

Change in Viewing a Fetus: Consumption of Ultrasound Photos

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【要旨】

胎児観の変容－超音波写真の消費－

宮内 貴久

妊婦は妊娠5ヶ月目に胎動を感じる頃、体内に存在する新しい命を実感し、産祝いをする民俗がある。江戸期に出版された礼法書『女重宝記』『胎内十月の図』には胎児が4ヶ月までは仏具、5ヶ月以降は人間の形で図示されている。1980年代後半から普及していった妊婦検診における超音波診断により、不可視の存在であった胎児が見える存在へと劇的に変化していった。

日本では1990年代に妊婦検診で撮影された超音波写真をもらうようになる。最初はいくまでも妊婦の検診時の診断結果を示す存在で、他の記録と共に母子手帳と共に保管されていた。それが、次第に検診結果ではなく、胎児のポートレートと意識される様になり、アルバムに保管される様になる。さらに、「おなかアルバム」というエコー写真サービスも登場する。パソコンの普及、メディア環境の変化によりブログでエコー写真を紹介する、あるいは携帯電話のメールで超音波写真を送るという状況になる。このように本来は医学的データであった胎児の超音波写真が、胎児のポートレートと意識される様になり様々な形で消費されるようになった。

My question is how the development of ultrasound photography changed pregnant women's views of a fetus. The theme of my presentation is the changes in the viewing of a fetus and the consumption of ultrasound photos. I am going to show you how this view has changed since pregnant women began to receive ultrasound photos during their medical check.

Generally, in the fifth month of pregnancy a woman feels fetal movement for the first time, and it is well known that many folkloric customs celebrate pregnancy. In the book, *Onna chohoki*, a medieval manual for unmarried women, there is a picture called "10 months in the womb." Until the fourth month the fetus is drawn as a fitting used in decoration of the Buddhist altar, and after the fifth month – in the form of a human. In the late 1980s, the fetus, which had always been something invisible, turned dramatically into something visible during an ultrasound check.

The starting point of this study was the photo album and its photos. One of my students, born in 1987, was writing her thesis on what photos of a newborn baby are put in photo albums, and what is the percentage of pictures that can be categorized as birth and educational rituals, the focus in Folklore Studies. I brought an album of my oldest son,

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born in 1999. In the first photo was my son right after he was born, the second photo was his first birthday, and the third was the ultrasound photo. My student was surprised seeing an ultrasound picture in the album, as she had never seen an ultrasound picture before, and she even asked why I posted the picture in the album. I could not answer her because my wife created the album.

The student's mother told her that she had her ultrasound check, but did not receive the photo. However, the girl's older brother, born in 1990, has one, although her mother completely forgot whether or not she had received the photo. Nowadays, there is even an Internet service, where anyone can create a photo album using fetal pictures.

The point I want to examine is how ultrasound photos became widespread, what problems the photos faced and how the photos are consumed in everyday life.

In obstetrics and gynecology in Japan, ultrasonic waves have been used in medical practice since 1959. At the beginning of the 1970s, ultrasonic waves were introduced as an effective diagnostic tool during the early stages of pregnancy. The ultrasonic-wave health check was added to the insurance health check, which followed the revision of the health check fee itself, and ultrasonic-wave diagnostic equipment, although expensive, became widespread. Ultrasonic diagnostic equipment appeared in hospitals in 1970, and in the 1980s, in diagnosis centers. By 1987 the number of ultrasonic-wave diagnostic machines in hospitals had increased, so it became possible to use them for pregnancy checks in general.

The first note of a fetal ultrasound photo can be found in the Asahi Newspaper, on January 16, 1986 in an article titled "How far can we allow it? Ultrasonic-wave diagnostic check and its 'profit.'" The article described a completely new reality: now with the help of ultrasonic-wave check parents can find out the unborn baby's sex, can take a video of the fetus from the ultrasonic screen and can show the photo to the rest of the family, and so on. What was originally for the purpose of a medical check, in the end had discovered a new "profit" outside the hospital, and that was "a rather delicate problem." To what extent can doctors use this "profit," and, again, how do people see the fetal images? These were the main points of confusion from the hospitals' side.

Right then, does this mean that children born around the time the article was published got their ultrasound check? Or did their mothers receive ultrasound pictures? I interviewed 25 students. One student was born in 1984, two in 1986, seven in 1987, three in 1988, two in 1989, nine in 1990, and two in 1991, altogether 26 students. Of those students interviewed, 25 did have the ultrasound check. Two thirds of the students, 19 of the 25, had their ultrasound photos. Of the six who did not have the photo, one was born in 1984, four in 1987 and one in 1989. Of seven girls born in 1987, which is the closest to the time the article was published, four do not have the photo. Girls born after 1990 all have their ultrasound pictures, so the end of the 1980s was a kind of transition period, after which, from the beginning of the 1990s, receiving ultrasound photos became the norm.

What concerned me next were the conditions under which the photos were kept. Of the photos, 58 percent were put in a mother-and-child notebook, 21 percent into a photo album, and the location of 21 percent was unknown. Of the 21 percent, comments included the following: "The picture is so unclear, so it isn't something appropriate for posting into the album," or "There is a photo somewhere, but we don't remember exactly where."

The next step was to conduct a questionnaire survey in the kindergarten and elementary school, both of which are affiliated with Ochanomizu University. The target audience was 172 children enrolled in the third age group in kindergarten, and 755 children from the elementary school. The total number of individuals targeted in the survey

was 925, and 45.9 percent of them, which is 425, answered and returned the questionnaire.

All responses indicated that the children had their ultrasound check, but only 7 of those responding to the survey indicated that they did not receive the photo. I will not specify the reasons they did not, although 5 of them were second children in their families. For the number of photos received, the average number is 7.9 photos per person, and the largest number is 50.

Here are examples of the answers from the questionnaire. This one is an example from the growing-up diary. It says, “The first shot of baby by the ultrasonic waves!”

Concerning the conditions of keeping the photos, I divided the results into three groups, according to the year the children were born, with a four-year interval.

In the first group, 1997-born, 49 percent of children have the photo put or posted in a mother-and-child notebook or kept with mother-and-child notebook, 25 percent have their photos in albums, specialized ultrasound picture albums, ultrasound photo services or on video. None of the children has a photo image in a personal computer.

Four years later, in 2001, the percentage of mother-and-child notebook related answers was 39, album related was 34, and computer related was 9 percent.

In 2005, 21 percent was for mother-and-child notebook, 25 percent for album, and 18 percent for computer. Comparing 1997 and 2005, we can clearly see the decrease in the percentage of mother-and-child notebook related answers, while answers related to albums and computer storage, increased to 43 percent.

In the beginning of the presentation I introduced comments concerning ultrasound photos from mothers who gave birth to their children around 1987. One mother said that the picture was so unclear, so it wasn’t something to post into album, and the other mother’s comment was that she didn’t remember where exactly the ultrasound photo was. Does that mean that the ultrasound photo from the result of the medical check transformed into the portrait of unborn child? From the growing-up diary writing, “The first shot of baby by the ultrasonic waves!” – is the best illustration of this theory.

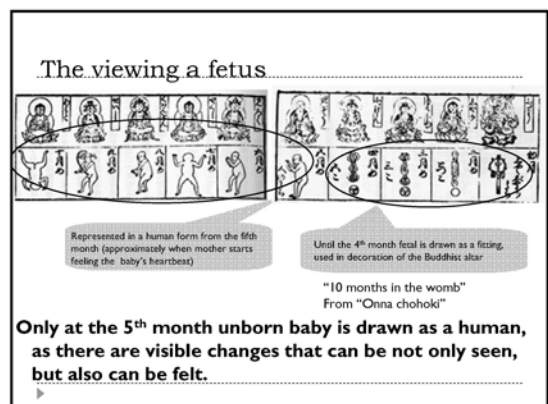
In 2000 young mothers started to post ultrasound photos in Internet blogs. In the Asahi Newspaper, dated January 8, 2002, is an article titled, “The Pregnancy Diary of ‘Saori,’ Internet-idol,” about a woman in her eighth month who was writing her pregnancy diary in the Internet, and posting ultrasound photos as well.

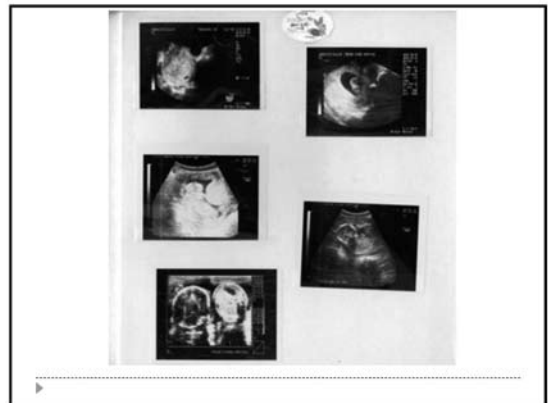
Again, in the reader’s column, dated January 5, 2006, is a letter from a 63-year old housewife, titled “My second New Year.” Here is the quoted text: “I began receiving the little baby photos of my daughter-in-law’s pregnancy. Although the shape is still unclear, I can see with my own eyes how our grandson is growing, and I can fully visualize him.”

More than 20 years have passed since the publication of the Asahi Shimbun article titled “How far can we allow it? Ultrasonic-wave diagnostic check and its ‘profit’ in 1986.” Now, with the development of media sources, such as the Internet and mobile communication, we are facing a new era in which ultrasound photos can be sent over e-mail or mobile phone message.

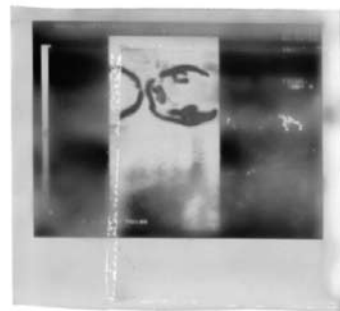
To summarize, ultrasound photos came into common use in the late 1980s, and in the 1990s pregnant women began to receive the photos. With the popularization of ultrasound photos the fetus from being something unseen has turned into a visible object, which is itself a fundamental change. At the beginning, ultrasound pictures were nothing more than the result of an expectant mother’s health check, stored along with other details in the mother-and-child

notebook. As time passed, from the health check result the ultrasound photos became interpreted as a photo shoot of the fetus, moving from the mother-and-child notebook into the picture album. Moreover, now we can see even special services for posting ultrasound photos called “In the womb Album.” That is how ultrasound photos, initially medical data, were culturally consumed.





- ▶ T. A., student, born in 1987, Funabashi, Chiba:
- ▶ she has never seen ultrasound photo.
- ▶ more than that, she couldn't understand, why someone posts ultrasound pictures in photo-album.
- ▶ T. A. (born in 1987) had her ultrasound check
- ▶ Her elder brother (born in 1990) had ultrasound check and picture both.



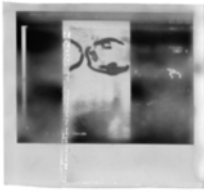
Picture of the child born in 1990,
put in the Mother-and-Child notebook

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*** Her mother couldn't remember if she had received ultrasound photo, although it was posted in the notebook.**



An unborn childhood : ultrasound photos.....



Child born in 1990:
From Mother-and-Child notebook



Child born in 1999:
From photo album

Since when did these photos have started being kept and where are they kept?

Mother-and-Child notebook



Question area:

- ▶ What has changed in the view of fetus with the appearance and spreading of ultrasound photos?
- ▶ How are ultrasound photos kept and where?

1. Ultrasound photos in newspaper columns.

From Asahi Newspaper

Obstetrics and gynecology in Japan and ultrasonic-wave health check

- ▶ From 1959 – applied in general medical practice.
- ▶ 1970-ties: ultrasonic waves are introduced as an effective diagnostic tool during the early stages of pregnancy
- ▶ 1970 year: ultrasonic-wave health check is put into the insurance health check; revision of health check fee
→ ultrasonic-wave diagnostic equipment, being highly priced though, became widespread
- ▶ In hospitals from 1970 year; in diagnosis centers from 1980
- ▶ By 1987 the number of ultrasonic-wave diagnostic machines in hospitals has increased, so it became possible to use them in pregnancy check in general.



Asahi Newspaper
January 16th, 1986

“How far can we allow it? Ultrasonic-wave diagnostic check and its “profit”

- ▶ the unborn baby's sex can be found out
- ▶ a video of fetus from ultrasonic screen can be taken and shown to the family members
- ▶ what was originally for the purpose of the medical check, in the end had discovered new “profit” outside the hospital, and that was “a rather delicate problem”
- ▶ To what extent can doctors use this “profit”? Again, how do the people see it?
- ▶ “There is no obvious danger and maybe there will be side-effects we are not aware of yet. But as a diagnosis tool it is has profit, so that's why it should be allowed”

Born in late 1980-ties: did they receive their ultrasound photo?

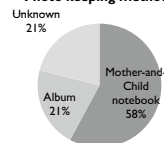
- ▶ Case of study: students of the Department of Cultural Historical Studies, Ochanomizu University.
- ▶ Birth year:
1984 1 1986 2 1987 7 1988 3
1989 2 1990 9 1991 2
Total: 26
- ▶ Number of those who had ultrasound check: **25**

Born in late 1980-ties: did they receive their ultrasound photo?

- ▶ Number of those who received photo:
19 students, approximately 2/3.
- ▶ Those, who didn't have the photo: 6.
1984 born: 1、1987 born: 4、1989born: 1
Of 7 students born in 1987 4 students don't have photos
- * Since 1990 it became common to receive ultrasound photo.

Late 1980-ties: keeping ultrasound photos

Photo keeping methods



“I'm keeping it with Mother-and-Child notebook. It is too unclear, so it isn't something appropriate for posting into the album” (1991 born).

“I received few photos after the health check. It is stored somewhere, but I don't remember where exactly” (1986 born).
“Guess they're somewhere”(1988 born).

2. Ultrasound photo: how it is kept

from the survey conducted it Kindergarten and Elementary School affiliated with Ochanomizu University

Questionnaire survey

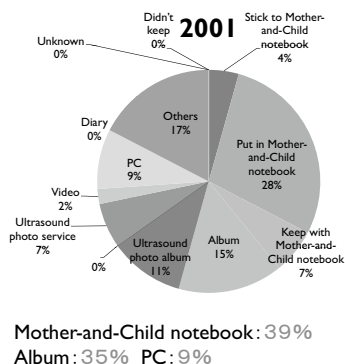
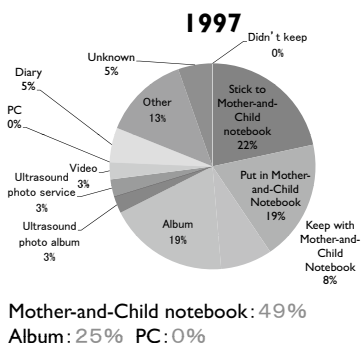
- ▶ Target audience:
- ▶ Kindergarten, 3rd year group 172 persons enrolled
- ▶ Elementary School 755 persons enrolled
- ▶ Total: 927 persons

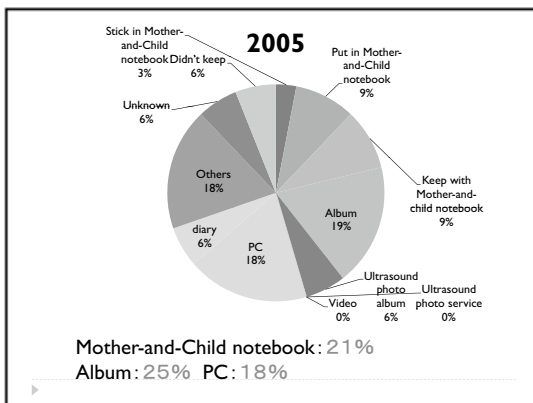
- ▶ Questionnaire
- ▶ Kindergarten: homeroom teachers handed out blanks; special box for filled in questionnaires was set inside Kindergarten
- ▶ Elementary School: homeroom teachers handed out blanks and specially prepared envelopes with stamps for sending the questionnaires by post.
- ▶ Questionnaires answered: **425, which is 45.9% from the total number.**

- ▶ All of them had their ultrasonic-wave health check
- ▶ Without ultrasound photo: 7 persons
- ▶ Average number: 17.9 photos per person
- ▶ the biggest number is 50 photos (2 persons)

Answers

- ▶ Mother-and-Child Notebook
- ▶ Album
- ▶ Ultrasound photo album
- ▶ Ultrasound photo service
- ▶ Video
- ▶ PC
- ▶ Diary
- ▶ Didn't save the photo
- ▶ Whereabouts are unknown
- ▶ Others
- ▶ Others
- ▶ Box
- ▶ Photo frame
- ▶ Record paper
- ▶ Maternity paper
- ▶ Maternity related goods





Results

- ▶ 1997 Mother-and-Child notebook: 49%
 Album: 25% PC: 0%
- ▶ 2001 Mother-and-Child notebook: 39%
 Album: 34% PC: 9%
- ▶ 2005 Mother-and-Child notebook: 21%
 Album: 25% PC: 18%

*** Mother-and-Child notebook related answers has decreased: 49%→21%**

PC related answers increased: 0%→18%

Album+PC 25%→43%

medical data → into child's portrait

Ultrasound photos in the internet

- ▶ January 8th, 2002, Asahi Newspaper:
 "The Pregnancy Diary of "Saori", internet-idol"
 Woman who is on her 8th month, writing her pregnancy diary in the internet and posting ultrasound photos as well

Ultrasound photo sent via e-mail and sms

- ▶ January 5th, 2006, Asahi Newspaper
- ▶ "My second New Year"
 housewife, age 63, from Fukuoka
 receiving photos of a little baby of her son's the pregnant wife via mobile phone mail.



Conclusion

- ▶ Ultrasound photos
- ▶ From 1980th – became widespread
 invisible → visible
- ▶ **medical data** → Mother-and-Child notebook
- ▶ **Portrait of unborn child** → album
- ▶ "The first shot of baby by the ultrasonic waves!"
- ▶ The service of echo photos "In the Womb Album"
- ▶ PC becoming common
- ▶ Changes in media sources such as internet and mobile communication:
 Blogs, Mobile phone photos