The First Mythological Description of an Incubator

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To the Editor:

Reading through Greek Mythology one can easily come across a series of references concerning the transportation of Newly Borns, from their birth place to other, to be "nursed-bred", where the newborn remained until it was fully developed. A distinct example is that of Zeus' transportation [1]. When Rea was going to give birth to Zeus, in order to save him from Cronus' infanticide, he carried him to Mount Dikti where he was taken care by nurse Amalthea, the nymphs Adrastea and Ida and Melia nymphs (midwife and nurses). Bearing in mind some of nowadays basic characteristics of the incubator, such as the existence of an air filter, a double inner wall and finally protection from air currents, we will come to realize the parallel between the knowledge of the ancient Greeks and the recent outcomes. With the aim to exhibit the probable existence of the incubator in Mythological Times, there has been an indexing of the works of ancient authors who had been engaged with the theme.

What comes in mind is the perinatal history of Dionysus. His fertility was not questioned with Zeus as a father and as a mother, strong breed of the family of Cadmus, Semeli. The arrogance of the mortal woman Semeli to ask Zeus to appear, in all his grandeur, in thunder and lightning, during her pregnancy brings her death by burning and leaves her with a barely developed infant^[2]. After Semelis' death her unprotected embryo escapes her intestines ^[3]. Zeus grabs and opens up the womb and thus carries out the first Caesarean

Section [4-7]. After his birth, Dionysus was a prematurely [8] born eight-month infant[9,10], underweight that needed special care and an incubation. Zeus performed an incision in his thigh, living the embryo to be fed by the femoral artery (embryo implantation?). The femoral artery cannot properly feed the embryo, as the uterine one, furthermore the space in the thigh is extremely limited for an embryo to develop. Zeus performs a second Caesarean incision and calls for Hermes to transfer the newborn in a suitable location [2].

Hermes ^[2,11], the first infant courier, carries Dionysus in Nyssa Mountain^[3,12] (the Neonatal Department) and delivers him to the Hyades^[13], and the Nymphs, where Ino^[14], the chief nymph, places him in a cave-incubator, to a sweet, hot and moisture environment.

The mythological description of the caveincubator paradoxically seems to keep its modern standards. Pines were planted at the entrance of the cave leading to a kind of air filter. A type of double wall, which was developed between the roof and the branches, was that of leafy ivy and a virgin vineyard, protecting the God from air currents. That way the maintenance of a sweet, hot and lightly moist environment was ensured, thus giving a thermally neutral one.

In this incubator with lumens of Panama's lullaby [15] and the Hyades [13], Maenads [16], the Satyrs and finally the Silenus [17], the little God there stayed until he gained his normal weight and grew.

It is not possible to verify if either all mythological events were based on practices of the era or existed only in someone's bold mind. What is more likely to have happened is that through practices and knowledge of the era, we have testimony of the first primitive image and thus the pioneer incubator, which appeared thousands of years before its modern invention.

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References

- Diels H, Kranz, W. Die Fragmente der Vorsokratiker. Musaeus, Fragmenta Theogonia A',Β',Γ'. In: Erster Band. secheste Auflag. Berlin: Weidmansche. 1960, P: 23. (In Greek)
- Frazer J. Apollodorus. Biblioteca III. Appollodorus Library. Cambridge: Harvard University Press. 1921; Pp. 26-8.
- Bowie E, Elsner J. Philostratus Major Soph. Imagines 1; Chapter 14: Section 2. Cambridge Harvard University Press. 2009.
- Nonnus Epivc. Dionysiaka XXVII, 288. Graefe DF; 1819-1826. Herodotus. Historiae II; 146:10. Prior T. Oxford. 1927.
- Euripides. Bacchae. Murray G, Oxford; 1913: 294-295. Theocritus. Idyllia XXVI. Linae or Bacchae; Line 34. New York: Clover Hill Editions, Chilmark Press. 1971.
- Dionysius Perieg. Orbis descriptio; Line 940. Woestijne vd P. Brugge. 1953.
- 7. Aelius Aristide Dionysus. Jebb; Line 6-9. Brill EJ, The Complete Works. Leiden. 1981, P: 29.
- 8. Philo Judaeus. Quod omnis probus liber sit. Section 130; Line 38. Goodenough ER,

- Introduction to Philo Judaeus. Cambridge: Harvard University Press. 1963.
- Heraclides Ponticus. Fragmenta (SUDA N. 27 cf, Stephanus Byz.s.r.). Gottschalk HB, Heraclides of Pontus. New York: Oxford University Press. 1980.
- 10. Daley B. Gregory Nazianzus. On Holy Lights. New York: Routledge. 2006, Pp. 127-37.
- 11. Mackie EC. Lucianus. Menippus. Cambridge: University Press. 1904. P: 27.
- 12. Aelius Herodianus. New York: Oxford University collection. 1803, P: 502.
- 13. Pherecydes Hist. Fragmenta. In Musaios, TLG. 2002, Fragmenta 46a; Section 5; Line 4 and Fragment 46c; Line 7-8 and Line 14-15.
- 14. Lucianus. Dialogi Marini. Dialogue 6; Section 1; Line 17-18. Cambridge, Mass: Harvard University Press. 1961, Pp: 178-236.
- 15. Lucianus. Bis accusatus sive Tribunalia IX. In: Musaios 2002, TLG.
- Murray G. Euripides. Bacchae. Oxford; 1913: 102-103. Macleod MD. Lucianus. Dialogi deorum. In Mass. Cambridge: 1961, Dialogue 6; Section 2; Line 12-13.
- 17. Teubner BG. Strabo. Geogr. Strabo Geographica. Leipzig. 1866, I. Chapter 3; Section 10; Line 21.