### Theorizing Milk Kinship while Breaking Borders between Reproduction and Nutrition<sup>1</sup>

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Abstract: It is our condition as mammals that makes human milk, with all the symbolism that this entails, not only a bodily fluid but also as the most complete and nutritious food for the new-born child. Breastfeeding is an activity that can be performed by the biological mother or, in the event that it is not possible, by another woman (wet nurse), or just by accepting human milk from a donor woman at a milk bank. Drawn on two ethnographic case studies in Spain, and in dialogue with other ethnographies and anthropological theory, the aim of this article is to try to offer a broader and more complex way of looking at not only human milk but also human reproduction and milk kinship. In this study, one of the main questions is how through the flow and sharing of milk among two or more infants so far not biologically related, milk kinship identities (such as milk brother, milk sister, milk mother and even in some Muslim societies, milk father) and milk kinship relations can be constructed and meaning of them. As anthropologists we should try to recognise and analyse how each culture and society, in the present as in the past, constructs and recognises a relative. An emic perspective which might, or might not, include ideas of reproduction of the society studied, but if it is the case, then we should able to analyse how life is culturally transmitted, who has intervened in this process, and through which symbols: semen, blood, milk, genes... And, most importantly, what meanings are attached to these? However, this only will be possible, if we consider widening our narrow definition of biological reproduction while breaking the

<sup>&</sup>lt;sup>1</sup> 1 The first draft of this article, which in part sums up my long-term research interest in milk kinship, was presented at SOCIOCON conference, Bez Hranic/No Borders, at Pardubice University in 2018. My thanks to the Department of Social and Cultural Anthropology, especially to Dr. Tereza Hyanková, for the invitation and insightful comments.

borders between reproduction (blood and genes) and nutrition (milk). Because, as stressed in these case studies based on an intra-extrauterine model of reproduction, milk (that "whitened blood"), can be more than just food.

Keywords: anthropology of childbirth, human reproduction, lactation, milk banks, milk kinship, Muslim migrants, Spanish Catholic society, wet nursing,

If we analyse the activity of lactation from an evolutionary and transcultural perspective, we see the importance that this activity has had on infant upbringing. As human species, it is our condition as mammals that makes human milk, with all the symbolism that this bears, not only as a bodily fluid but also due to its nutrition and immunological components, is the most complete natural nourishment for a new-born. Breastfeeding is an activity that can be exercised by the biological mother or, in the event that it is not possible (because the mother is absent, sick, or her offspring is ill, among other factors), by another woman, a wet nurse, known in Spanish society as *nodriza* or just *ama*, or, even, by accepting human milk from a donor woman at a milk bank.

Given the complexity and possibilities of addressing the subject of lactation, and human milk (Cohen and Otomo, 2017), from an anthropological and interdisciplinary perspective, in this article I would like focus on the following question. How, despite its feeding role, through the flow and shared of milk among two or more infants so far not biologically related until the moment of breastfeeding, milk kinship identities (known as milk, brother, milk sister, milk mother, and even in some Muslim societies, milk father), and milk kinship relations can be constructed, and meaning of them.

Milk kinship, as we well know, is not universal. However, once it exists, as I would like to demonstrate in this study, it has coexisted simultaneously across different human societies, in the past as in present times, with other types of kinship relations, such as affinal and consanguineal, without always having been recognised and analysed by the anthropological discipline.

Along these research lines, this article is going to be structured in three parts: — In the first part, in which after exposing some premises and questions to the anthropological discipline, a theoretical proposal will be raised.

— In the second part, and in order to support the theoretical proposal that includes milk as a potential symbol of reproduction and therefore kinship, I will comparatively focus on the findings of two ethnographic case studies conducted in Spain. The first one, more historical, is the result of my doctoral theses<sup>2</sup> presented at the University of Barcelona in 2005. This, as far as I know, is a pioneering study on milk kinship in a majoritarian Catholic society, focused on the role of the Pasiega wet nurse in the construction of milk kinship from the 19<sup>th</sup> to mid-20th centuries in Spain. And the second case study, more contemporary, examines the intertwined processes of human milk donation at a milk bank, milk kinship in Islam, and child feeding beliefs and practices among a migrant group of self-identified Moroccan Muslim women living in Barcelona.

— In the third part, there will be some theoretical reflections and concluding remarks.

# I. New insights and theoretical approaches to human milk and milk kinship

In this study, I will start from the premise that human milk is the only food produced by the human beings. However, beyond being perceived as a nutritious food essential for the survival of the new-born on many occasions, it is also a biological relational bodily fluid capable of generating imaginary and symbolic representations which can be used for the construction of identities and relationships among individuals when milk flows and is shared. Human relations and bonds, which depending on the theory of bodily fluids and model of procreation recognised by each group or society studied, can be even identified as kinship, specifically, milk kinship.

Following the work of anthropologists who have worked on the anthropology of the body and bodily fluid perceptions (such as Héritier, 1994, Conte, 1994) regarding how different societies create ideas of reproduction and thus kinship, historical data confirms that from the Greco-Roman Antiquity to the end of the nineteenth century and beginning of the twentieth, when important discoveries in the field of biogenetics started, thanks mainly to the work of Mendel,<sup>3</sup> one of the models of procreation that we find in Europe, among other parts of the world,

<sup>&</sup>lt;sup>2</sup> In this research, which was published under the title, *Lactancia y Perentesco. Una* mirada antropológica, there is a review on milk kinship cross-culturally (Soler 2011: 29-44). This, along, with the theoretical framework, were mainly developed during my 6 months visiting research stay at the University of Cambridge which gave me the opportunity access to its immense bibliographical collection.

<sup>&</sup>lt;sup>3</sup> Gregor Johann Mendel, who was born on 20 July 1822, in Silesia, and died 6 January 1884 in Brno under the Austro-Hungarian Empire, now the Czech Republic, was an Augustinian monk, scholar, botanist, mathematician, meteorologist and the first person to set the foundation of the science of genetics and the basic principles of heredity.

has been, what I would call "intra-extrauterine". This model of gestation included four stages: conception, pregnancy, delivery or childbirth and breastfeeding.

According to this intra-extrauterine "folk" theory of reproduction, human milk was perceived as menstrual blood that disappeared during the pregnancy stage for nine months to nourish the embryo in the uterus and then it was diverted and purified when converted into milk in order to feed and finish shaping the identity of the newborn through the process of breastfeeding. In other words, mother's milk was believed to be derived from the mother's blood. It means that in the collective imagery, the frontier or border among the bodily fluids (milk-blood) due to its possibility and capacity of mutation was not defined. Being blood, in its whole meaning, was the guiding principle. The gestation process ended with lactation.

That's why, Galen, among others, like Spanish medieval archbishop and scholar Isidore of Seville (d. pre-1192) who in his well-known *Ethymologiae*, an encyclopaedia in which he worked until the end of his life, considered human milk to be *whitened or bleached blood*.

"Lac uim nominis a colore trahit, quod sit albus liquor: leucos enim Graece album dicunt. Cuius natura ex sanguine commutatur" "Milk (lac) receives from its colour the strength of its name, it has to do with a white liquid, and in Greek 'white' is leukós. Its nature comes from the transformation of blood. (De Sevilla 1982-1983, vol. 2: 26-27).

According to this reproductive model, not just physiological factors but also human traits, such as differences in temperament that were transmitted from the mother to the unborn offspring during the foetal period, and therefore acquired in the uterus, were believed to be as innate as the ones that were acquired through the process of breastfeeding once the baby was born.

In other words, the milk that infant suckled from the woman's breast was believed to create and determine the person it became. That's why, as most of the medical literature of that time up to the beginning of the 20<sup>th</sup> C. (Comenge 1906) show that if a wet nurse was needed in order to feed a baby not her own, the selection of a healthy one, after having completed a strict medical check-up, and with good moral qualities and lifestyle, was an essential issue to consider.

Therefore, based on this model of reproduction it will be understood that two infants until then not biologically related, once breastfed by the same woman, or wet nurse, could be mutually recognised as milk siblings (milk brother and milk sister), and the lactating woman as milk mother. This was explained to me by some informants while doing fieldwork in the Montes de Pas, known as the Pasiego region, "that they owed their lives to the same woman because they were made by the same vital substance". This was blood-milk, or "whitened blood". In other words, this reproductive model will explain the marriage and sexual taboo I found among milk siblings in the Pas region.

After taking into consideration these premises, which has given analytical relevance to consider milk as a potential symbol of reproduction and, therefore, determinant in some cultural and social contexts, in the past as in present times, in the construction of kinship, namely milk kinship, some of the questions raised, first in my doctoral thesis, and later throughout this long-term research in which I am still interested and working on, are:

- 1. Has the anthropological discipline recognised milk kinship in other societies, even in our own societies throughout history? If so, how and why has it been analysed and classified as 'spiritual kinship; 'pseudokinship'; 'fictive kinship'; 'ritual kinship'; and even 'nurture Kinship' (Watson, 1983)? When, in the end, with milk kinship, and contrary to other types of "spiritual", "fictive" or "ritual" kinship such as compadrazgo (Mintz and Wolf 1950) or godparenthood that we can find in Latin America and in Mediterranean societies, among other parts of Central and Eastern Europe (Vasile, Cash, Heady 2017) we are talking about sharing a biological bodily reproductive substance (milk-blood). Could we then consider milk kinship ties as analogous to consanguineal ones? This leads us to the long-lasting controversial debate between real and natural kinship and an artificial and cultural one.
- 2. If we say that "real" kinship is that which is related to the facts of reproduction. Sexual intercourse, or sharing a biological-substance is a "biologised kinship" (Strathern, 1992, 1992 b). Affirmation that is changing with the new assisted reproductive technologies when intervening in nature and guiding the natural into the artificial. What happens, however, when the substance shared is not blood but human milk? That "*bleached-blood*" as Galen or Isidoro de Sevilla would call it. Did these human fluids have the same meaning throughout history, and even today in different societies? And what about its capacity of mutation? Have we considered that? In other words, where is the real border among these biologically vital fluids?
- 3. Therefore, to what extent has our classificatory kinship system in anthropological studies been, from the very beginning, reductionist in some of its theoretical conceptualisations and analytical categories that have often prevented us from seeing the existence of other bonds-links recognised, even from the emic or local point of view, as kinship beyond sharing genes and/ or blood? But understanding blood, in its narrow meaning, because we have excluded it from the capacity of transformation into milk.

4. Is it valid, therefore, that classification system of "real" kinship, which has dominated the anthropological discipline for decades, even though, it has been questioned (Holy 1996)<sup>4</sup> as analytical reference for the cultural study of kinship systems around the world, and even in our own society, in this case Spanish society, through history?

My position is that as anthropologists we should be able to try to recognise and analyse how each culture and society, in the present as in the past, constructs and recognise a relative. An emic perspective which might, or might not, include ideas of reproduction of the society need to be studied. But, if it is the case, then we should able to see and analyse how life is culturally transmitted, who has intervened in this process, men, women, both, or others? And through which vital symbols: semen, blood, milk, genes, or others and, more important, meaning and capacity of mutation of those?

This will explain why in this research human milk is analysed in a wider symbolic dimension: as food, as a result of our condition as mammals (which can be commodified, as it is the case with salaried lactation through the feeding role of the domestic wet nurse, where we have a price for breastfeeding: the service, and the product: the human milk). And, also as a mutable bodily vital fluid (blood-milk) able to generate identities and relationships considered in some societies as milk kinship when milk flows and is shared through the process of lactation. In this case, through wet nursing or accepting milk from a donor woman in a milk bank

In other words, as we will see through the comparative analysis of the following two case studies located in Spain, one historical and the other contemporary, the aim of this study is to offer a more dynamic, broader and more complex way of seeing and analysing not just human milk, but also the process of human reproduction and milk kinship. But this only will be possible if we have a different way of looking at it while breaking the ingrained conceptual borders between human reproduction (blood and genes) and nutrition (milk).

<sup>&</sup>lt;sup>4</sup> In Anthropology there has been an old and huge discussion in kinship studies. Especially, since the work of Schneider (1968, 1972, 1984), or Carsten (1995, 2000, 2013), among others. These authors, moving beyond classical kinship theory which started with the work of L. H. Morgan at the end of 19th c, with his book *Systems of consanguinity and affinity of the human family* (1871), proposed a broader and more flexible definition of kinship, where biological reproduction is not central. This will explain why, for example, Carsten, would prefer to talk in terms of "relatedness", as seen in her work among Malays in Pulau Langkawi.

#### II. Ethnographic Case studies. A comparative approach

## The domestic wet nurse in the construction of milk kinship in the $19^{th}-20^{th}$ C. Spain

In this first case study, very briefly, I would like to expose some of the results of a historical ethnographic study conducted in Spain between 1999 and 2004, focused on the role of the domestic wet nurse in the construction of milk kinship in the 19<sup>th</sup> to 20<sup>th</sup> centuries. The study<sup>5</sup> shows how the rural peasant women from Northern Spain (Montes de Pas region in Cantabria), well-known for their transhumance dedicated to livestock *"la muda"*, now extinct and excellently analysed by American anthropologist S. Tax de Freeman (1979), responded and adapted to situations of economic instability and poverty through engaging in migrational practices of childcare and wet nursing, while creating new milk kinship relationships.

As data collected demonstrates, the Pasiega women, who were mostly married and Catholic, emigrated for more than a century, between 1830 to approximately 1940, to different cities such as Santander, Zaragoza, Madrid, Barcelona, Sevilla, among others, in order to take care and breastfeed babies of the elite: aristocracy, bourgeoise and even, the Bourbon royal family. A service in exchange for economic remuneration for a period of two years, which was the time stipulated according to the scientific canons of the time, and that dates to the ancient times of Greece and the Roman Empire.

One of the main questions when initiating this research was how did we move from the vocabulary of market when hiring a domestic wet nurse in order to get a service, the nursing of a baby not her own, to the vocabulary of kinship (milk brother/milk sister, milk mother). And, what did it really mean, especially for the most disadvantaged group involved in this new relationship, namely the peasantry. In other words, how did these feeding practices and milk kinship fit into and serve a wider social structure?

<sup>&</sup>lt;sup>5</sup> The methodology is historical and ethnographic. The data comes mainly from the gathering and analysis of local archives and from the Royal archive in Madrid, family photos, medical treaties, within other academic and non-academic literature. However, some of the most valuable information came from the life histories of two former wet nurses that were still alive at the time of the research. And, also from the interviews to the descendants of other wet nurses conducted in the place of origin, the Pasiego region, which includes the towns, pastures, and hills of San Pedro del Romeral, San Roque de Riomiera and la Vega de Pas, among other areas of Pasiego influence such as Selaya in Cantabria, and in two of their urban settings (Madrid and Barcelona).

For this purpose, I chose to follow the path of these women since their departure from the Pasiego hills in Cantabria to the cities, their stay for two years as domestic wet nurses and their return to their villages once the period of lactation ended. Even though, I also found cases in which the women instead of returning decided to stay longer in the house working either as dry wet nurses (*ama seca*) or nannies, which means still as part of the domestic service. And even, there were others who just explored new job opportunities in the cities and its surroundings, in a period in which the demand for female workers, as for example, in the textile industry in Catalonia, among other industrial sectors, was on the rise.

This migration or female spatial displacement (rural-urban-rural) also became an institutional one (from visiting the physician to the priest and, even to the local mayor). We must take into account that not all women who wanted to emigrate and work as domestic wet nurses were considered to be suitable. In this patriarchal and hierarchical Spanish Catholic society, the medical examination, which could prove the good health to feed, and a good reference letter from the local priest confirming that they were married women with high moral qualities, were essential requirements in order to migrate to the city. In other words, the donor (wet nurse) and the vital product (human milk) not just had to be religiously pure but also ethically correct according to the social prescriptions of the time.

In this social context, and moving to their stay in the cities, as described in the literature of French romantic writer Théophile Gautier in his trip to Spain in 1840, which was published under the title *Voyage en Espagne* in 1843 in Paris, we can see how the Pasiega wet nurse with her luxurious regional dress and the baby assigned, soon became a distinguished, as Bourdieu would say, social figure of the urban scene. The domestic service meant more than the production of goods and services. Their very presence in the house as in public spaces, such as parks is the one that bears witness to the social and economic status of the elite family for whom they work.

However, it is not until the return of the Pasiega women to their villages in the Montes de Pas, after two years of breastfeeding, that the significance of the wet nurse in the construction of some type of identities (milk brother, milk sister and even milk mother), and relatedness known as milk kinship between their own biological offspring, and the ones she breastfed, becomes clear. It is considered now a closer and more natural relationship or bond, that the simply contractual relationship that the Pasiega woman has had when she arrived in the city.<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> Therefore, the market preceded kinship. Even though, there were also cases in which these two vocabularies, that of the market and that of kinship, were used simultaneously.

Looking at the anthropological literature, if we say that milk kinship is a socio-cultural construction that can be presented as a dynamic and active strategy to achieve specific purposes in the interests of each individual, group or society, such as the prevention of future marriage as in Saudi Arabia (Altorky 1980), or alliances between families of the same or different social rank (Maher 1992), we can say that this cultural reality is not an exception. From what I could ascertain from the research is that the relationships created among both groups (the Pasiego peasantry and the elite) once milk kinship was strategically mutually recognised, it led to a series of rights, mutual assistance, cooperation, care and even, sometimes obligations benefiting thereby, in this hierarchical social structure, the most disadvantaged group which was, the Pasiego peasantry.

This strategy, consisted mainly in relating the Pasiego peasantry with a more influential and powerful group who had a broader network of social relationships as it was the urban elite and the royal family. In fact, during fieldwork, I found that the wet nurses were obtaining a good economic remuneration for the service they provided, which sometimes exceeded the average wages of the time. Also, for milk siblings and their families, in case of need, the possibility of studying and working in the cities, reference letters, various gifts, and in some cases, the acquisition of an inheritance of properties. And even, as I found in the Royal Archive in Madrid, for the ones who worked for the Bourbon royals, and their siblings- those milk brothers and milk sisters of the prince and princess received life pensions or annuities. In other words, they gained a new special status which would even include the acquisition of noble titles, as seen in the work of historian Cortés Echánove (1958), if we go to the time of the Austrian Monarchy, but not in the period I studied.

Despite the material benefits just mentioned, there were also emotional and affective bonds which arose between these two groups, which sometimes even crossed generations. However, we cannot forget that in this stratified Spanish society, as some of my informants said, at that time there was a reality and "what prevailed was need and hunger".

Therefore, we can say that this migration movement, and the construction of this new milk kinship relationship, which is based in an intra-extrauterine reproductive model, changed gender and traditional hierarchies when giving the opportunity of social mobility and a better status to the wet-nurse and her families. In fact, most of the data analysed, proved that on their return, this financial reward obtained in the city from their work as domestic wet nurses served first, to pay the local wet nurse whom has been feeding their own child for a reduced price, or to another family member, such as grandparents or aunties, who took care of it, once she was absent. And, secondly, to pay debts and invest in the family farm with the purchase of new cows (*vacucas*) and even some new land, or pastures, and a cottage.

Hence, far from being seen as victims, which has been attributed to the domestic wet nurses, in which these women were presented without initiative, the reality was very different. What I found in their narratives is that before migrating, they were well-aware of what that migration process may involve, such as possible risks – the advantages and disadvantages, being the construction and practice of milk kinship (which was expected to last) with the elite and, in some cases with the royal Bourbon family itself, one of the most valuable strategies to consider for survival and social mobility. Even if this female labour migration meant a huge emotional cost due to the temporary separation between the mother and her own baby as with the rest of the family.

In order to conclude this brief case study example, it is important to highlight that this method of child-rearing is part of a historical and cultural heritage in many societies. A social heritage which is important to remember, not only by the potential contribution to the anthropological debate about the symbolism of milk, identity and milk kinship relationships created from its circulation and sharedness among infants not biologically related until the moment of lactation. But, also by the recognition of a cultural and social reality, wet nursing. Who, despite the criticism that has had throughout history- because motherhood and breastfeeding create a cultural ideal, and this should not be split with a third-party involvement, this also has had a key role in infant feeding and even in child survival. A child-feeding method that is beginning to gradually decline in Spanish society, as in the rest of Europe and America (Golden 1996) during the twentieth century with the generalised practice of a new method of child-feeding: bottle-feeding, known as artificial feeding, among other methods (even though it is now back again, but this would be a new study).

### Beliefs and practices on Human milk donation among Moroccan Muslims in Barcelona

In this second contemporary study, I analyse how in a transnational context of Moroccan Muslim women living in Barcelona, there is a widespread refusal to accept milk from a milk bank in the event that the biological mother could not breastfeed her own baby. This food restriction for the new-born, which can be incomprehensible among the public Catalan health system, as discussed here, is mainly due to many Muslim women's fear that through ingesting anonymous milk, their son or daughter could start a new milk kinship relationship with an unknown person (Soler 2017, 2019). But, before we go over it, it would be important to take a brief look, as so many scholars have analysed since the pioneering work of Filipović in the Balkans (1963) and Altorky in Arab society (1980), of how milk kinship is perceived in Islam.

In Muslim societies, milk kinship, called in Arabic, *Rida*, is the same as kinship by consanguinity (*Nasab*) and by affinity (*Musahara*), is recognised by law. This is a legal framework we do not find in the previous Spanish case study, even though there were some *Royal Ordinances* that recognised and regulated milk kinship relations (Soler 2011). This means that In the Islamic jurisprudence (Quran and the Hadith), what is usually prohibited by *Nasab (consanguinity)* it is prohibited by *Rida* such as, for example, restrictions on marriage (*Haram*).

However, just as the consanguineal relationship has a whole body of laws governing who can, or cannot, marry whom, the milk kinship relationship is much more complex than it may appear at first glance, and therefore exposed to various interpretations As anthropological literature shows (e.g., Parkes 2005, Clarke 2007), among the four orthodox schools of Islam, there are discrepancies in the legal recognition of milk kinship. Some schools argue that the amount of milk is important, for others the more important thing is that the milk flows directly from the breast of the woman who works as a wet nurse, in this case the physical bond is necessary. Others, do not see it necessary, just the act of sharing is enough. That's why, for example, when sharing from a milk donor at a milk bank, a milk relative could be created.

So, having in mind, that wet nursing mainly disappeared in the mid-20th C. in Spain, and that milk kinship is recognised and regulated in Islam. In this second study, I asked myself to what extent this type of milk kinship is still present today, not just in Muslim societies worldwide, but also among Muslim people who have emigrated to European countries such as Spain. And, if it is the case, how this type of milk kinship, understood in all its complexity, will be decisive in the choice of child feeding practices among transnational families? In this case, what were the choices between Moroccan women who immigrated to Barcelona in Spain at the end of the 20th C. or beginning of the 21st C.?

In other words, in the assumption that they could not feed her children with their own milk, what would be their response? Would they hire the services of another women, a wet nurse? Would they try to get milk in other ways (through local/even familial solidarity networks, or buy it from internet pages online)? Would they accept milk from a milk bank, even with the knowledge that the milk received from the donor in the Spanish state would be anonymous? Or would they rather go for artificial breastfeeding, bottle feeding or other methods of child-feeding? For this purpose, I prepared a series of interviews with Sunni Muslim women from Morocco in the Muslim Association Ibn Batuta, which is located in the Raval neighbourhood of Barcelona. However, in this article, I just will focus on the narratives of two of the informants followed by some concluding remarks.

A) The first interview was made to a 32-year-old woman, originally of the city of Tetuan, married and with a two-year-old child. When talking about the child-feeding method which she used at the birth of her son, she said that she opted for breastfeeding because that was stipulated by the Quran. When I asked her about wet nursing, she explained that history is full of cases in which wet nursing is required due to the illness or absence of the mother, or the illness of the infant. And, this considered natural activity did not need to be economically compensated. At this point of the conversation, I asked my informant about milk kinship, a subject that surprised her because until then no one has asked her about such an important topic as she said, which was the family.

"In Islam, as she put it, there are three types of relatives, those related by marriage, blood and milk". In the case of milk kinship, terms used are: milk mother from the woman who breastfeeds a foreign child, and milk siblings for the biological infant of the donor woman and the new breastfeed one.

In this context, she said that, there was no reference to milk father, they owe him respect but that's all (unlike what we find in Iran in the work of Khatib Chahidi (1992)). In other words, in this social and cultural context, the procreation model perceives milk as a female biological symbol of kinship that is constructed and transmitted through the nursing woman (donor), the wet nurse.

Regarding the legal aspects of it, she believed that the rights and duties were different from consanguinity, especially in relation to the inheritance: "Milk children have no right to inherit unless the nursing mother and her husband desire it". In this regard, she quoted a close case in which a very rich man wrote and signed an inheritance in favour of a child who had been breastfed by his wife. However, regardless of what the law said, what my informant saw very clearly is that considering that they were relatives it was normal that they respected, cooperated, and loved each other.

When talking about marriage prohibitions, she told me that milk kinship worked like consanguinity. In the case that two people get married and eventually realised that they are related by milk, this marriage won't be valid and will have to be ended. What she did not remember is how many witnesses were necessary to verify that the couple involved were breastfed by the same woman when they were babies. As she said: "Islam is a way of life, everything that Quran dictates must be done, it is divine law. The important thing is to be well with God." B) Second Interview- She was a twenty-five-year-old woman, single, and originated as well from Morocco, who has lived in Barcelona for five years. When talking about milk kinship, she told me that "it was very important to take into account because of the marriage prohibitions. As it is stipulated by the Quran and the Mudawana (Moroccan Family Law)".

When I asked her, what she would do in the event that she faced the dilemma of needing milk for her child, she answered that, probably she would ask for it from another woman, a wet nurse, but in this case, "this woman would have to be from the same family circle, Muslim, married and experienced as a mother because she will become a second mother, a milk mother for her own child".

In any case, she, as the other informants I interviewed in this Muslim centre in Barcelona recognised that milk kinship was more common in the past than now. Nowadays, if a woman cannot breastfeed her own babies, especially within a European context, they would rather use bottle-feeding. In this case, the rejection more than coming from the distrust of the property and the good quality of milk (considering that either the donor and the milk in a milk bank, have to go through a strict medical-screening process), it was due to that fear that through this shared milk, their children could become related to a stranger. And this risk, could even lead to an incestuous relationship in the event that those milk siblings would meet in the future and without being aware of their milk bond, get married.

In other words, if we consider, as Marcel Mauss (2010) emphasised in his classic essay, *The Gift*, that the traditional donation is typical of personal relationships, in this Spanish context of milk banks in which the milk is always anonymous (typical of a market relation) it will be clear why that it is not easily accepted. And this is, as most of my informants stated, because the acceptance of this anonymous milk could imply the construction of a new milk kinship relation with an unknown person without knowing if that milk comes from a Sunni Muslim woman, who should ideally be honest, married, healthy, with good habits and, even, in some of the cases from the same social background.

#### III. Conclusion

In order to conclude, we can say that even though Islamic jurisprudence recognises this type of milk kinship, there are other contexts in which this legal framework does not exist. That is why I agree with several researchers on the anthropology of the body and of childbirth that the construction of this type of kinship can only be understood, in theory and in social practice, from the existence of folk theory of fluids which leads to a specific reproductive model of the society studied. As already mentioned in the first part of this article, until the 19th century, some Western "folk" theories of reproduction, which still remain nowadays in some cultural contexts in Europe, mainly among Muslims communities, included the following phases: conception, pregnancy, delivery and breastfeeding. The gestational process ended with lactation.

However, it is throughout the 19th century and the beginning of the 20th century, in the scientific world when we find a conceptual break in what is considered reproduction or generation and nutrition (Ingold, 1990,1991). Since the work of Gregor Mendel and its consequent advances in biogenetics, which assumes that biological relations imply a bilateral system of kinship when considering that either the mother and the father contribute with the same genetic amount to the child, anthropologists have recognised this biological model of procreation. The dominant symbols of human reproduction are genes and blood, in a narrow sense because we have excluded blood from its capacity of transformation. While, human milk, that "whitened blood", and therefore the phase of breastfeeding is excluded from the reproductive process, leaving reproduction to just three phases: conception, pregnancy, and childbirth.

It means that that older intrauterine and intra-extrauterine model of procreation that has prevailed during centuries in different places, and still active in some parts of the world, has been reduced to an intrauterine one. Human milk, according to new scientific discourse, is no longer conceived as a bodily vital substance essential in the reproductive process, and therefore a potential symbol of kinship but as food, or post-natal nurture.

This conceptual break between reproduction and nutrition has also limited the fields of study in medicine. From this moment obstetrics deals with issues related to what is now considered as biological reproduction (conception, pregnancy, and delivery), which means taking care of the woman during her gestational process, while paediatrics takes care of the health, lactation, and the good development of the new-born.

In other words, this could explain, being one of the reflections and hypothesis in this research (Soler 2011), why from this moment, end of the 19th C. and beginning of the 20th C., (hence much before the discussion on new kinship), the anthropological discipline which had kinship as one the main domains of study had differentiated biological or "real kinship" (rooted in nature) and not fictive kinship (rooted in culture).

This "biologization" of kinship will therefore mean then that mother's milk is no longer conceived as an essential bodily substance in the reproductive process, and therefore able to generate identities and relatedness when milk flows and it is being shared. According to this procreative scientific model, therefore we could say that kinship reduced procreation to sex and biology, understood in a narrow sense. It means that it is during the construction of biogenetics, when milk loses its historical value as an essential potential reproductive symbol and therefore as a biological symbol of kinship: milk kinship. Milk is perceived just as nurturance.

This period of important scientific developments in Europe coincided with the development of pasteurised lactation and the use of bottle-feeding. This meant that if a biological mother could not or did not want to breastfeed her child with her own milk, she could choose this alternative new practice of child feeding. This new practice, or *scientific maternity* (Apple 1987), reduced the need for the services of a wet nurse. Furthermore, it can be said then that among other socio-cultural, technological, and economic determinant factors, bottle-feeding has subverted previously existing relations between mother-wet nurse and the new-born child.

These coincidences in time: the advances in biogenetic research; the birth of anthropology as an academic discipline; the separation between reproduction and nutrition in the scientific world; and the development of pasteurised lactation, along with bottle-feeding practices (even though wet-nursing continued, at least in the Spanish society until the mid- 20<sup>th</sup> c) could be considered as some of the essential determinant factors in order to understand the following questions. Firstly, why the anthropological discipline since its origin and until the eighties, has rarely paid attention to milk kinship around the world. And secondly, why when it has been recognised and analysed, it usually has been categorised just as "fictive, ritual" and "spiritual" kinship or, even nurture kinship (Watson 1983; Meigs 1986).

Based on these premises, historical and ethnographic data, as we have seen through the article provide a strong precedent for the thesis forwarded here, which will be mainly based on the need to rethink our conventional analytical categories regarding the process of biological generation and therefore kinship.

As anthropologists we should be able to try to recognise and analyse how each culture and society, in the present as in former times, constructs and recognises a relative. An emic or local perspective which might (or might not) include ideas of reproduction of the society in question, but if it is the case, as have seen in this study, we should be able to see and analyse how human life is culturally transmitted. Furthermore, it should reveal who has intervened in this process: men, women, both, or others; and through which symbols: semen, blood, milk, or genes and others...? And most importantly, the meaning of these symbols in both contemporary and past contexts.

If we agree that all societies feel closer if they share a bodily substance, mainly blood. What does happen when this sharing substance is not blood but milk, or 'whitened blood' as Galen would have said, due to its capacity for transformation?

The question then becomes is the canonical anthropological definition of what has been considered until now as biological reproduction (mainly based on an intrauterine model of procreation in which the main symbols are blood (in its narrow sense), and genes, still valid? Or, should we then extend our definition of biological reproduction in order to be able to recognise that there have been times and places, where lactation has been essential in the reproductive process? In other words, what do we mean by a 'biogenetic' relation?

But this only will be possible, and this leads us to the title of this article, if we consider widening our definition of "biological" reproduction while breaking that conceptual border between reproduction and nutrition. Because, as we have seen with these case studies, among other historical and anthropological literature, milk, that "whitened blood", can be more than just food.

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