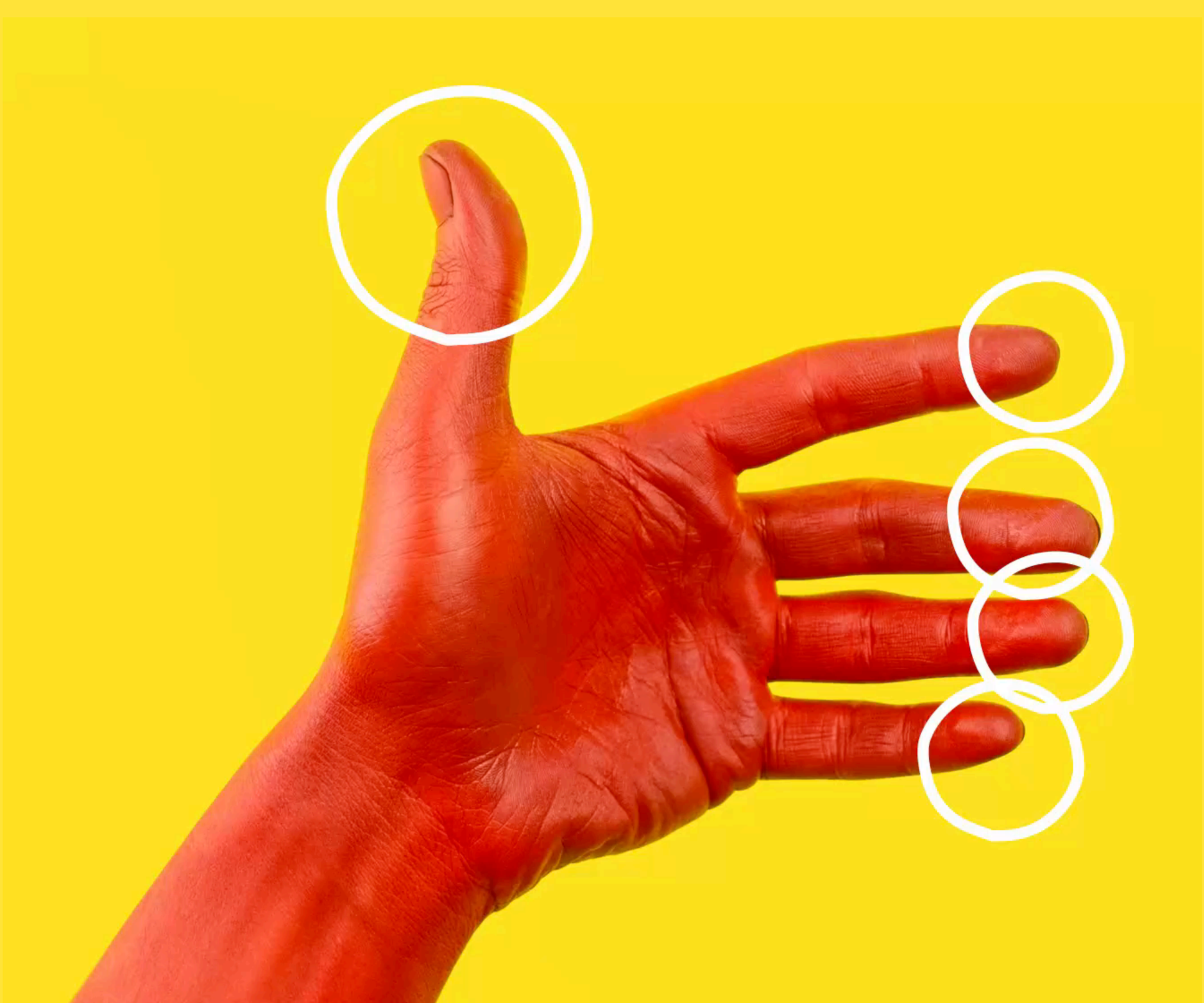


Three.js

Алексей Литвинов

Scene

- Cameras
- Lights
- Objects

https://threejs.org/docs/index.html#api/scenes/Scene

Object3D

Properties

- name
- position
- rotation
- scale

Object3D

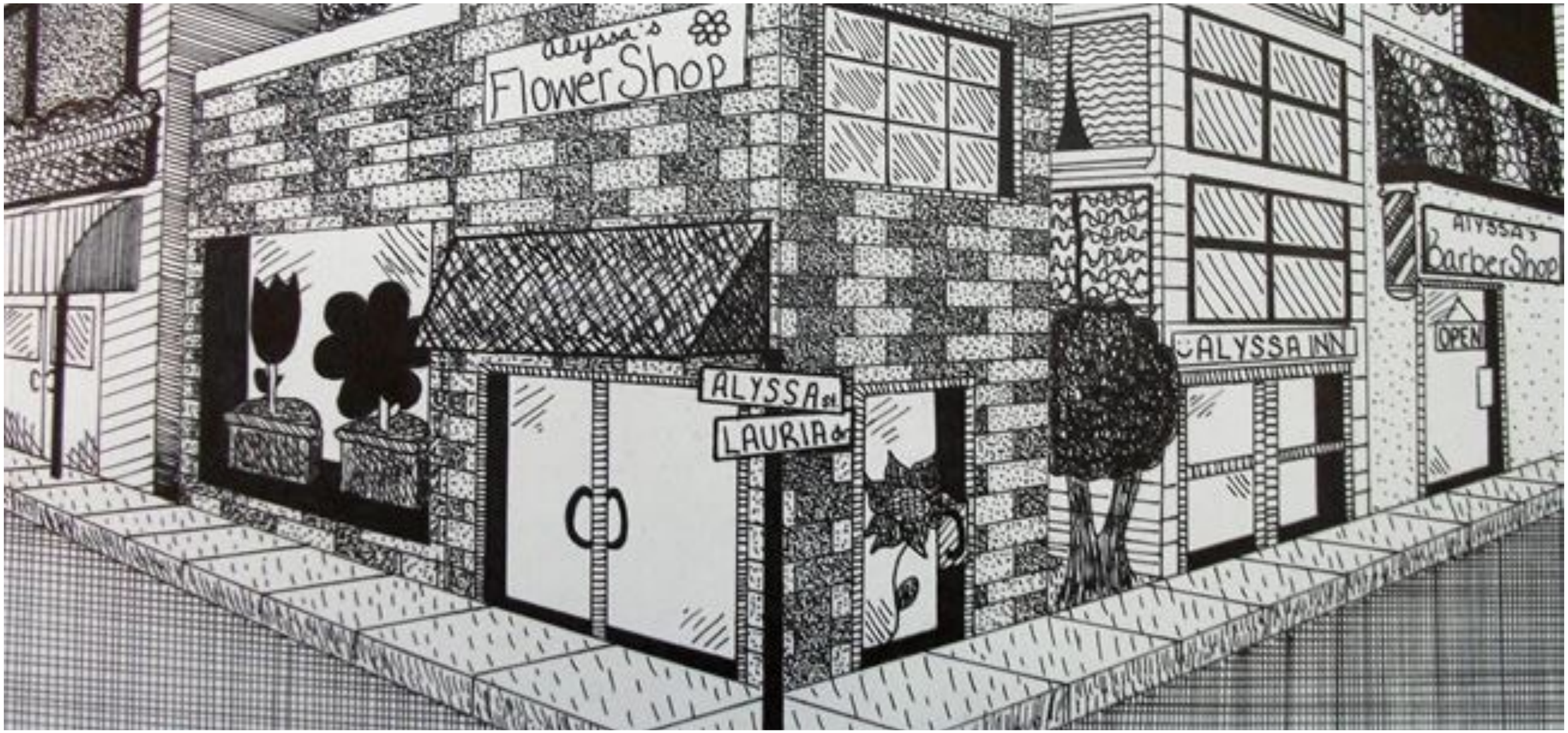
Methods

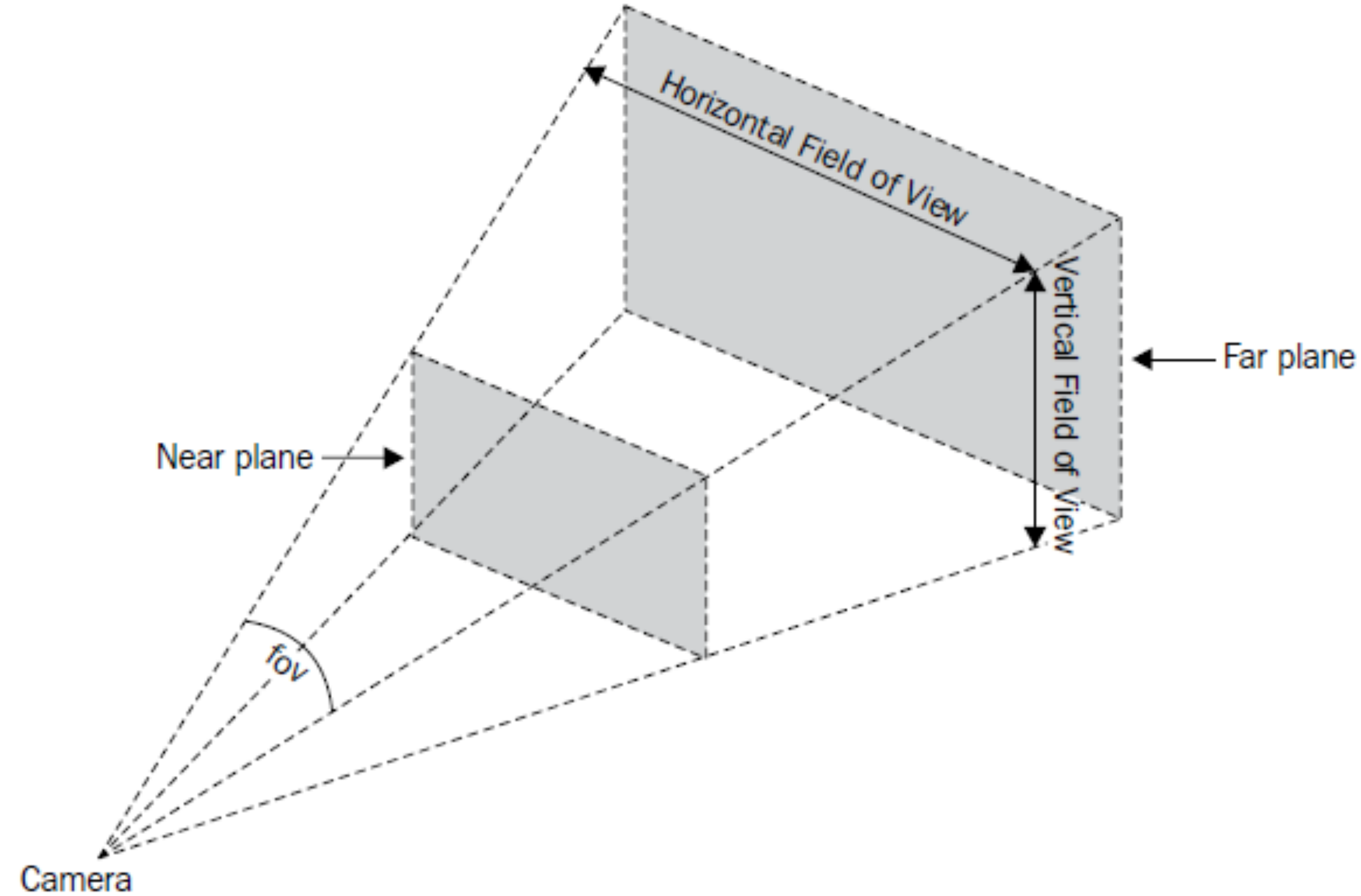
- add(obj)
- getObjectByName(name)
- traverse(fn)
- rotateX(rad)
- translateX(amount)

Cameras Types

- Perspective camera
- Orthographic camera

Perspective View




Horizontal Field of View
Vertical Field of View
Far plane
Near plane
fov
Camera

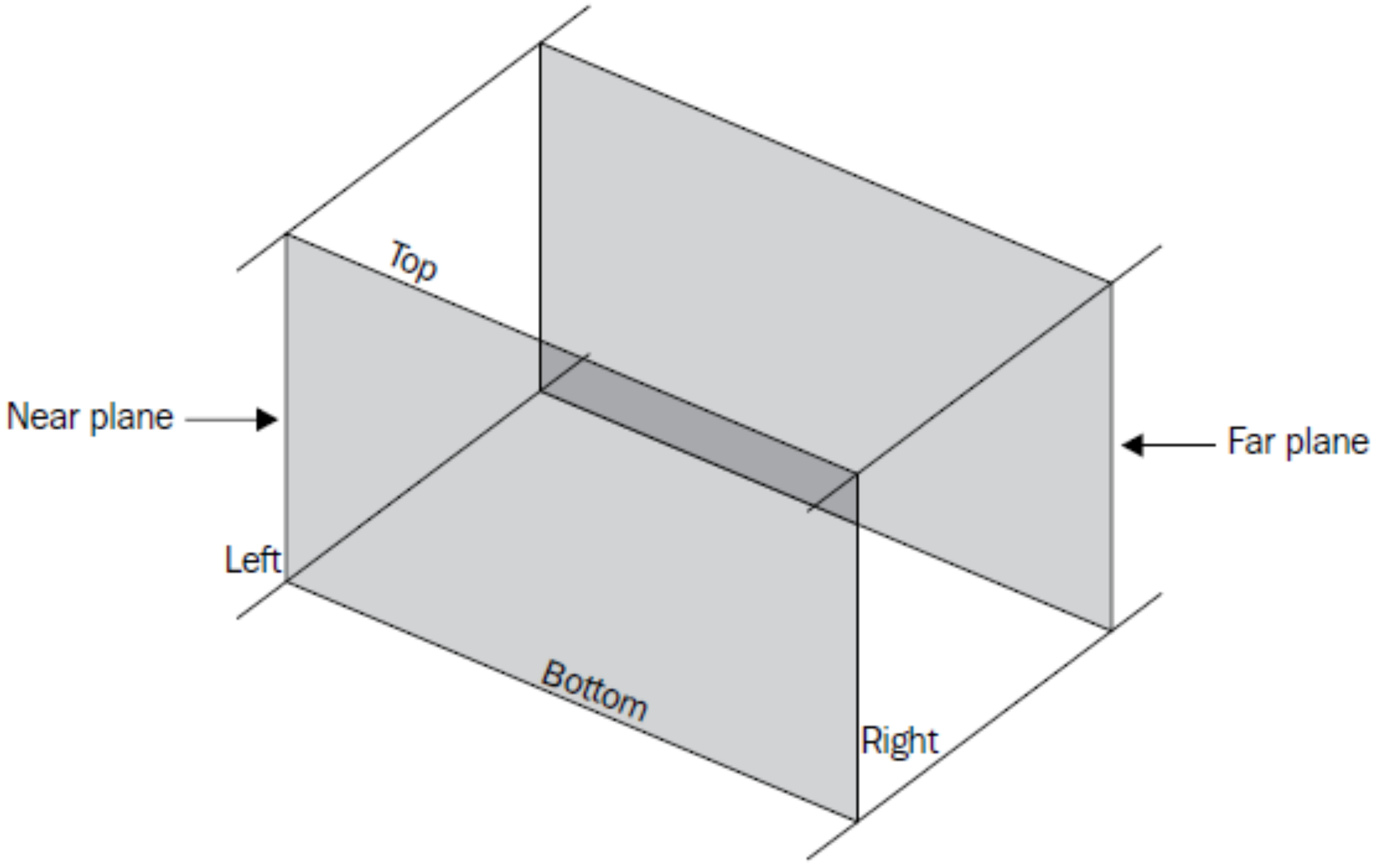
Perspective Camera

- fov — Field of view. 60...90 degrees is normally chosen
- aspect — Aspect ratio. aspect = width / height
- near — Defines from how close to the camera the Three.js library should render the scene
- far — The far property defines how far the camera can see from the position of the camera.

```
new THREE.PerspectiveCamera( fov, aspect, near, far )
```

https://threejs.org/docs/index.html#api/cameras/PerspectiveCamera

Orthographic View


Top
Near plane
Far plane
Left
Bottom
Right

- left
- right
- top
- bottom
- near
- far

new OrthographicCamera(left, right, top, bottom, near, far)

https://threejs.org/docs/index.html#api/cameras/OrthographicCamera

Light Types

- AmbientLight — Illuminates all objects in the scene equally
- DirectionalLight — Emits in a specific direction
- HemisphereLight — A light source positioned directly above the scene
- PointLight — Emits from a single point in all directions
- RectAreaLight — Emits uniformly across the face a rectangular plane
- SpotLight — Emits from a single point in one direction, along a cone

https://threejs.org/docs/index.html#api/lights/Light