

On the formation of a new element

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ABSTRACT

This letter is to report creation, complete formation and birth of a new element called Thomas. Special emphasize is made on the growth process. Proof of existence is given and a comparison between experimental observation and theoretical calculations is proposed.

§ 1. INTRODUCTION

Recently, our attention has been paid to the conditions of creation of new elements and in particular the long formation process and first days of existence. Because such creations are essential to help increasing the entropy of the universe, it is thus very important to understand their formation mechanism. As this process is usually followed by a cataclysmic life transformation, it is also of great importance to simulate the behavior of the new element in the first days of existence in order to be prepared for such a shock. This letter describes the experimental details of the formation of our new element, thereafter referred as Tiny Human Organism Minimizing After-Shock (THOMAS), and reports the results of the experiment as well as the comparison with computations.

§ 2. EXPERIMENTAL

Pre-samples preparation is supposed to be a well-known operation and has been described elsewhere many times (see for example, Vatsayayana, 1883). In the present case, a special experimental process has been used in order to insure completeness of the formation (Frydman, 1994). The incubator used for the experiment is depicted in figure 1. Initial compounds, less than a gram, were introduced within the incubator and

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heat treated for about 9 months at approximately 36.7°C. The incubator is a self-growing model, increasing its size as a function of the internal stress. The complete apparatus weighed 49 kg at the beginning of the experiment, and about 65 kg near the end. The power-supply was essentially constituted of chemical compounds, usually mixed and heat-treated at high temperature, and often including sauerkraut, large quantities of white and black chocolates and milk. Notice that the whole apparatus is quite fragile and a great care has been taken in order to remove any cause of instability or disorder, like avoiding emotional shocks, housekeeping or steps climbing.



Figure 1. The incubator, after about 30 weeks of experiment.

§ 3. RESULTS

3.1 *Progress of the experiment*

The complete sequence of formation started on July 22nd 1998, 10 a.m. Figure 2 presents the first experimental evidence of the existence of the pre-element after 5 weeks of experiment. This is an inside view of the incubator made by collecting ultra-sounds reflected by dense parts of the incubator. In such a view, solid parts appear white while liquid is seen in black. The length of the pre-element was estimated to be 7.5 ± 0.5 mm at that time.

After 10 weeks, a new imaging of the inside of the incubator was made (Figure 3). Notice that the element was now clearly evidenced and appeared to be fully functional, except for the gas exchange chamber, which is known to start working properly only when the element is removed from the incubator.

Figure 4 presents the growth curve as a function of time. After 32 weeks of growth the size of the medium segment (abd) was almost under the 10% limit curve but a new measurement 10 days later insured that the experiment was still undergoing satisfactorily.

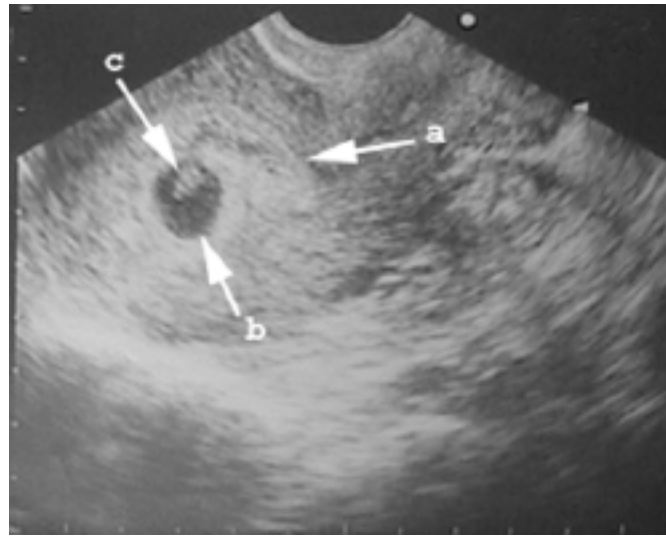


Figure 2. Cross-sectional view of the incubator after 5 weeks of experiment. The source of ultra-sounds is at the top of the image. Internal envelop of the incubator (a); limit of the liquid domain (b); pre-element whose length was estimated to be 7.5 mm (c).



Figure 3. Cross-sectional view of the incubator after 10 weeks of experiment. The element is clearly visible and appears fully functional.

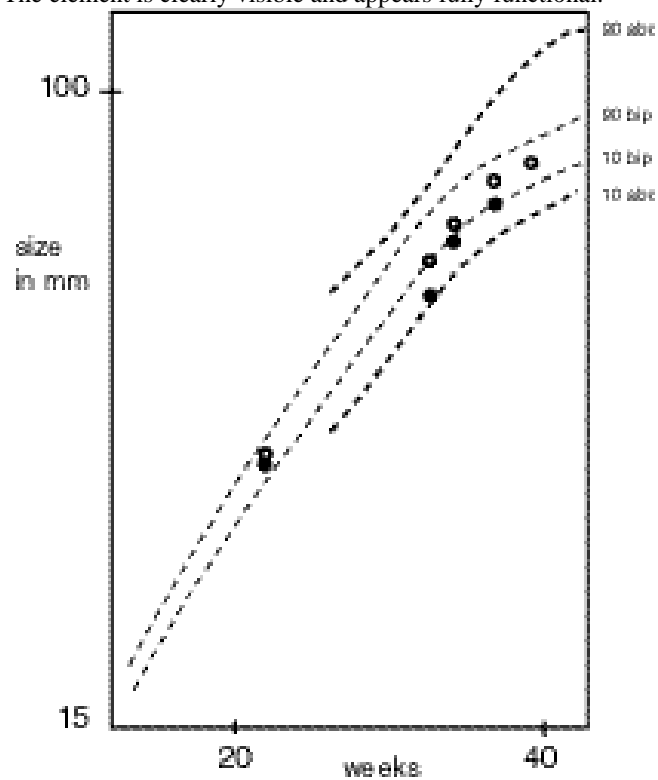


Figure 4: Size of the medium segment or abd (closed circles) and top segment or bip (open circles) as a function of time.

3.2 *Expulsion*

The final completion of the experiment, planned for March 22nd, 1999, appends 12 days before on Wednesday, March 10th at 5.10 p.m. in the presence of the authors (notice that the attendance of the first author was absolutely mandatory). The extraction of the new element started at 7.15 a.m. and took about 10 hours for the preparation (or labor) but less than 10 minutes for the expulsion, which occurs very smoothly without any scream or tear. After the expulsion, great care has be taken to Thomas, including invasive inspections of vital functions and reflex tests (Figure 5) as well as to the incubator. First measurements showed that Thomas weighted 2.660 kg and his length was 45 cm.

3.3 *Growth*

Figure 6 shows a more detailed view of Thomas the day after expulsion. Notice the (unusual) large quantity of long, black hairs as well as the small size of the ears, not characteristic of the second author of this letter.

Energy is mainly supplied to Thomas by natural means, at the rate of approximately one intake every 2 hours, including nights. At a consequence, after the usual decrease of weight during the first three days, Thomas is now growing at the mean rate of 20 g/day. Figure 7 presents Thomas after 1 week at a weight of 2.550 kg. Notice also that the system indicating an urgent need of energy is very sensitive and that the acoustic alarm associated with this system can be very effective. However, Thomas is usually very quiet, only making noise when needing power supply. This feature reduces greatly the evident life transformation shock.



Figure 5: First experimental evidence of the existence of the new element Thomas, taken less than 10 minutes after expulsion, during first vital tests.



Figure 6: Thomas, 1 day old, in a low energy state.



Figure 7: Thomas, 1 week old.

§ 4. COMPARISON WITH MODELLING

A three-dimensional model of the new element has been established during spare time (often very late at night when the incubator could be let unattended) on a PowerBook G3/300 using a sophisticated 3D simulation program. The result of the simulation is depicted in Figure 8. While the model clearly respects the main attributes of the new element, it is important to indicate that a large number of features were not included in the simulation, especially hairs. It is also worth emphasizing that the theoretical model is not able to produce any sound or movement while the real Thomas is. Further modelling including sound as well as smell is in progress. However, our goal to simulate the fact that the real Thomas is very very very sweet and so cute will be difficult (in fact probably impossible) to tackle.

§ 5. CONCLUSIONS

A new element has been created using appropriate heat-treatment in a well-designed incubator. The experiment succeeds on March 10th, 1999, 5.10 p.m.. The new element has been named Thomas. His initial weight was 2.660 kg and length 45 cm. A model was developed to describe the main characteristics of Thomas' appearance, but there is really nothing like the real one.

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REFERENCES

- Frydman, R., 1994, *L'art de faire autrement des enfants comme tout le monde* (Robert Laffond Ed.)
- Vatsayayana: KamaSutra, 1883, *Classic translation* by Sir Richard Burton.



Figure 8: Simulated image of Thomas' first appearance.