GLAVNet: Global-Local Audio-Visual Cues for Fine-Grained Material Recognition
Supplementary Document

Fengmin Shi[1], Jie Guo[1,†], Haonan Zhang[1], Shan Yang[1], Xiying Wang[2], Yanwen Guo[1,†]
[1]State Key Lab for Novel Software Technology, Nanjing University [2]IQIYI Intelligence

In this supplementary document, we provide more details about the proposed *GLAudio* dataset, including

- properties of selected materials (Tables 1 and 2),

- visualization of all 37 virtual objects (Fig. 1),

- examples of global geometries, local geometries and the corresponding sounds for virtual objects (Fig. 2),

- visualization of all real objects, including their reconstructions, hitpoints, sound waves (selected) and spectrograms (selected) (Fig. 3).

Material	Aluminum	Iron	Steel	Gold	Copper	Brass	Silver	Nickel	Zinc
Density(kg/m^3)	2700	7800	7800	19300	8900	8500	10500	8900	7130
Young's modulus(GPa)	72	200	210	80	125	95	80	205	13
Poisson ratio	0.34	0.30	0.31	0.43	0.35	0.34	0.37	0.30	0.33
Loss factor(10^{-3})	0.1	0.2	0.15	0.3	2	0.1	1.5	1	0.3

Table 1. Properties of selected materials in GLAudio.

Material	Tin	Oak	Fir	Plywood	MDF	Glass	Plastic	Ceramic
Density(kg/m^3)	7280	700	400	600	600	2500	1150	2600
Young's modulus(GPa)	4.4	2	1	5.4	4.6	60	3	60
Poisson ratio	0.39	0.35	0.34	0.30	0.25	0.2	0.33	0.23
Loss factor(10^{-3})	2	10	8	13	20	1.3	3	10

Table 2. Properties of selected materials in GLAudio. (continued)

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† Corresponding Authors.
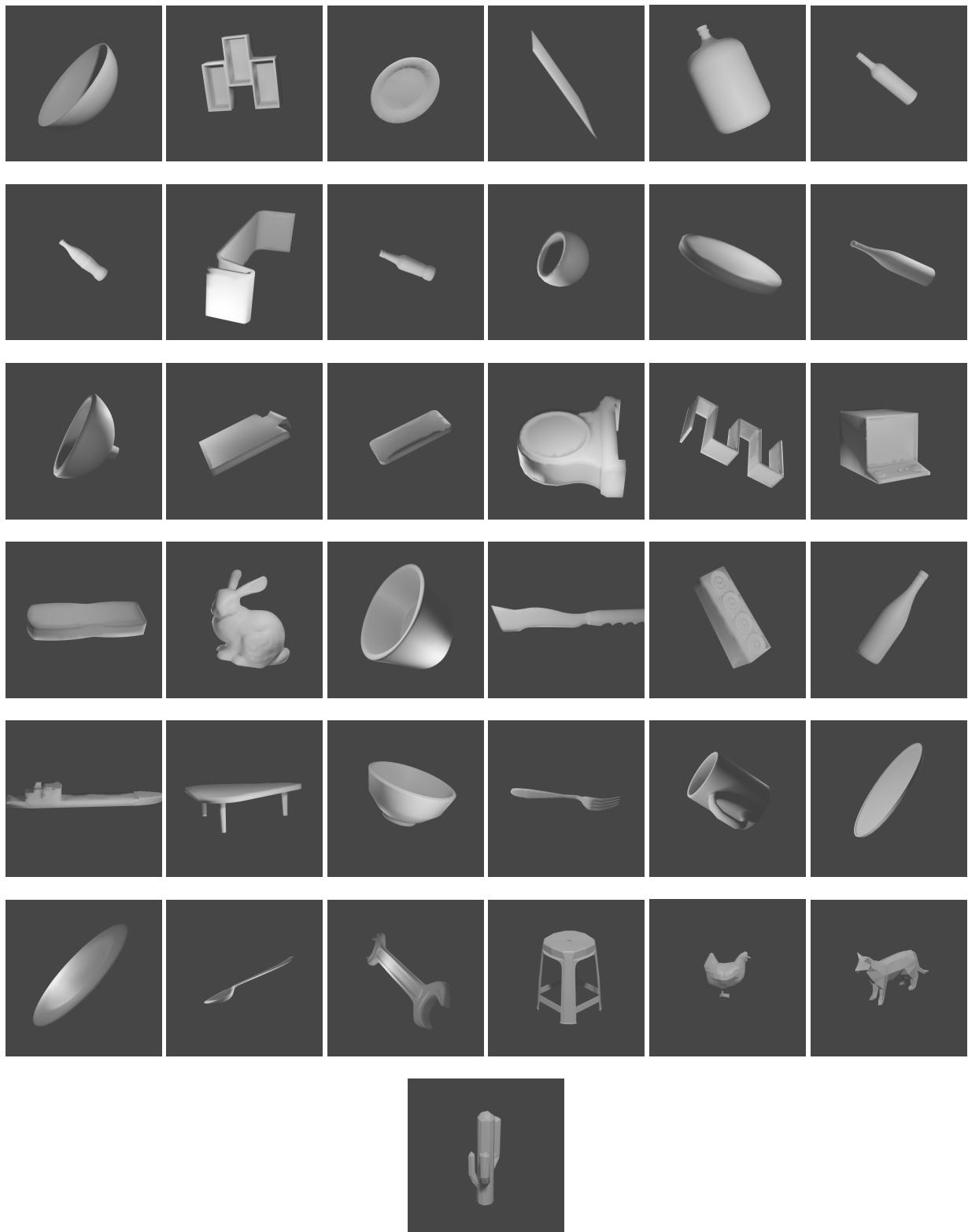
Figure 1. Visualization of all 37 virtual objects used in the GLAudio dataset.
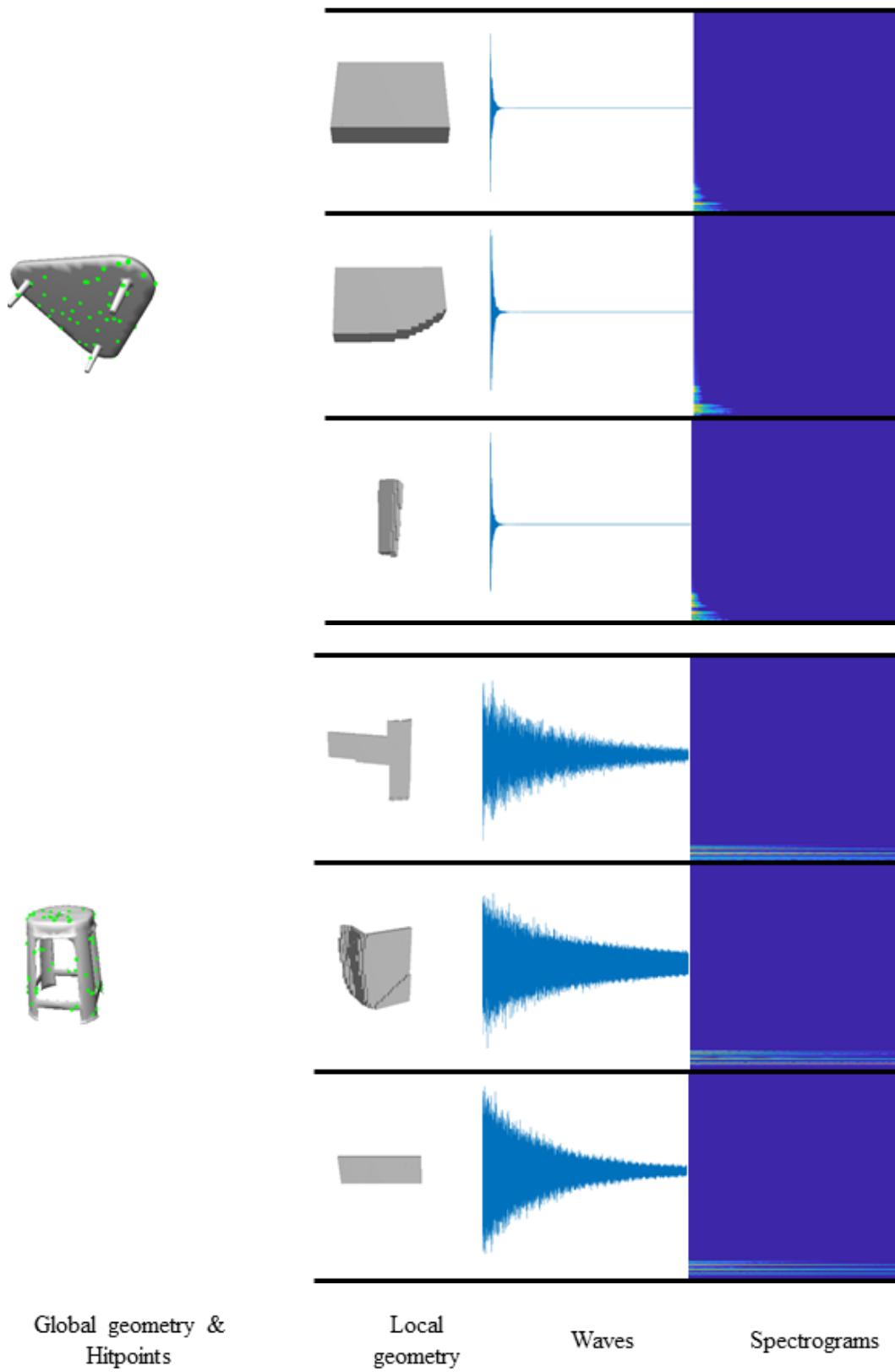
Figure 2. Examples of global geometries, local geometries and the corresponding sounds.

| Global geometry & Hitpoints	Local geometry	Waves	Spectrograms
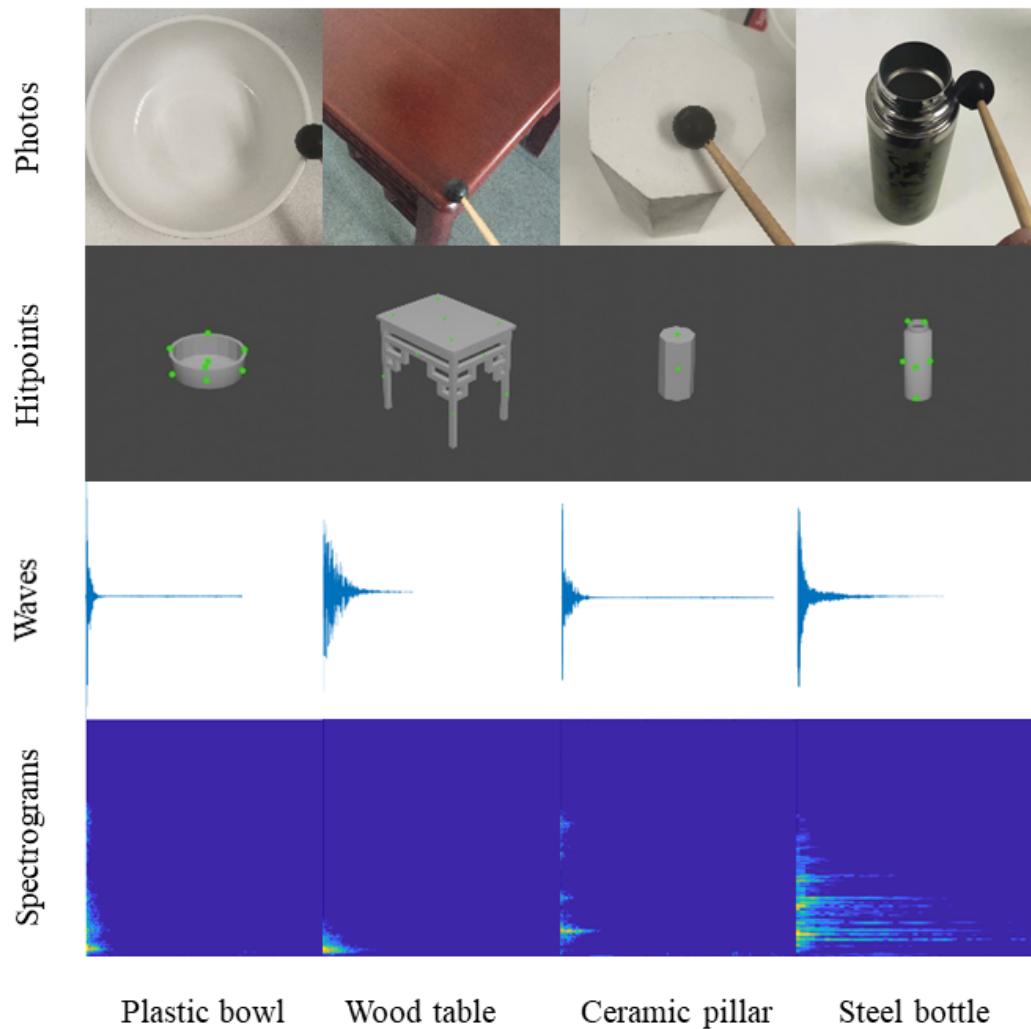
Figure 3. Visualization of all real objects and their reconstructions, hitpoints, sound waves (selected) and spectrograms (selected).