BEHIND THE SCENES OF

SALAD

TILL NOWAK


frameboX studio

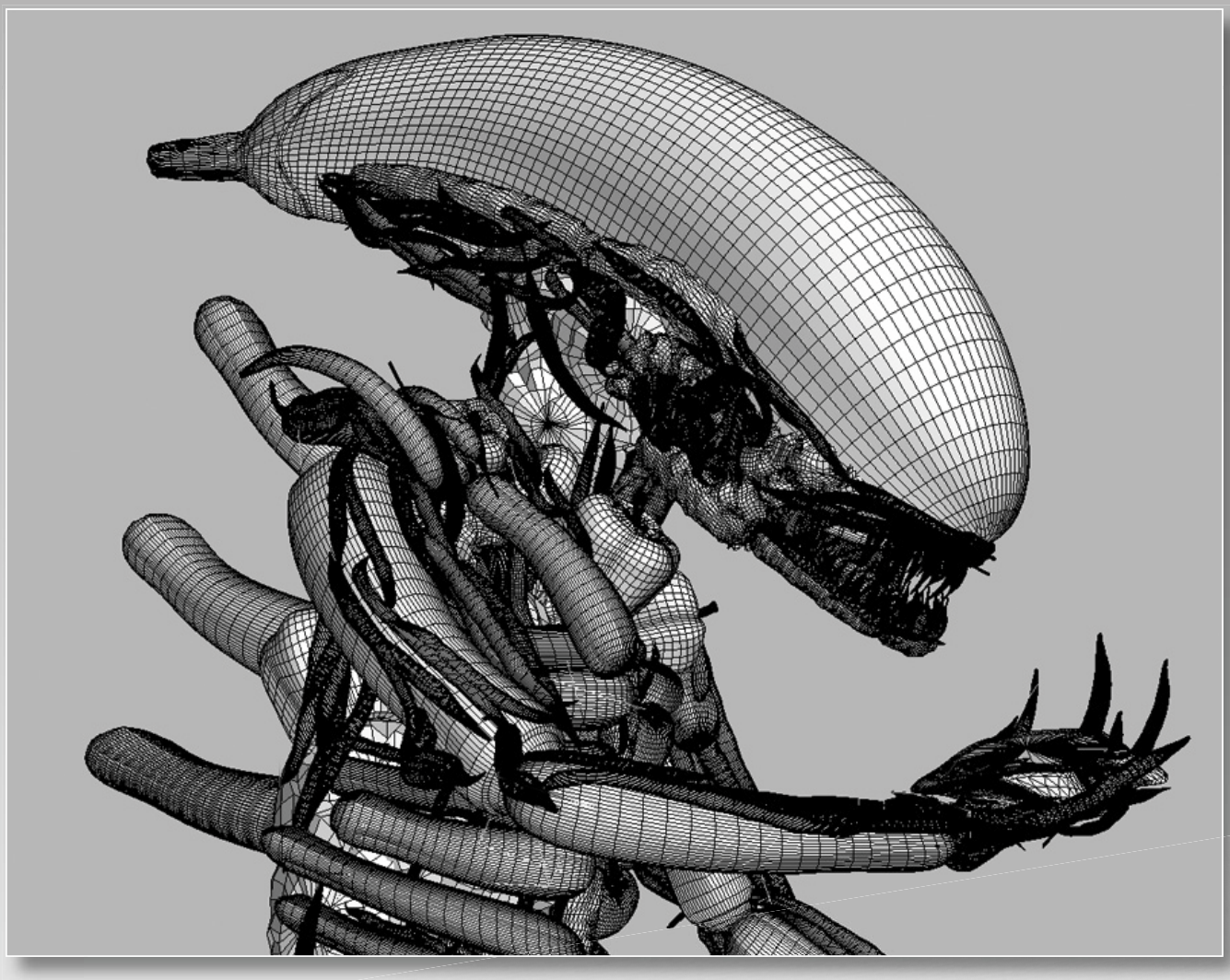
>>

Till Nowak is working as a freelance media artist since 1999 in his own studio in Mainz, Germany. He studied “media design“ and graduated with his award winning shortfilm “Delivery“.

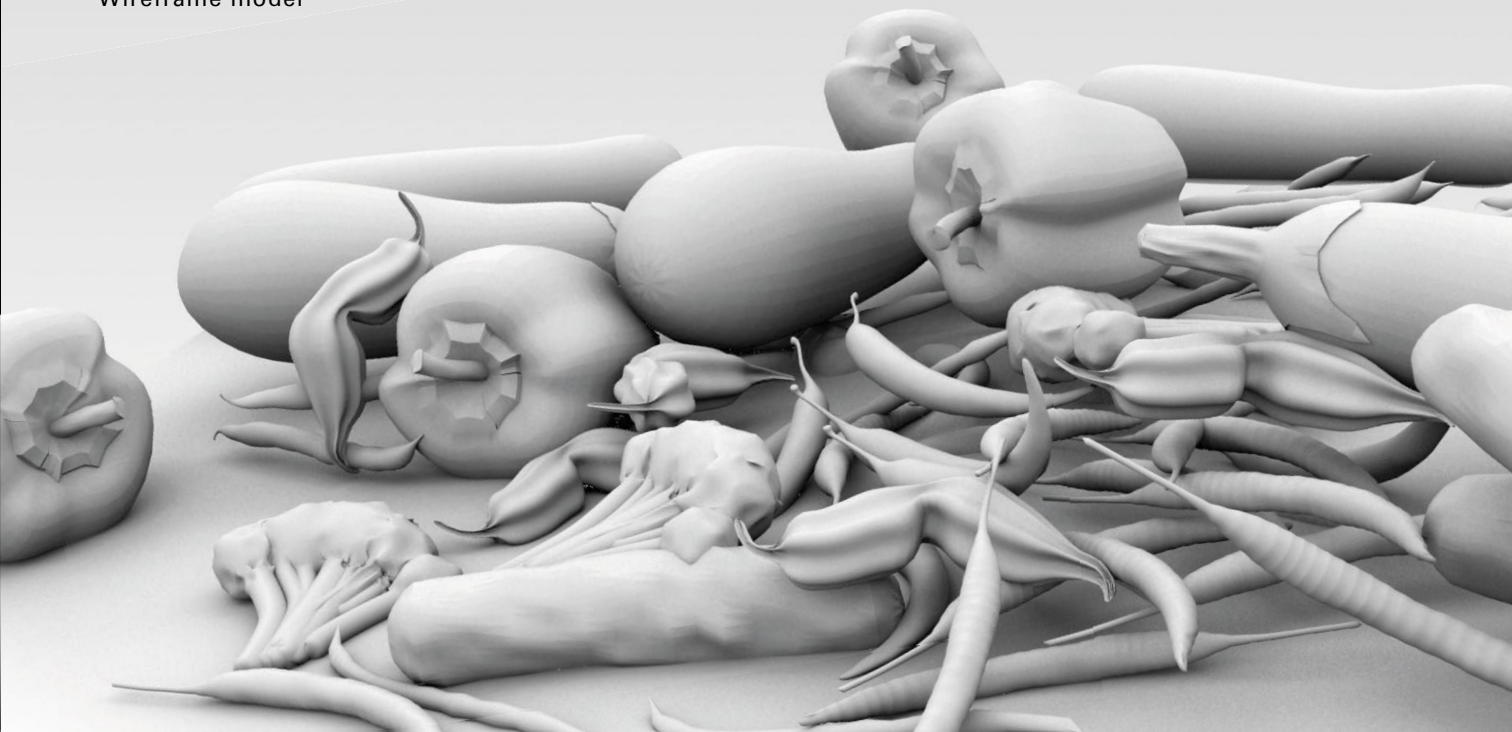
>> "Salad" is a computer generated image created in November 2006. It is a tribute to the fantastic artist H.R. Giger and the classical painter Giuseppe Arcimboldo.

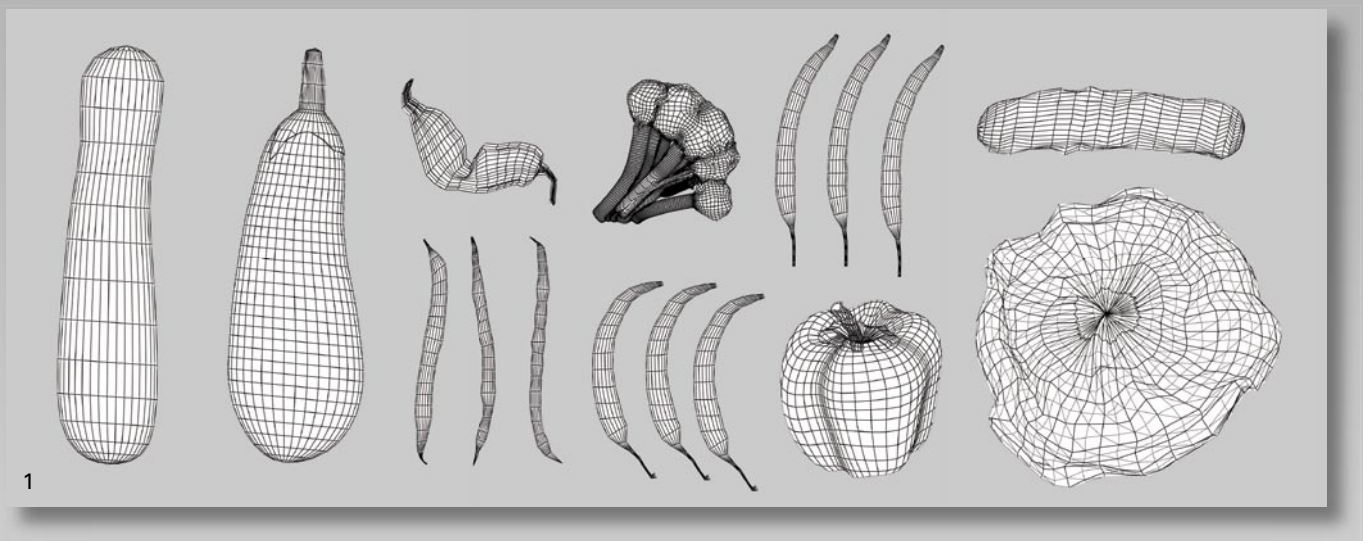
3D generated image "Salad"

Paintings by Giuseppe Arcimboldo (1527 - 1593)

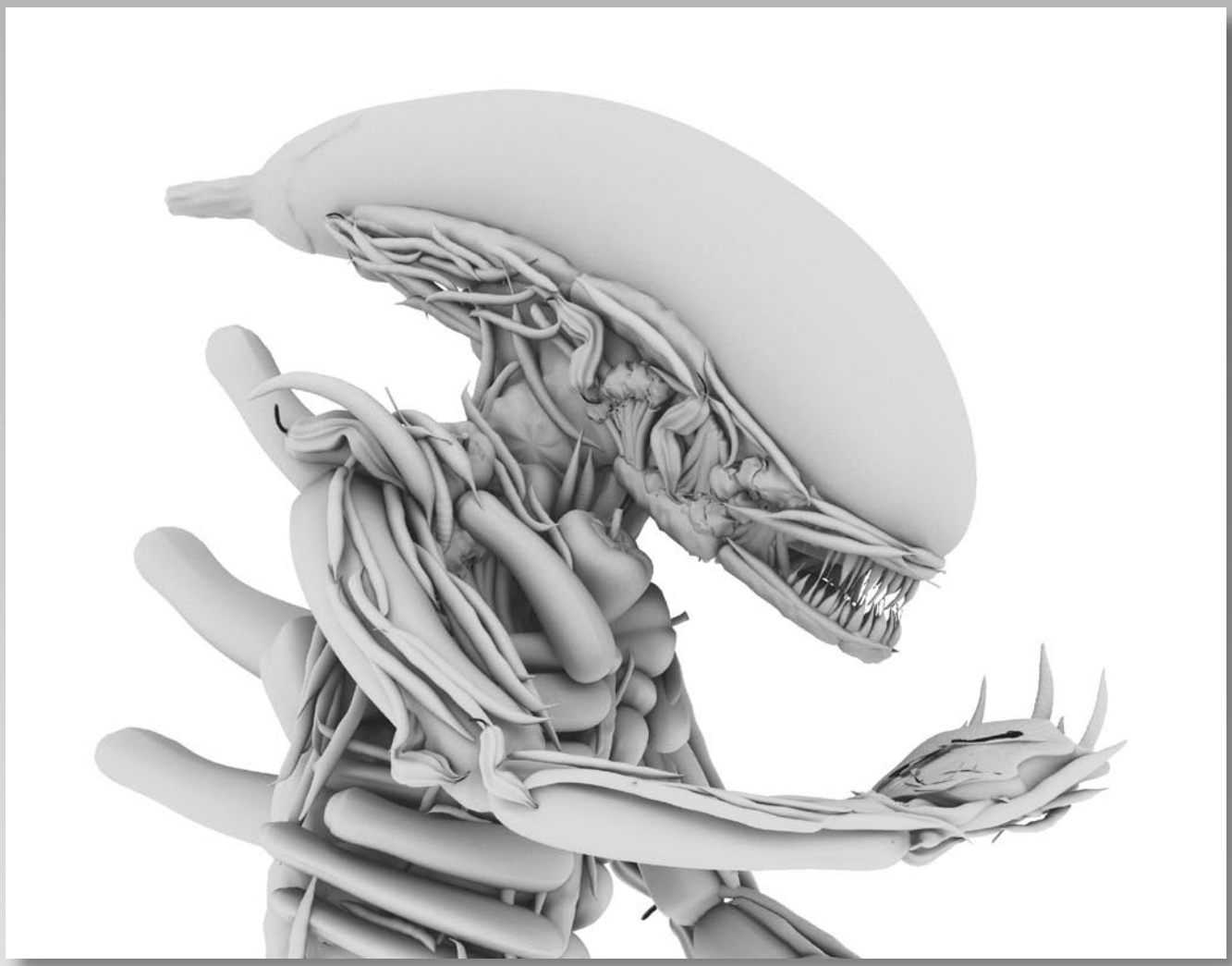


Wireframe model





[1] Wireframe Models
[2] Geometry
[3] Capsicum Texture Sample
[4] Zucchini Texture Sample
[5] Rendering



Ambient Occlusion Pass

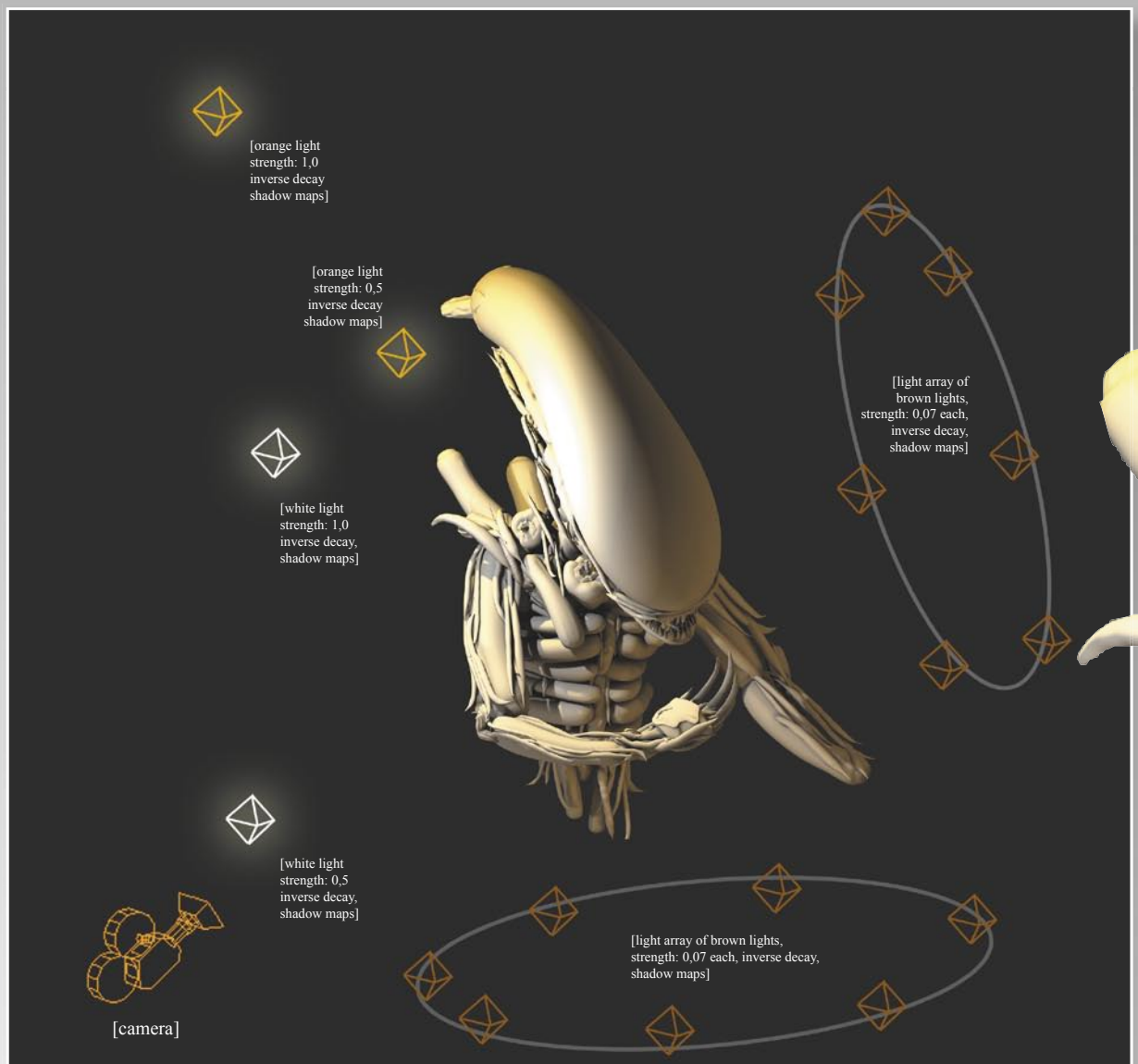
Specular Pass

MODELLING

Till Nowak modelled twelve digital vegetables in 3ds Max using classical polygon modelling techniques. Photographs of fresh vegetables were used for the texturing process. Most of the vegetables started with a cylinder primitive and needed around 30 minutes of work. The modelling was easy – it was much more difficult to find the right places and orientations to build a monster with it.

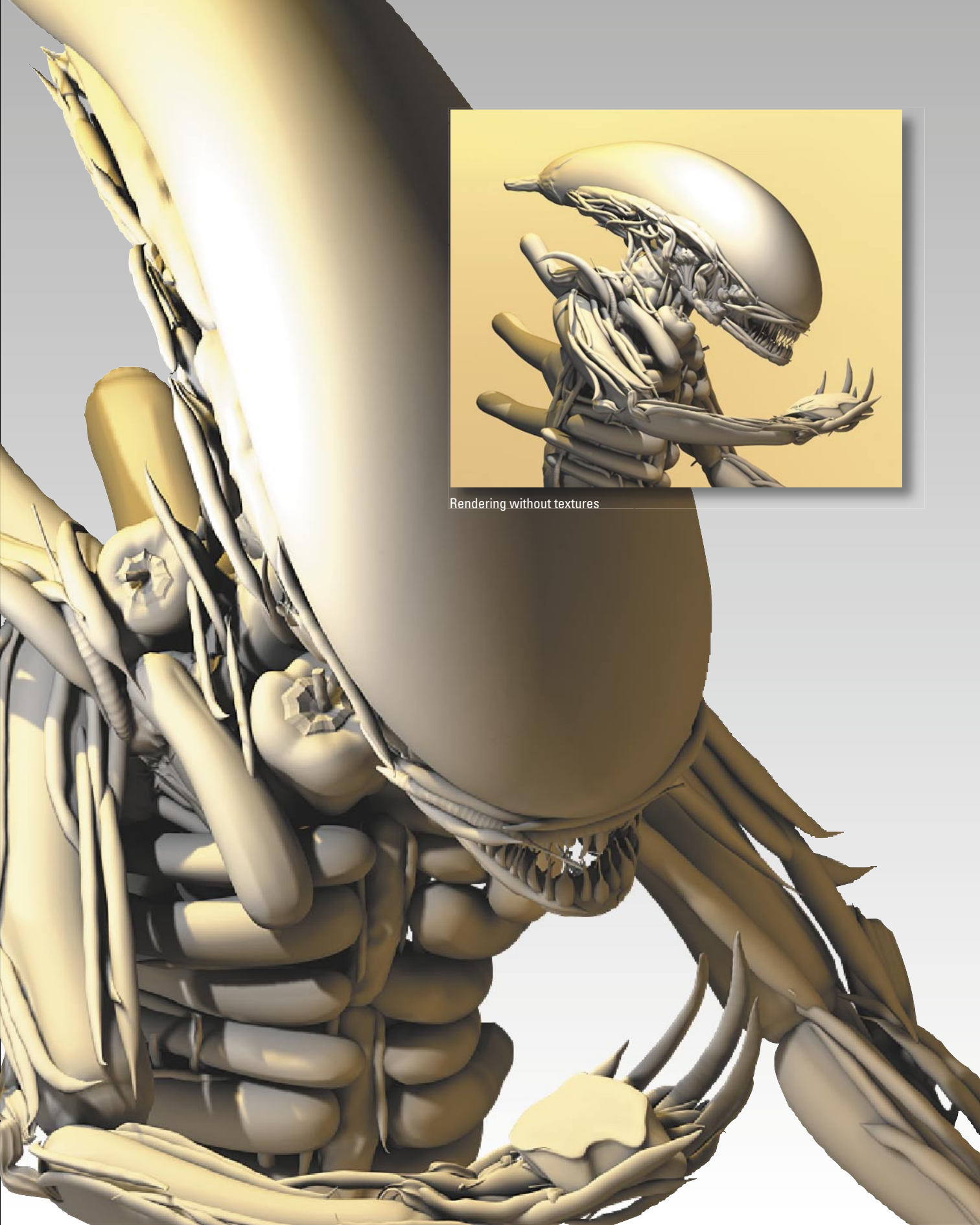
RENDERING

The final image was done by rendering several passes, such as diffuse, specular and ambient occlusion using 3ds Max Scanline renderer and Mental ray. The rendering was done in a few minutes thanks to my lowtech-lighting-methods (see next page).



LIGHTING

I used 4 main lights and 2 arrays of 14 point lights. I often work with point light arrays to get soft area shadows. The more lights you use the better the soft shadows behave, but 7-10 lights in an array are usually enough for me. In Maya I would recommend to use spot lights instead of point lights, but in 3ds Max there is not much difference regarding the render time. This way of lighting a scene for me is the most intuitive way and it renders very fast in comparison to global illumination or "real" area shadows. The complete "salad" image for example only renders 10 minutes in 4000x4000 pixel. For this simple lighting technique it's important that shadows and a decay are enabled for every light source.



Rendering without textures

SALAD IN THE TRAP

This is an alternative version that I developed after finishing the basic model. In the end I found the reduced portrait version is stronger, because it focusses more on the basic idea with the vegetables. This version was ment to create a story about wholesome vegetables stepping into a trap. At the same time it can look like the meat is the victim in a fight between vegetables and meat. I made this second version to play with the cinematic look.

To modell the web I used the cloth physics of 3ds max *reactor* to lay a simple plane over the vegetables. Then I used the "edit mesh" modifier to convert the edges of the polygons to a spline. After that I used the modifier "lattice" to create the joints at the connection points and some texturing.