, body water, cellular component and minerals in bone tissue; the *three-component model*: fat, active cell mass and structure of extracellular matrix (fluids and fibrous protein); and the *two-component model*: fat and active body mass.[23] Therefore, as recognized by Basdevant,[24,18] this heterogeneity should provide plenty of reasons for why the BMI is an indicator showing little interest in the individual level. The counterexamples to the standardizations that the BMI system imposes promptly emerge: a muscular bodybuilder may have a BMI over 30 and, most certainly, not be considered obese.[18] Similarly, a high performance athlete may have high values in the anthropometric parameter of body weight, but on account of a high percentage of muscles and active body mass in general, and a low percentage of fat (even if the calculation of his BMI would make him or her fall into the obese category). Clearly, the shortcomings of this method are visible when evaluating athletes who compete according to their body weight, as is the case of boxing, judo, mixed martial arts or wrestling.[23] Thus, it is evident that the *criteria for obesity* established by the BMI system ideology does not take into account the complexity of the components or its consequences.[23] Nevertheless, these issues do not prevent the BMI system from functioning as an effective quantification mechanism, and at a very low-cost.

A formula developed by Adolphe Quetelet in 1835, BMI was established as an international standard by the World Health Organization (WHO) in 1998. Mexico adopted this guideline, and published the draft

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of the Mexican Official Norm (NOM) [*Norma Oficial Mexicana*] for the integral management of obesity (NOM-174-SSA1-1998) in the Official Journal of the Federation of 1998, which was approved two years later. According to Orellana Trinidad:

> At that time, several North American studies still suggested that BMI could not be applied to different cultures. One of these studies showed that Italian men between 20 and 50 years old had higher weight rates than Norwegians and North Americans. Another research study demonstrated, by way of even more adequate techniques to measure body fat, that Asian populations require their own reference values, which are clearly below the values currently recommended by the World Health Organization.[25] [Own translation]

If a thorough epistemic revision of the BMI is conducted, it should be added that not only does its generalization become problematic (considering the previously mentioned risks of its massive, indiscriminate implementation), but its formula also raises doubts. As already stated, BMI calculates the weight of the body in kilograms by the height in meters, squared. However, many critics highlight the fact that, from a biomathematical approach, it is not possible to relate a *three-dimensional* measurement such as weight (which records the result of the values of height, width and depth, anteroposterior dimensions) with a *linear* measurement, such as height; even if it is squared.[23]

Nevertheless, these difficulties should not create the illusion that the use of BMI has decreased because of its detractors' discontent. On the contrary, BMI continues to function as a privileged resource for a standardized treatment that, through averages and statistics, favors a normalization of corporality (turning the "anomalous" into "abnormal"). This is demonstrated by how easy it is for anyone to access any of the several websites that provide the opportunity to self-diagnose for free simply by entering age, weight and height, so as to determine whether they are within the "normal" category of BMI (for instance, the website https://www.imc-peso.com). With regard to this, Soich and Moreno[26] cite, as an outstanding example, the open access websites that belong to what they call the "Cormillot Empire," which represents an extensive network of products (food, diets, magazines) and sectors (private clinics, clubs, television shows, websites, advertisements, information spots) led by the distinguished Argentine physician Alberto Cormillot. This network also includes the Anonymous Fighters Against Obesity Foundation [*ALCO Foundation*], the Nutrition and Health Clinic, Dietaclub, Universidad Isalud, the Aqualife franchise, the Argentine Institute of Food and Nutrition, the "Live better" ["*Vivir mejor*"] magazine and the websites drcormillot.com, alimentoscormillot.com, dietascormillot.com, delivery-cormillot.com, and kioscolight.com).

For instance, when visiting the website www.dietaclub.com, the option "Calculate your BMI" appears, which requests visitors to provide weight and height information in kilograms and centimeters, as well as to select the type of body constitution. Once the BMI is obtained, four categories are determined: ideal weight, possible weight, designation and risk. This means that, for example, if a BMI of 40.1 has been obtained, the ideal weight would be 63.4 kilograms, the possible weight would be 74.6 kilograms, and the designation would be class IV obesity with a "very severe" risk). In light of this, Soich and Moreno conclude:

> We can say that the average weight classified by the index as "normal" has a standard and objective equivalent that permits us to determine whether the rule is followed or not [...]. In this range, the alleged objectivity of the risk is based on a calculation of the arithmetic average as a physiological regulation for a standard subject. It is clear that the measurement is absolutely depersonalized, considering it comes from a calculation made on a website, but, additionally, there is no

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> way of knowing who was the subject from which the risk characteristics, weight and designation that constitute a value judgment about the normality of weights were taken *a priori*.[26] [Own translation]

This website encourages visitors to navigate a vast ocean of offers; in fact, the calculation of BMI does not exist in isolation, but instead, there is a quick-view table which lists the "complications" and "mood" disorders associated with each level. The greater the pathology of weight, the greater the correlation with anger, frustration, depression, fear, aggression, hostility, suicidal ideation, and others. It should be highlighted that the "pedagogical" style that prevails in this website omits hypothetical language. "Facts" are presented as if they were medical certainties, instead of controversial and permanently revised perspectives. When it is emphasized that the majority of people whose BMI is equal to or greater than 30 kg/m^2 are considered to have future deterioration, this prospect is not presented as a *possibility*, but as *fact*. Moreover, this website also mentions the essential "therapeutic options" (referred to as "Our plans" ["*Conoce nuestros planes*"]). Among other issues, it should be noted that the official definition of obesity provided by the "Cormillot industry" suggests that obesity is "a disease in which the vast majority of people who firmly decide to recover may indeed do it." Taking this into consideration, Cormillot's Health and Nutrition Clinic:

> ...makes evaluations clearly aimed at emphasizing the *individual responsibility* and the *rational choice* regarding body care – noticeably meaning the loss of weight and the adjustment of the "anomalous" corporality to the statistical pattern.[26] [Own translation]

The characterological construction of overweight and obesity

The epistemic expectations of approaching overweight and obesity as "pathologies" do not come alone. On the contrary, they are influenced by powerful inferences about how the "fat" or the "obese" think, feel and act. These stereotypes account for the medical aspect of the problem (an obese person *has a disease*) but also allow other associated professions, such as psychiatry, psychology, psychotherapy and psychopharmacology, to get involved. Regarding the predominance of certain characterological representations of fatness in occidental culture, Fischler[27] identifies two iconic patterns: the sweet-toothed fat individual, who is socially accepted because of sympathy, and the gluttonous fat individual, who is rejected for being selfish and lazy. Fischler considers that the latter has prevailed, as a result of society's idea that obese people eat uncontrollably, disregarding the ordinary rules of sharing. Fatness is considered to be physically and morally unhealthy, obscene, which is a characteristic of lazy and mean people (features associated with self-indulgence). In contrast, thinness is not only presented as attractive but is also associated with moderation, effort and methodicalness (virtues related to self-control). As Gracia Arnaiz[18] properly stated, the systematic rejection to fat and the fear of gaining weight has gathered an unusual strength in industrialized societies, which even lead to a sort of *lipophobism*. Its consolidation as a "health problem" does not only coincide, in the 20th century, with the consecutive transformation of the epistemological status that medicine gave to fatness as a disease, but also coincides with the concurrence of other not less important socio-historical aspects:

> At present, negative judgments about fatness are mostly shared. In this process, a major role has been played by Christian Occidental morals demanding prudence and moderation with food and despising gluttony, the evolution of scientific knowledge showing the close relationship between diet and health, and the changes in the representations of the body, which made thinness a sign of health and social distinction as opposed to obesity.[18] [Own translation].

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The framework through which the problems of overweight and obesity are currently observed has been shaped under the idea of dietary and body *normalization*, which was pushed by the moral interpretation made by science of the "societies of abundance." The author observes that, in this unprecedented period of food exuberance, fatness is nothing but a "fault" that is associated with the civilizing process. The infringement of the rule by virtue of an excess is an implied sign of indiscipline. It is of little importance that medicine itself recognizes the excessive accumulation of fat as being related to numerous metabolic, genetic, medical or hormonal types of functional causes. Given that there is a belief that a fat individual is a self-permissive "great eater" who consumes the maximum and expends the minimum, he or she will be accused of being a sort of *nutritional criminal*.[24] The individual will frequently be blamed for having the disease, although diseases are, by definition, suffered and involuntary. Furthermore, the overwhelming stigmatization of these individuals may frequently be accompanied by a family history in which it is presumed that no limits were established to the individuals' voracity for food, which leads to a re-stigmatization: a fat son is the son of permissive and indulgent parents, "negligence" is seen as a burden and a family trace. Taking into consideration that an assigned role such as this, which, in the best-case scenario, is attributed to ignorance, the intervention of a professional is of major importance. The professional must introduce a healthy lifestyle, teach one how to eat, eradicate bad habits, motivate prevention, and warn patients about the risks of overweight and obesity. Such efforts should demonstrate that science is the best justification for self-normalization, and that the costs of dietary and bariatric industries are extensively validated by the "epidemic" seriousness of obesity on a global scale.

This type of explanation also permits making the patient responsible for therapeutic failure, thus exonerating the person who indicated the treatment. Family and personal apathy, which promoted obesity, may now favor the fast abandonment of the *corrective* measures implemented by the physician. Furthermore, the unsuccessful attempt for self-normalization may be accompanied, in this case, by a self-re-stigmatization (the subjects reject themselves for being fat, but also for not being able to deal with the problem, although professionals put a lot of effort to "help" them). Labelling, which derives from interactions with the environment, can dramatically shape self-perception and induce different types of self-deprecation and self-segregation.

THE OTHER EPIDEMIC: GENERALIZATIONS

As noted by Hacking,[28] there are two epidemic levels in the dominant discourses regarding obesity. On the one hand, the obesity level itself, determined by alarming statistics. On the other hand, the level of the discourse on obesity, which is surrounded by several narratives formed by the voices of the biomedical community (these narratives, according to Hacking, are summarized in the title of *Le Figaro*'s journal article which reads as follows: "Obesity, the disease of the century.") Both levels (the statistical-population level and the qualifier-catastrophist level) support each other, and this is evidenced in the subtitle of the article of *Le Figaro*'s journal article: "One out of every ten French citizens suffers from serious excess body weight."[28] Every country has its own statistics on the mortality rate associated with obesity: a hell for each national observatory.

Furthermore, from an epistemological point of view, we could introduce a third epidemic level: the *generalizations* level, with numerous ways to present, explain and spread this problem. When an idea is generalized, what is subtly different, novel, intriguing, unsolved, ambiguous, confusing or unexpected of each particular situation is erased, so as to fit within a framework of explanation which does not easily admit exceptions or nuances. This conceptual monopoly,

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which is currently held by science, seeks to map a world in which the comprehension of phenomena only seems attainable if natural laws are established as universal or as generalizations.

However, this is exactly where the epistemological trap is located. The campaigns to "raise awareness" on the problem which are distributed by public health policies show no attempts to eradicate the linear (and erroneous) belief that all bodies accumulate fat in the same way if the same amount of food is consumed.[29] The view of the fat person as a great passive eater is not dismissed, and a nutritional education that generates opportunities to reflect on the nutritional matter as a *complex* and *multidimensional* phenomenon is not promoted. Additionally, nobody questions the dogmatic principle that the individual who is objectively overweight or obese must necessarily feel he or she has a disease; and an enlightening perspective about how to understand the complex notion of "healthy lifestyle" is not encouraged. On the contrary, there is an intention to naturalize the idea that eating problems, especially those related to weight, derive from the amount of food consumed, as if the effects that eating produces on the body were a simple *arithmetic* operation: we eat little or too much and we lose or gain weight depending on the calorie intake.[18] *Calorie calculation* involves an invisible transformation of qualitative notions (such as when someone is described as "chubby," "robust," "stocky," "skinny," "thin") into notions with a quantitative precision (normal weight, overweight, obesity class I, II, III), terms that can be determined by the use of a weighing scale, a meter and a rule, such as the BMI.

The diagnosis standardization covers the lack of epistemological transparency that would make us question those discourses, which are presented as bearers of irrefutable and ultimate truths (while what they actually codify are consensual notions). As Gracia Arnaiz asserts:

> Not all fat people have a disease and not all of us eat badly. What is more, everyone who eats badly or does not exercise daily will not end up being fat. Certainly, not all of us are equally threatened by obesity, although the current discourse and its respective prevention measures lead us to believe otherwise.[18] [Own translation]

Strangely enough, there are cases in which being overweight does not necessarily imply affliction, discomfort, hindrance, incompetence or morbidity. Therefore, the generalizations that arise from this media representation of the phenomenon only portray an abstract subject, rootless, without biography. The discursive strategies that support this representation only reinforce the tactics of biopolitics, which is based on a technical-scientific State that intervenes in the bodies so as to socialize them through the network of institutions that manage individual, family and citizen life. The narratives about diet and the narratives about sport could not, at present, escape the imperatives of health discourse.[30] The body has been captured by the tentacles of power devices that force the individuals to go on a chronic diet in favor of the new care of their body. With regard to the renewed asceticism for the perfect body, Laura Contrera asserts:

> In the interchange between fitness and the diet industry, we see how health – and healthy appearance – is an individual desire and a business profit at the same time. Fatness, currently defined as a worldwide epidemic with specified edges, is as a nodal point of this interchange, given that its presence – or absence – enables the transfer to the groups of pathological/undesirable bodies or normal/desirable bodies. However, fatness is not like any other disease that can be contracted in a society that is concerned with health: it is associated with excessive as well as defective food intake, and also with the harmful lifestyle of *beings with no will*. The device of corporality establishes fatness as a defect of the body, turning it into an index of lack of self-control (and other market values such as profitability, efficiency,

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> competitiveness, high performance, and so on), which is why it is associated with social failure.[31] (Italics added) [Own translation]

Taking this phenomenon from the perspective of the neoliberal world, which delimits health policies in many countries, Costa,[32] who is cited by Contreras,[33] highlights that:

> ...this set of technologies of the self – cosmetic, surgical, gymnastic, dietary, pharmacological – enables a greater competitiveness in the markets of labor, prestige, social status or desire, and at the same time they exacerbate the transformation of socio-economic differences into physical, esthetic differences. [Own translation]

"To improve" is "to fit in," thus making the medical-institutional biopolitical slogan, "Fat is unhealthy," coincide with the subjective and introjected slogan, "Fat is bad." Regardless of whether or not we are overweight or obese, we are encouraged to live, and desire to live, in a permanent state of alert or self-vigilance:

> ...fat is not a mere adjective that describes a substantial characteristic of the body, but is rather an insult, and also an accusation (negligence, lack of care), a diagnosis (disease) and a sentence (physical or social death).[33] [Own translation]

Capitalism functions simultaneously as "a fabulous machine for the production of excess and insufficiency which permits the ghosts of hunger and fatness to terrify contemporary subjects," according to Sibilia,[34] as cited by Contreras.[33] In other words, the current subject is an *available subject*: available for binge, and also available to be purged from that overfeeding. And, for each of those moments, there is an overwhelming medical, industrial, business and dietary infrastructure.

The historic-anthropological short-sighted way in which we frequently think of body weight deprives us from being capable of approaching the problem from a *comparative* perspective regarding the enormous variability of senses that each society, group or community has construed historically with regards to the notions of nutrition, health, body, and welfare. Outside of a contextualized focus, present definitions seem *correct* simply because they are currently in force. Taking a panoramic look at the history of other cultures and other periods in time would let us confirm that the prevailing contemporary lipophobism has not been a universal constant. In light of this, we could ask when and under which circumstances the high valuation of fat and energetic food (previously appreciated, in a moderate quantity, as a resistance barrier against diseases) became a war against fat and caloric accumulation. Thinking about food in a quantitative manner is no longer related with the ancient concern about food insufficiency (which means to fear that food is scant, as happened in societies of scarcity) but with the regulation and restriction of individual food consumption when food is abundant (which was typical of societies of abundance).

Certainly, within the network of beliefs, values and practices that favored this change, there is abundance of different, concatenated factors. The interference of biomedicine and the characterization of the problem as a matter of political and health interest is one of the numerous edges of this matter, as is also the relative weight, in which lucrative health insurance companies have found an opportunity. The social anthropologist Jesús Contreras expresses that, in the course of the 19th century, insurance companies were already using body weight as a risk indicator.[33] He considers that *Dublin's standard table of heights and weights* of 1908 had a decisive role at the moment of establishing the first ideal weight averages. Other aspects that have been deeply studied before, particularly from the perspective of *fat activism,* cannot be avoided. For example, the concomitant change in beauty stereotypes; the "diet empire" invasion of mass media and of editing, marketing and advertising fields; medicine and "complementary," "soft" or "alternative" medicine;[33] the sedentarization of

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workforce; and, specially, the impact of socio-cultural transformations, as relevant as the classically analyzed biological aspects, over nutritional customs that influence cultural practices not only followed by reason of health, but for other equally important reasons. The amount of food that humans can consume does not depend only on changeable physiological necessities. The increase in purchasing power, the growing hospital care and the festive/ceremonial ostentation, may incite higher consumption of and growing demand for socially prestigious food.[33] People do not aim at simply pleasing nutritionists, or decide to blindly follow the instructions of health professionals in relation to food, although they trust in their knowledge about the harmful effects of certain ways of eating. Many women follow dietary regimes or diets knowing that these are not adequate, or do not quit smoking for fear of gaining weight.[33] This means that there is not a linear and direct relationship between dietary knowledge and individual decision-making. Therefore, an approach basically centered on what those individuals do or not do, implies a notable omission of the multifaceted character that this matter has.

CONCLUSION

Eating is a biological act, but "eating in a certain way" is a *political* exercise that involves preferences, valuations and the ways in which we relate to ourselves and others. The same principle applies to physical activity. Nevertheless, the efforts made to discipline, normalize and standardize the ways in which we eat, activate and live do not end the repudiated *body diversity*. It is true that the discursive reductionism spread by the previously mentioned campaigns for the awareness, detection and prevention of diseases presupposes that citizens will massively react with "dietary reasonableness"; but, according to Samantha Murray,[35] as cited by Contrera,[31] "there is not a unique experience of fatness that produces a homogeneous fat identity: the ways of living with a fat body are always multiple, contradictory and eminently ambiguous." [own translation]

If we go back to Canguilhem's[9] reflections on the subjective judgements we make about the experience of "feeling as having a disease," we can emphasize that an individual's body mass index, waist circumference, weight, height or body build does not indicate his or her welfare or health. Classifying a fat body as "ill" does not only stem from a moral prejudice but also from an epistemological bias. In fact, they feed into each other: what is morally bad is considered bad because there is scientific evidence about it. This strong ideological relationship – ethical/epistemological – operates in many collective health programs which were explicitly created to give a health solution to social problems: they are frequently based on flagrant generalizations, which are accompanied by statistic figures that lack context, custom and idiosyncratic roots. This represents one more step towards the construction of subjectivity as a *quantified corporality*; the subjects are exposed to the construction of their identity in terms of a sort of *homo caloricus*, trained for self-depreciation of their non-ideal singularity.

The perspectives on nutrition, body care, and health-seeking habits are, naturally, countless. Therefore, the biomedical perspective is far from exhausting this subject. However, its rhetoric has colonized the media by introducing the phenomenon of overweight and obesity as issues before which science must show an *epistemic function* (investigate food processes from a biological-empiricist level), an *instructive function* (teach patients to eat and do physical activity) and a *bureaucratic-administrative function* (be committed to participate in the making of public health policies of therapeutic and preventive nature). The feeling that the problem of obesity is a global threat demands a search for successful and urgent solutions. Certainly, in a context that seems to be so critical, the lethargic philosophical reflection is not considered a fertile ground to find answers with proven and visible pragmatic value. As a result, rigorous attempts are made to maximize the

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scientific potential of the disciplines which are useful for statistical analysis, standardized diagnosis, and compulsion for presumptively objective classifications. Owing to the fact that there is a widespread fear of the reported medical and social consequences of obesity, it would seem that the critical-epistemological thinking about the diverse ways of living corporality is an anachronistic and nostalgic luxury.

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