

The *Grande Odalisque* by Ingres
or the woman with 10 lumbar
vertebrae

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Jean-Auguste Ingres
The « Grande Odalisque » - 1814



Criticized for its faulty anatomy

- Lack of bony or muscular reliefs...
- Skinny arms of unequal length...
- Left thigh in a wrong position...
- « Three lumbar vertebrae too many »
 - Oral remark of the art critic *M. de Kératry*
 - To Ingres' student Amaury-Duval

This remark was successful!



La critique a souvent parlé des fameuses trois vertèbres excédentaires du dos de « la Grande Odalisque » d'Ingres (en haut, à gauche). Capable lui aussi des plus grandes audaces formelles, Picasso copiera cette

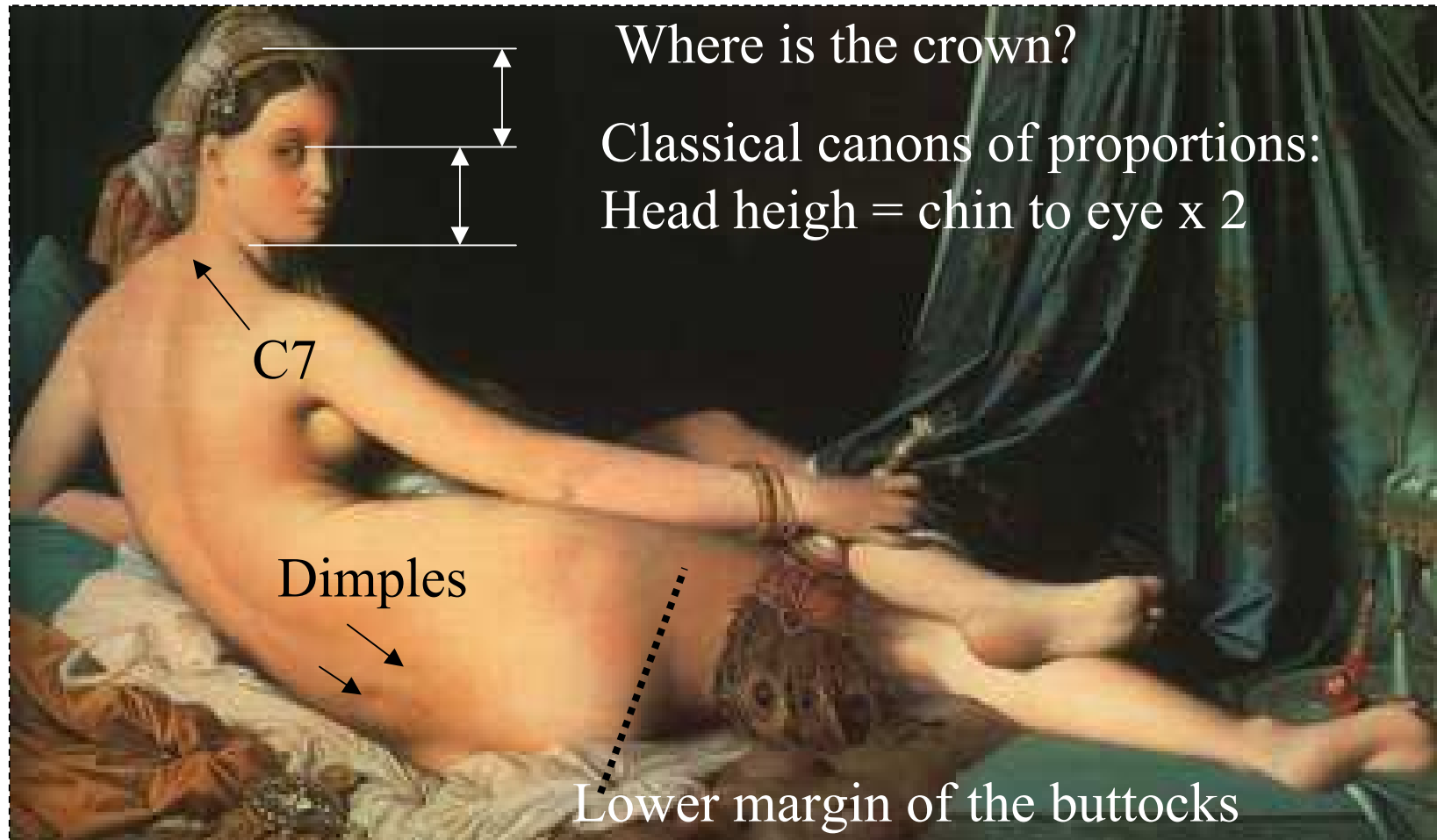


- Zimbler MS. Ingres' Odalisque: idealized beauty. *Arch Facial Plast Surg* 2000
- “Art critics have often spoken about the famous supernumerary three vertebrae of the Grande Odalisque’s back” (left, Figaro Magazine)

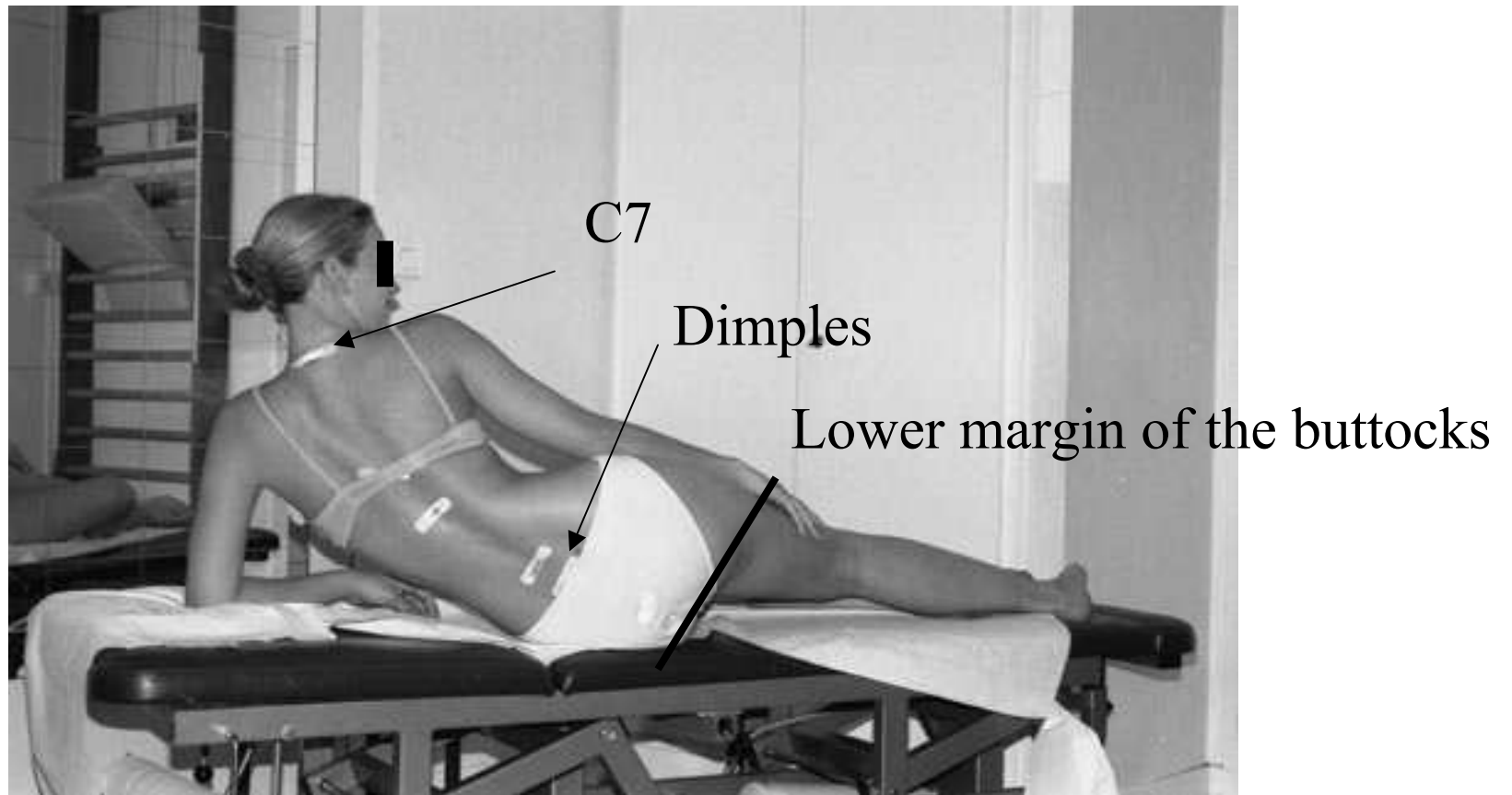
We have to be careful about what we are told...

- Simple measurement shows that the deformation is more important and complex
- Hence the idea to establish the number of her vertebrae by measuring the back and the pelvis of human models, relating the data to head height and transferring the measurements to the painting

The Odalisque displays anatomical landmarks!

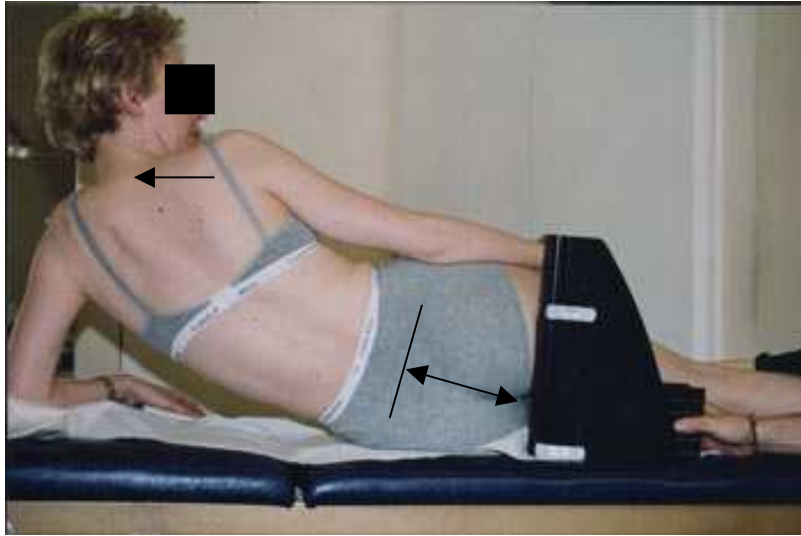


Our study: 9 models

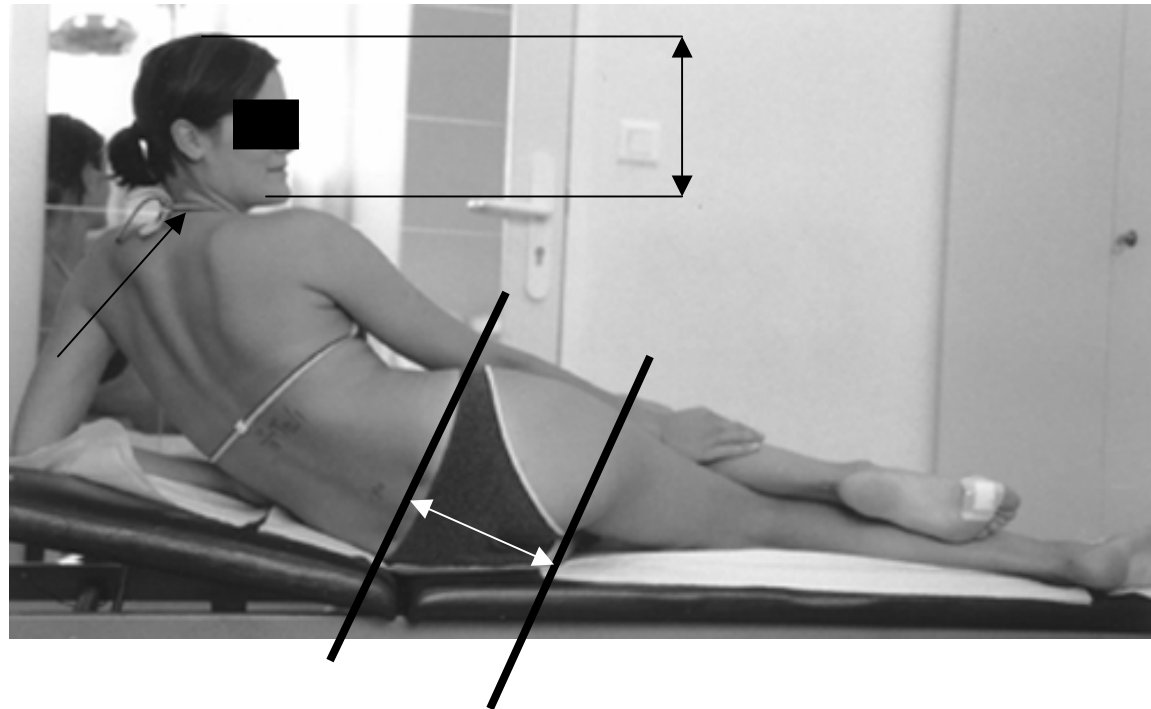


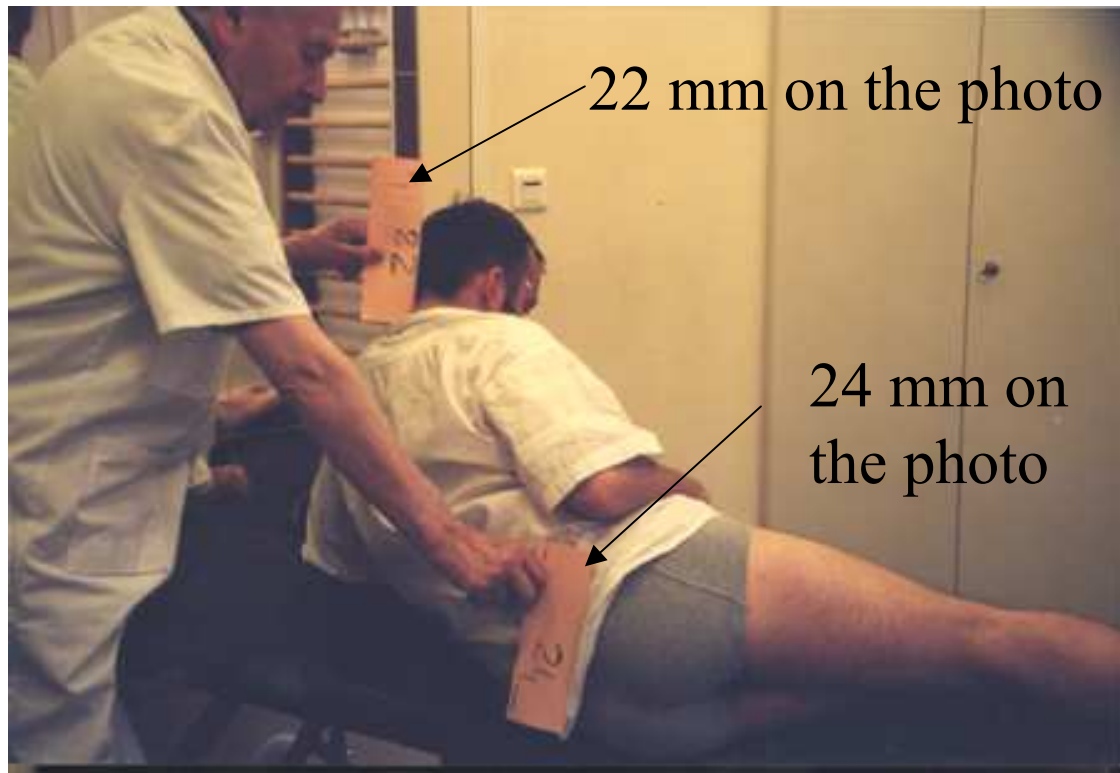
Method

- Pilot study on 5 models: feasibility
- Study on 9 models
 - Height: 178 ± 4 cm, BMI: 20.2 ± 2.4
 - Informed consent
- Two successive measurements in a position matching that of the Odalisque
- Average of the 2 measures



- Height of the face (chin to crown)
- C7-T12
- T12 to dimples
- Dimples to lower margin of the buttocks





Taking into account the effect of perspective

- Two segments of identical length held at the level of the head and pelvis respectively (focal length: 50 mm)
- Coefficient of magnification to apply to the head: +9.4%
- For the back, half of it (4.7%)

Mean values of the measurements in the models

	Height in cm	Height related to head height
Head	21.8 ± 0.9	1
<i>C7 - T12-L1</i>	34.1 ± 1.5	1.56 ± 0.09
<i>T12-L1 - dimples</i>	19.3 ± 1.3	0.89 ± 0.07
Back (C7 - dimples)	53.4 ± 2.1	2.46 ± 0.14
Pelvis	20.6 ± 1.4	0.95 ± 0.07

Measurement errors

- Head: 0.20 cm
 - IC 95%: -0.50 to +0.11 p=0.18
- Back: 2.13 cm
 - IC 95%: -2.90 to +7.17 p=0.36
- Pelvis: 0.88 cm
 - IC 95%: -0.55 to +2.30 p=0.19

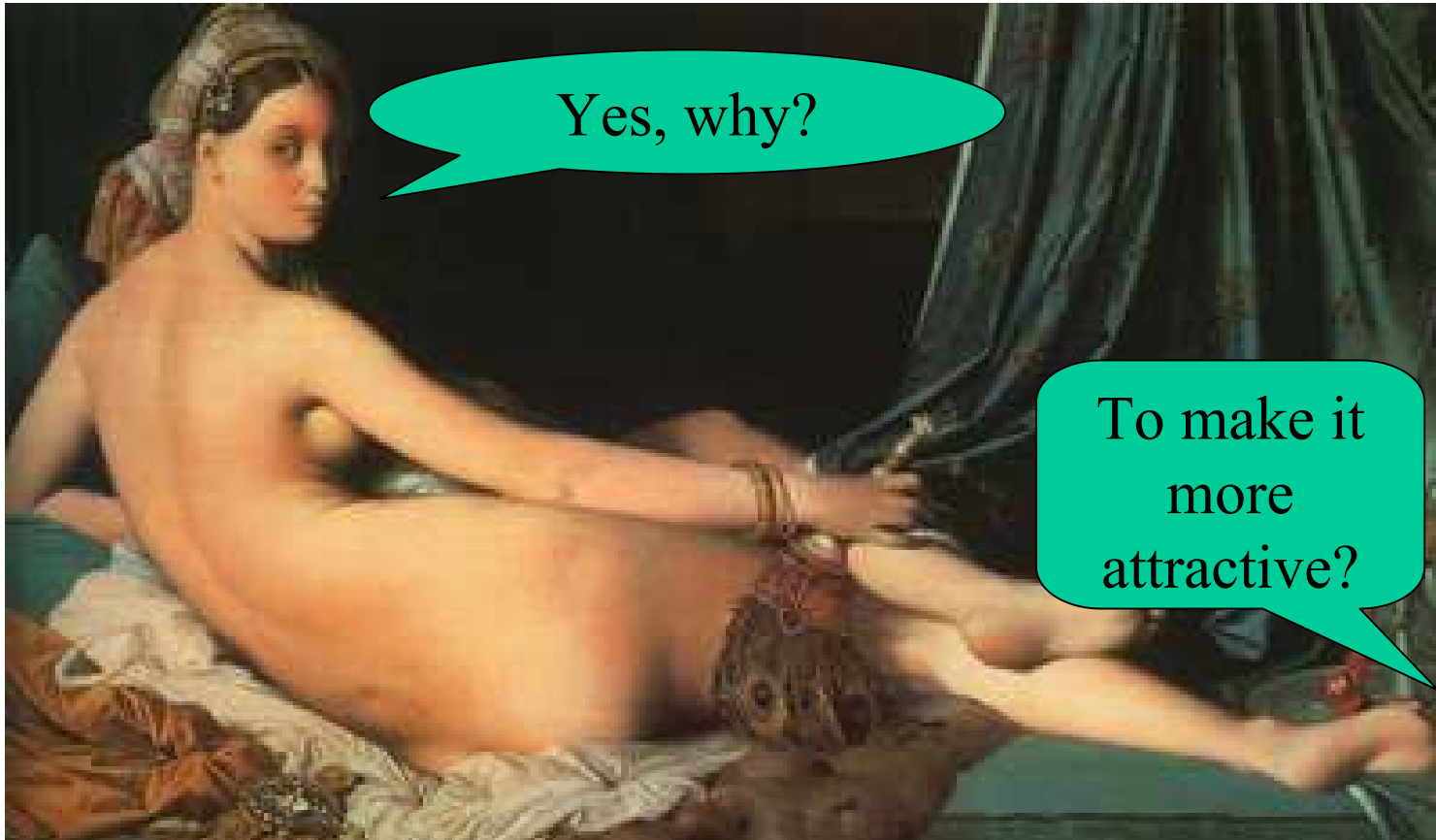
Grande Odalisque

- Excessive length of back: 8.20 ± 0.36 cm
- Excessive length of pelvis: 6.77 ± 0.25 cm
- Excessive overall length: **14.97 cm**
- Comprised between **12.33 and 17.60 cm**

Grande Odalisque

- Average height of the female lumbar spine: 15.5 cm (extrapolated from Gray's Anatomy)
- Odalisque's back longer than normal by the height of almost five, rather than just three, lumbar vertebrae
- Contrary to received wisdom, the excess affects lower back and pelvis, rather than being confined to the lumbar region

Why?



Yes, why?

To make it
more
attractive?

Ingres is known for reflecting his subjects' social condition in his paintings



The face has been described as *betraying no feeling, as being sad and indifferent or aloof and inscrutable, reflecting a complex psychological make-up...*

Odalisque = woman kept in a sultan's harem for the sultan's pleasure



- Pelvis: a symbol of her social role
- The added 2 sacral vertebrae increase the pelvic length, magnifying its role



- The visual effect of the excess length of the back is to place the head further away from the pelvis
- Ingres may well have tried to show, in physical terms, the gulf between the woman's condition (the hypertrophied pelvis) and her innermost thoughts and feelings (the resigned face)

Did you enjoy?

Thank you!