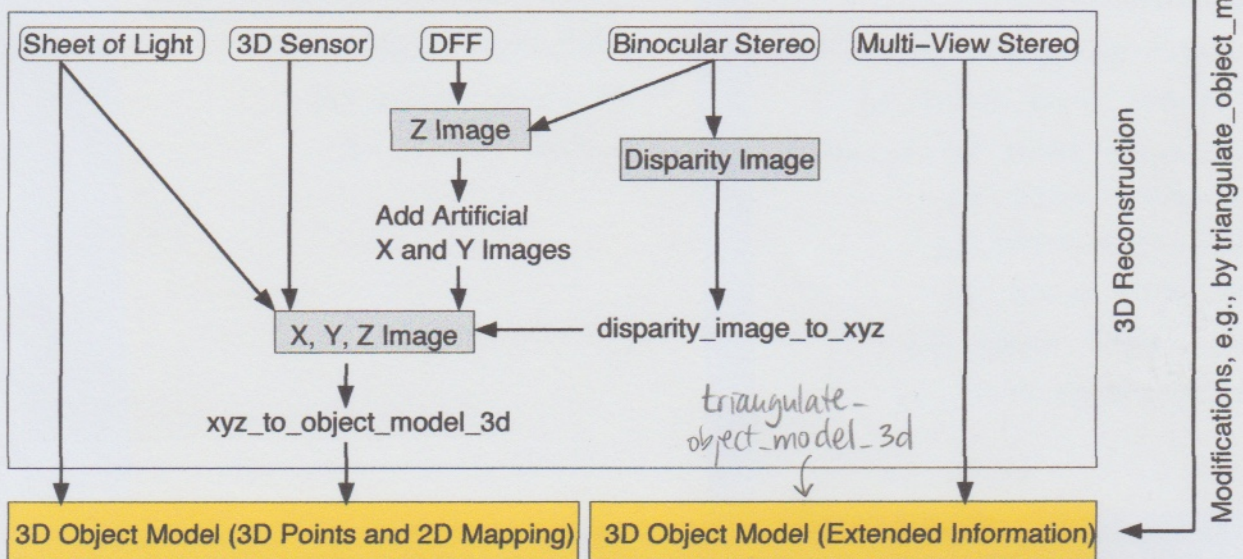
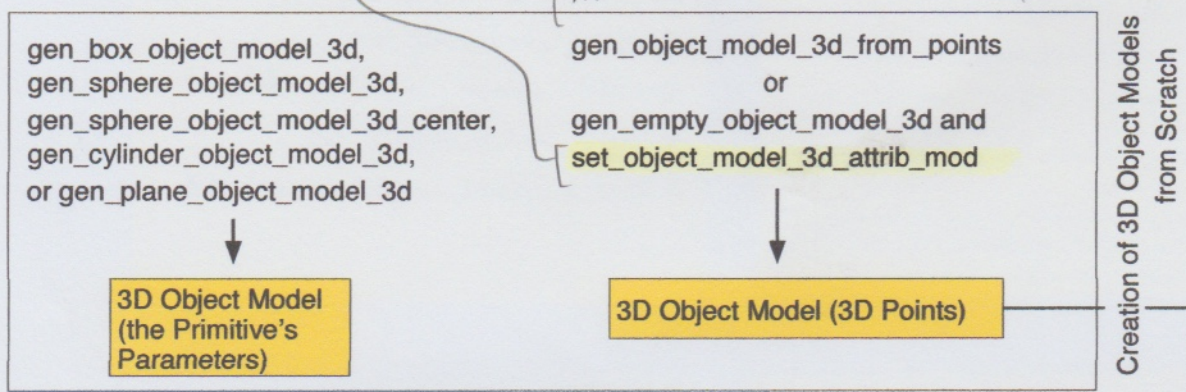
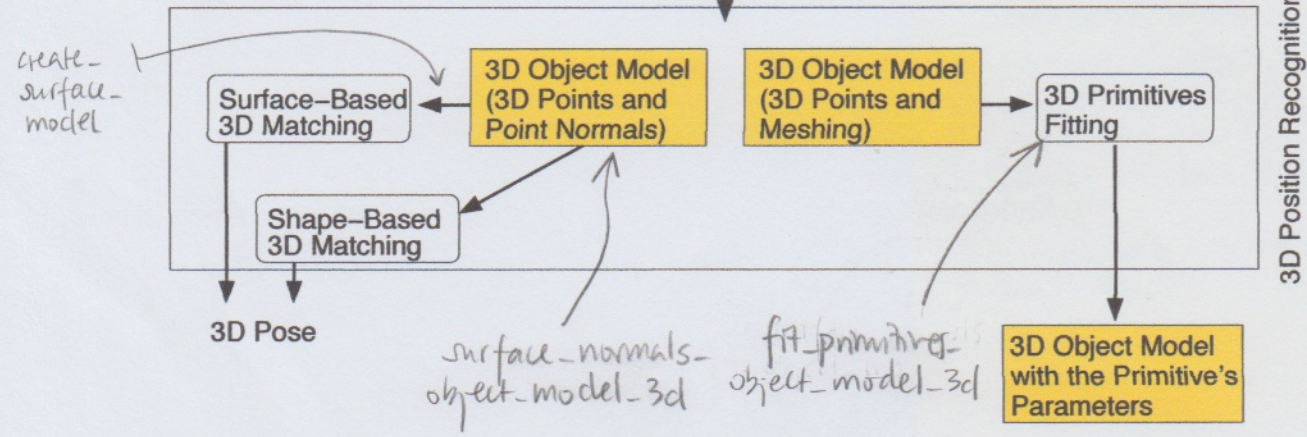


Overview of 3D Object Model

Standard {
 point-word-x/y/z
 point-normal-x/y/z
 score (point-wise)
 triangles/polygons
 xyz-mapping
 Extended {
 'distance' ← associated to
 ...
 }
 for complete list:
 get_object_model-3d-params
 object points
 ...



eg, CAD Models (DXF, PLY, STL...)
 read_object_model_3d → prepare_object_model_3d → Purpose {
 segmentation
 distance computation
 shape-based matching
 ...
 }
 ↳ scale?



TRANSFORMATIONS {
 rigid-trans-object-model-3d
 affine-trans-object-model-3d
 projective-trans-object-model-3d
 }

ATTRIBUTES / PROPERTIES

smallest-bounding-box-object-...
volume-object-model-3d-rel-plane
max-diameter-object-...
distance-object-model-3d
area-object-model-3d
moments-object-model-3d
intersect-plane-object-model-3d
set-object-model-3d-attrb(mod)
get- " -
connection-object-model-3d
select-object-model-3d

FEATURES

area-object-model-3d
distance-object-model-3d
max-diameter-object-model-3d
moments-object-model-3d
smallest-bounding-box-...
smallest-sphere-object-model-3d
volume-object-model-3d...
intersect-plane-object-model-3d

MODIFYING POINT CLOUDS

set-object-model-3d-attrb-mod
select-points-object-model-3d
reduce-object-model-3d-by-view
sample-object-model-3d
simplify-object-model-3d
smooth-object-model-3d
segment-object-model-3d
connection-object-model-3d

MODIFICATIONS / SEGMENTATION

segment-object-model-3d
union-object-model-3d
fuse-object-model-3d

VISUALIZATION

visualize-object-model-3d(
... [objects], PoseVisuIn, ParNames,
ParValues, Label, Instructions,
PoseVisuOut, ...) → INTERACTIVE
disp-object-model-3d (1 model,
no compar)
display-scene-3d (N models,
several cams &
views)