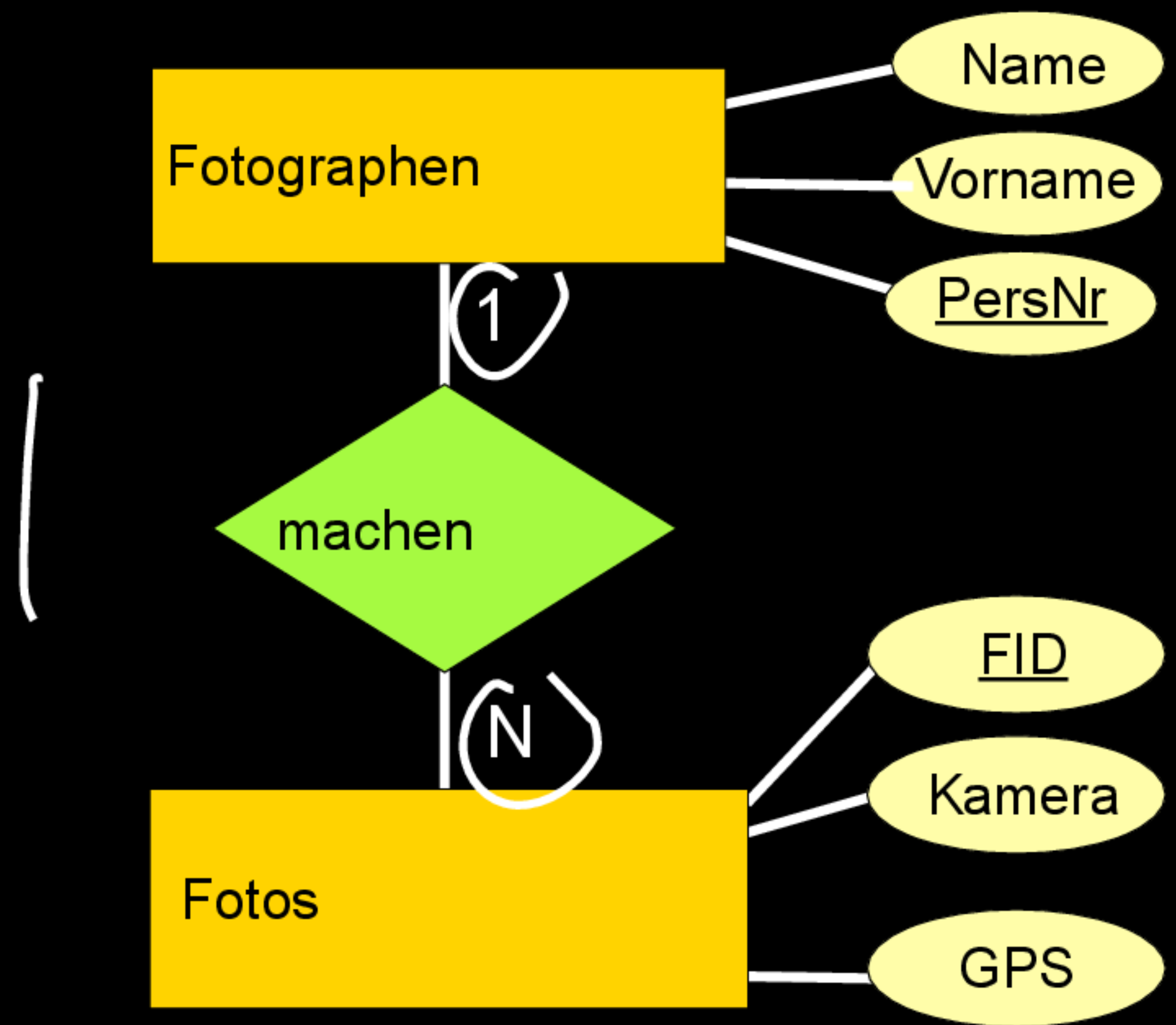


1:N Vereinfachen

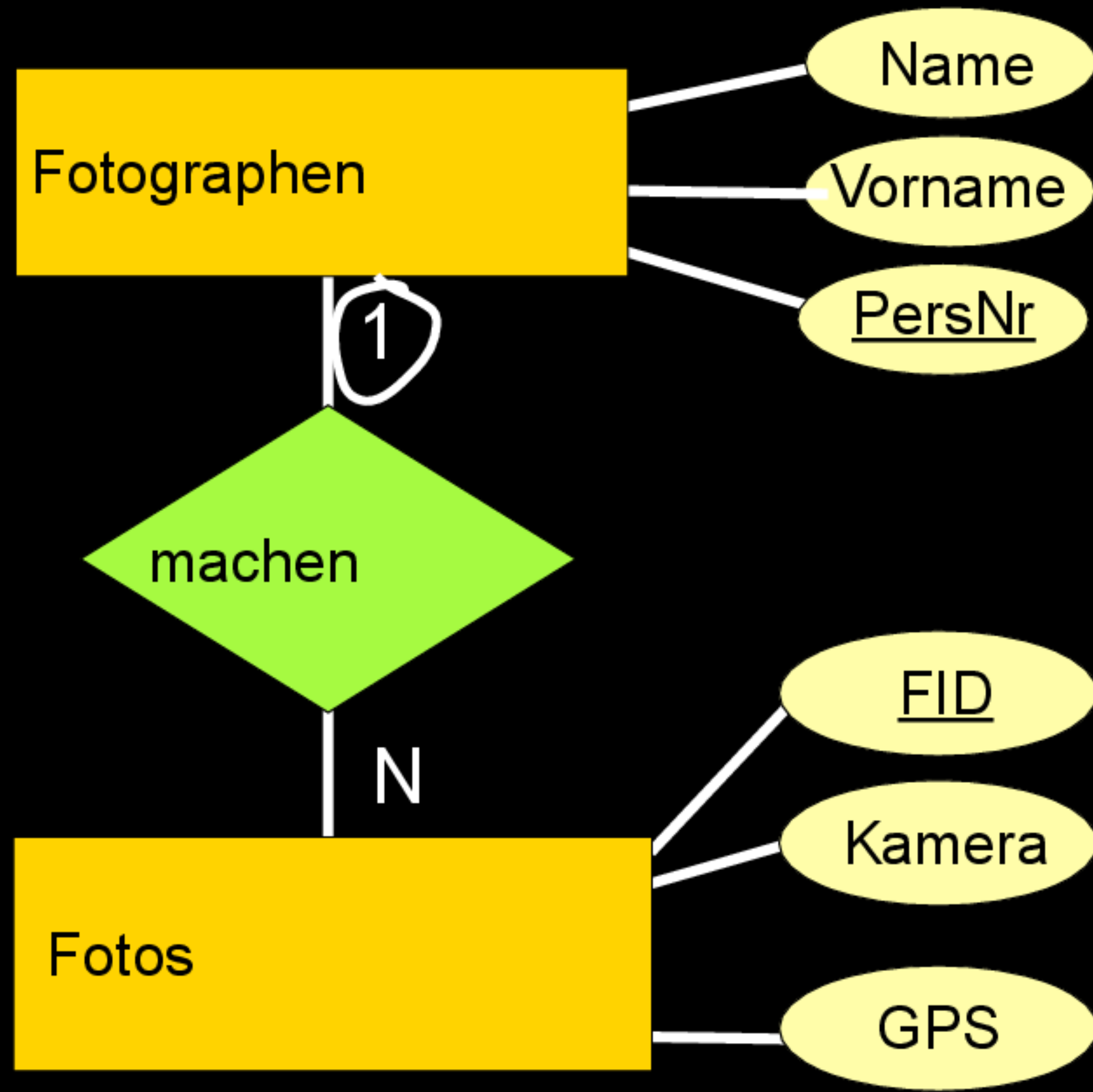


[Fotographen] : {[Name: string, Vorname: string, PersNr: int]}

[machen] : {[PersNr: int, FID: int]}

[Fotos] : {[FID: int, Kamera: string, GPS: point]}

1:N Vereinfacht

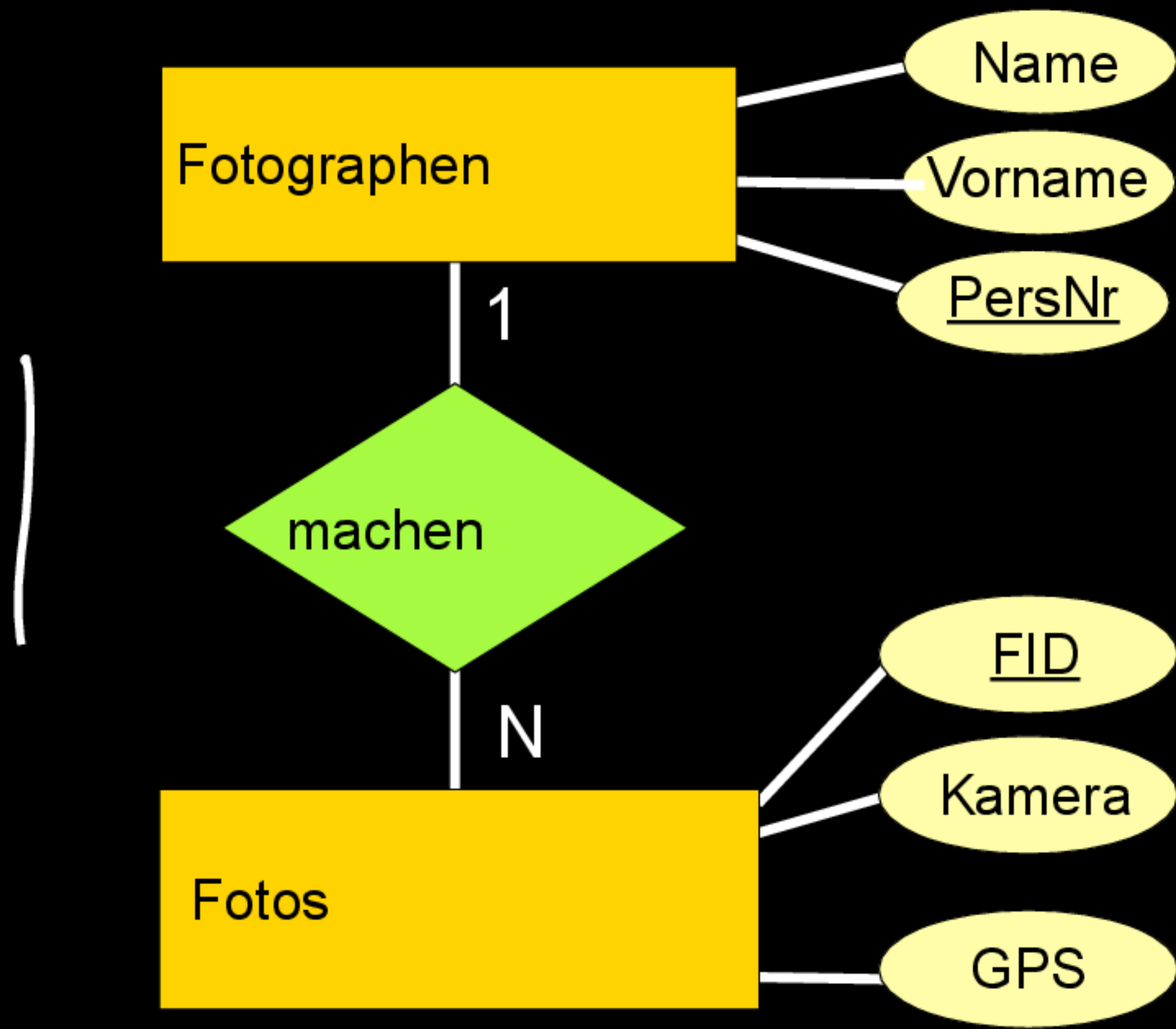


[Fotographen] : {[Name: string, Vorname: string, PersNr: int]}

[Fotos] : {[FID: int, Kamera: string, GPS: point, gemachtVon: int]}

↘ Fremdschlüssel

1:N Vereinfacht



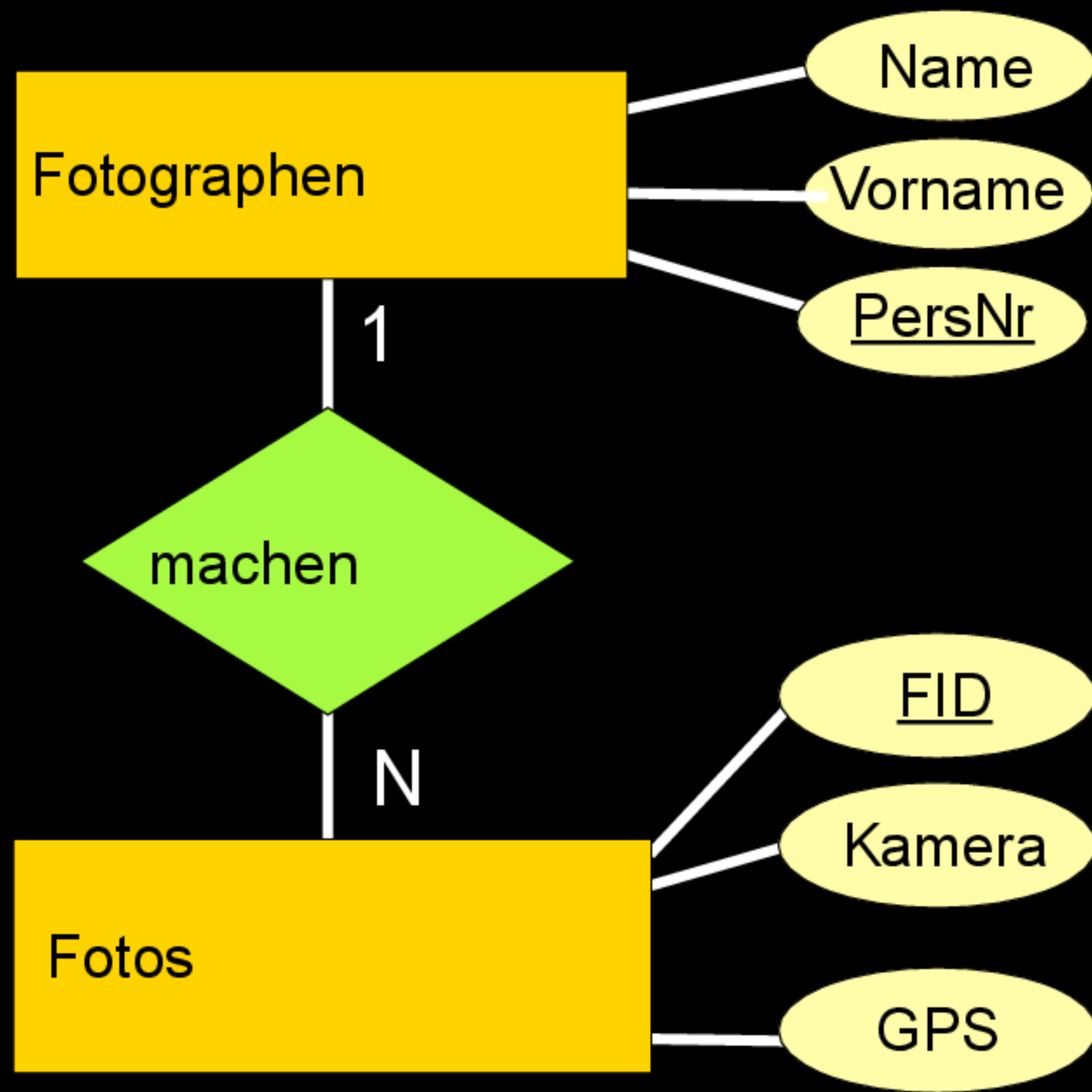
Fotos			
<u>FID</u>	Kamera	GPS	gemachtVon
13	Canon	(49°15'24.04"N, 7°2'45.48"E)	11
7	Canon	(49°14'20.14"N, 7°2'44.48"E)	11
43	Nikon	(49°15'24.04"N, 7°2'44.49"E)	11
22	Sony	(49°15'22.11"N, 7°2'43.52"E)	42
4	Sony	(49°15'25.33"N, 7°2'45.38"E)	42
...

[Fotografaphen] : {[Name: string, Vorname: string, PersNr: int]}

[Fotos] : {[FID: int, Kamera: string, GPS: point, gemachtVon: int]}

↙ Fremdschlüssel

1:N **FALSCH** Vereinfachen

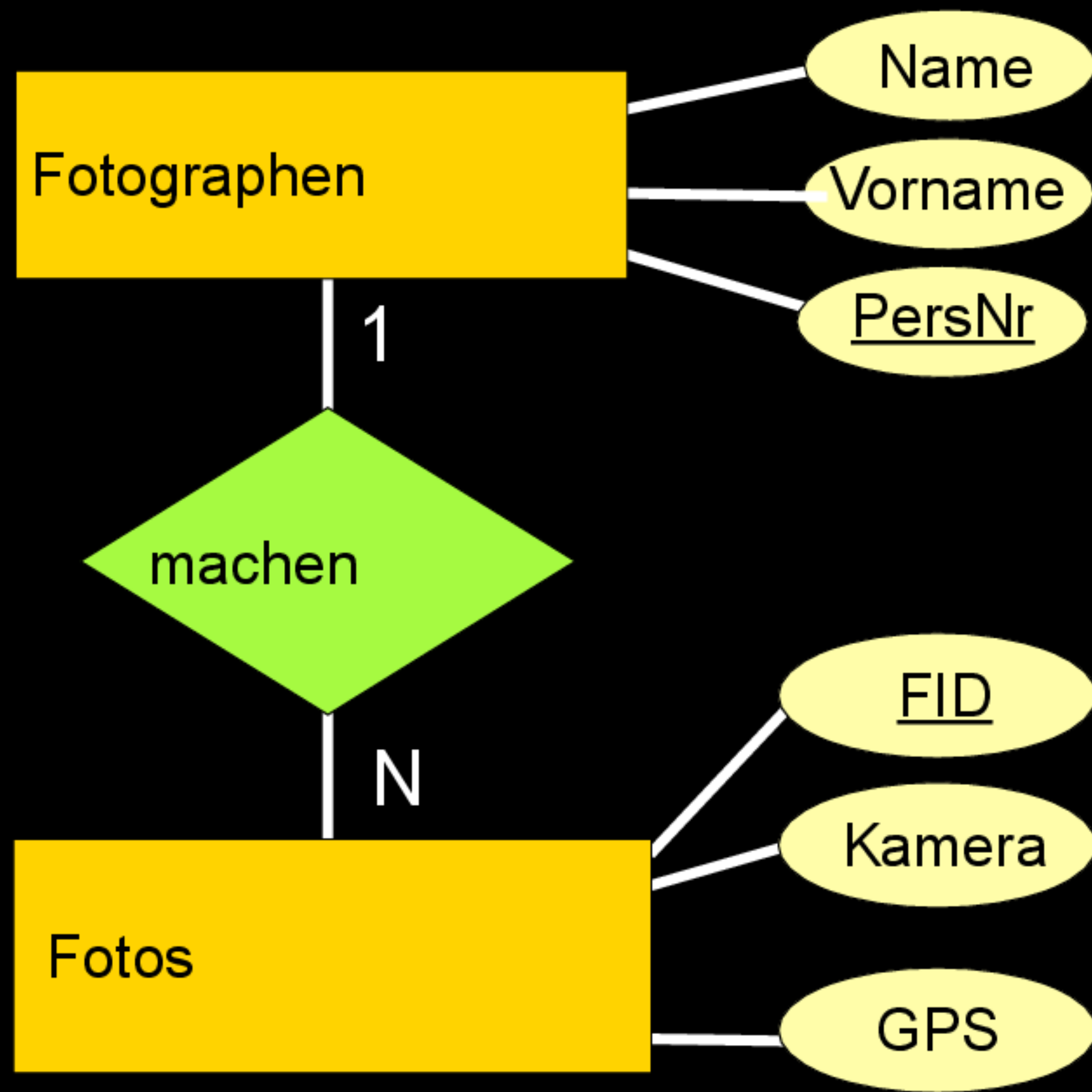


[Fotographen] : {[Name: string, Vorname: string, PersNr: int]}

[machen] : {[PersNr: int, FID: int]}

[Fotos] : {[FID: int, Kamera: string, GPS: point]}

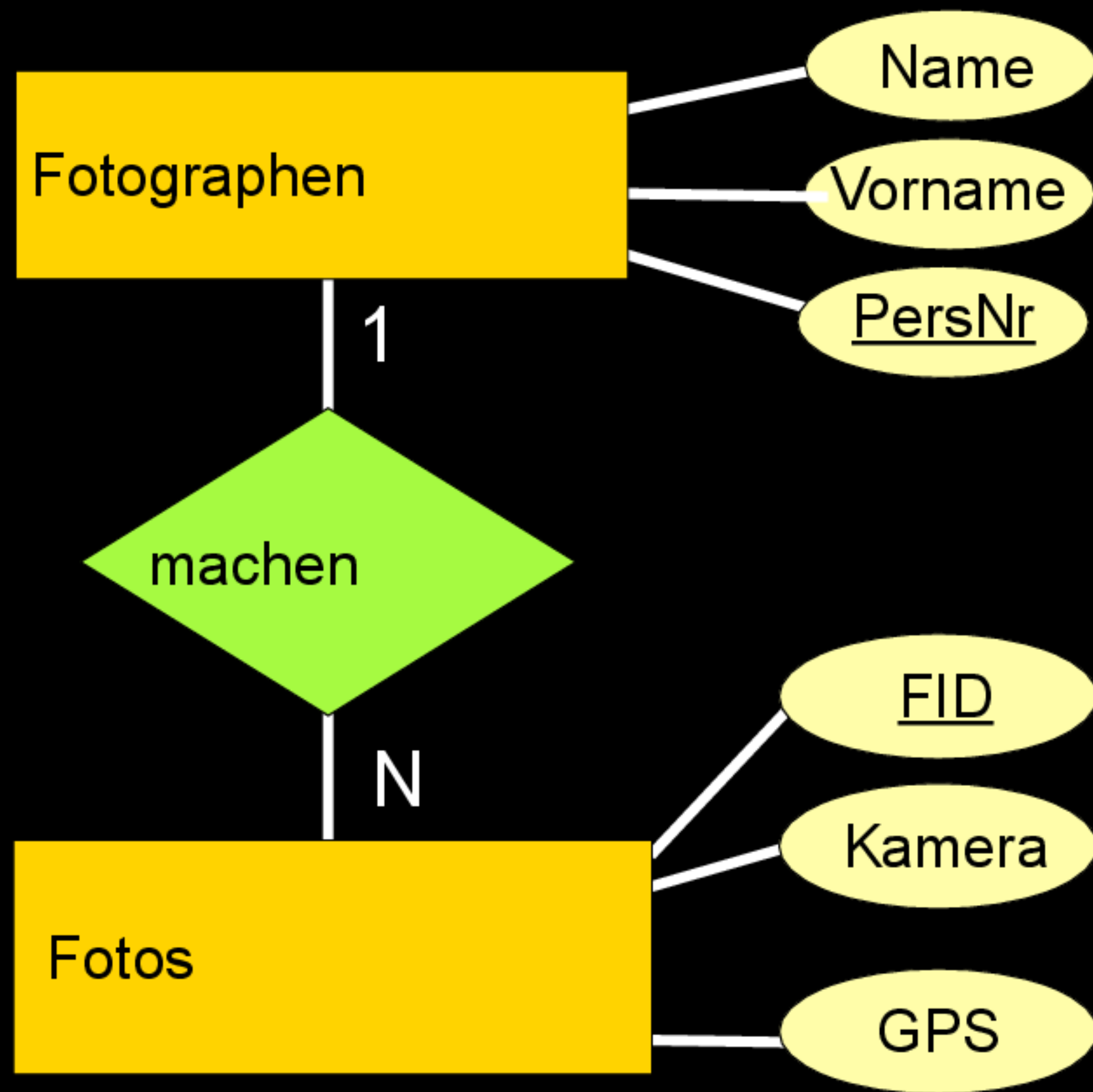
1:N **FALSCH** Vereinfacht



→ [Fotographen] : {[Name: string, Vorname: string, PersNr: int, machtFoto: int]}

[Fotos] : {[FID: int, Kamera: string, GPS: point]}

1:N **FALSCH** Vereinfacht

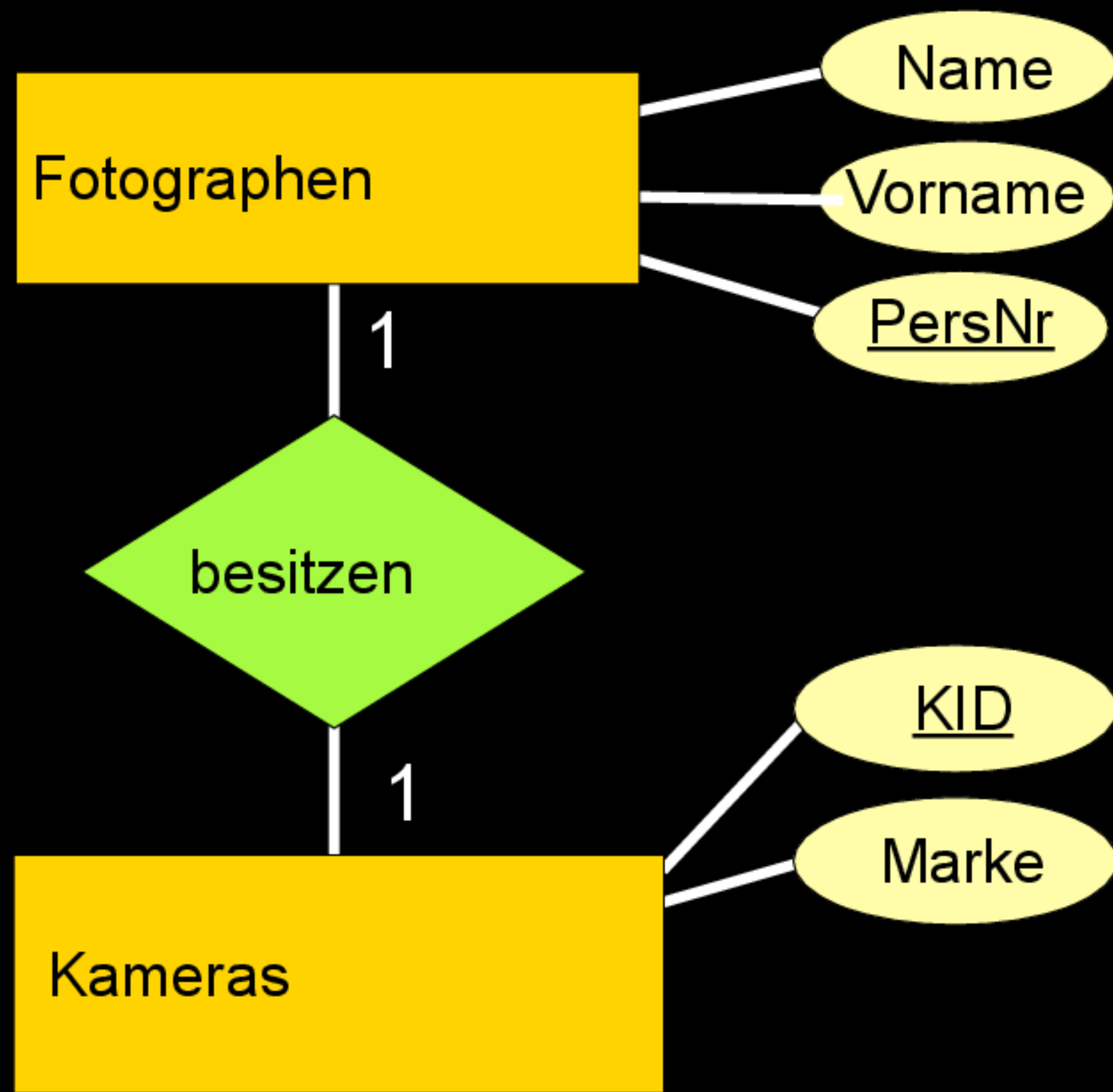


Fotographen			
Name	Vorname	<u>PersNr</u>	<u>machtFoto</u>
Schmidt	Albert	42	11
Schmidt	Albert	42	4
Schmidt	Albert	42	9
Capa	Rob	12	32
Capa	Rob	12	77
...

[Fotographen] : {[Name: string, Vorname: string, PersNr: int, machtFoto: int]}

[Fotos] : {[FID: int, Kamera: string, GPS: point]}

1:1 Vereinfachen, Option 1

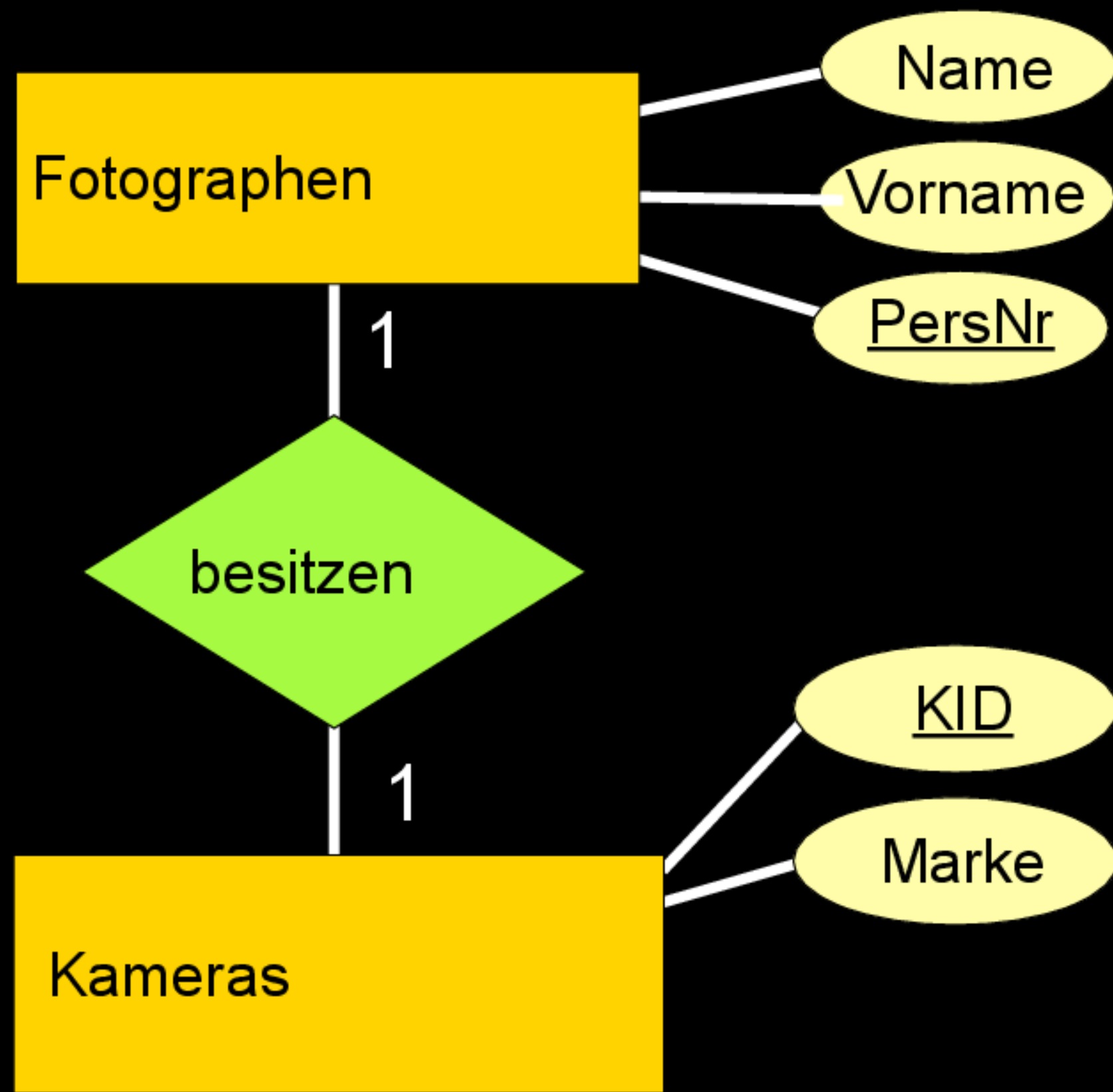


[Fotographen] : {[Name: string, Vorname: string, PersNr: int]}

→ [besitzen] : {[PersNr: int, KID: int]}

[Kameras] : {[KID: int, Marke: string]}

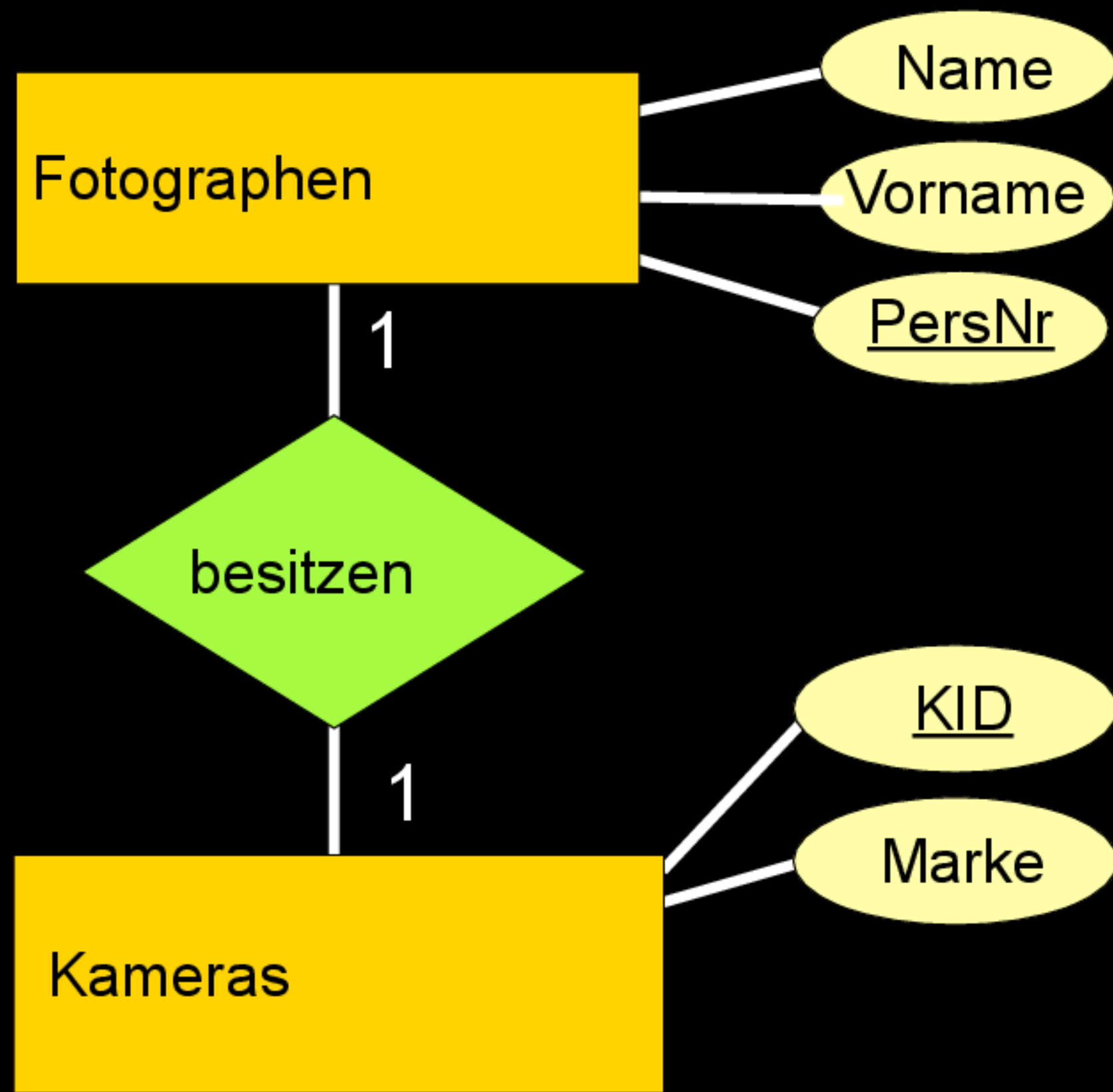
1:1 Vereinfacht, Option 1



[Fotographen] : {[Name: string, Vorname: string, PersNr: int]}

[Kameras] : {[KID: int, Marke: string, PersNr: int]}

1:1 Vereinfachen, Option 2

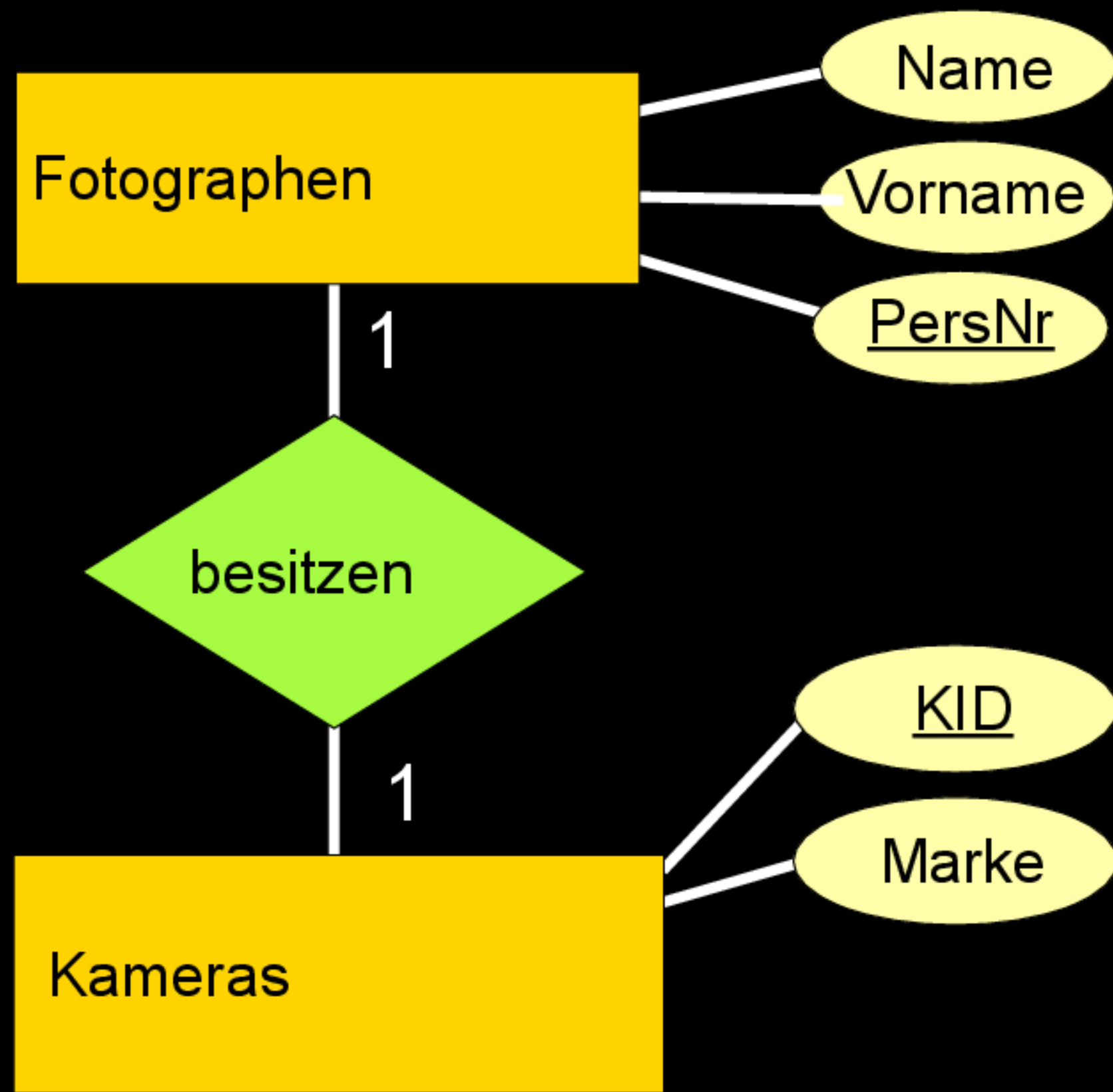


[Fotographen] : {[Name: string, Vorname: string, PersNr: int]}

[besitzen] : {[PersNr: int, KID: int]}

[Kameras] : {[KID: int, Marke: string]}

1:1 Vereinfacht, Option 2

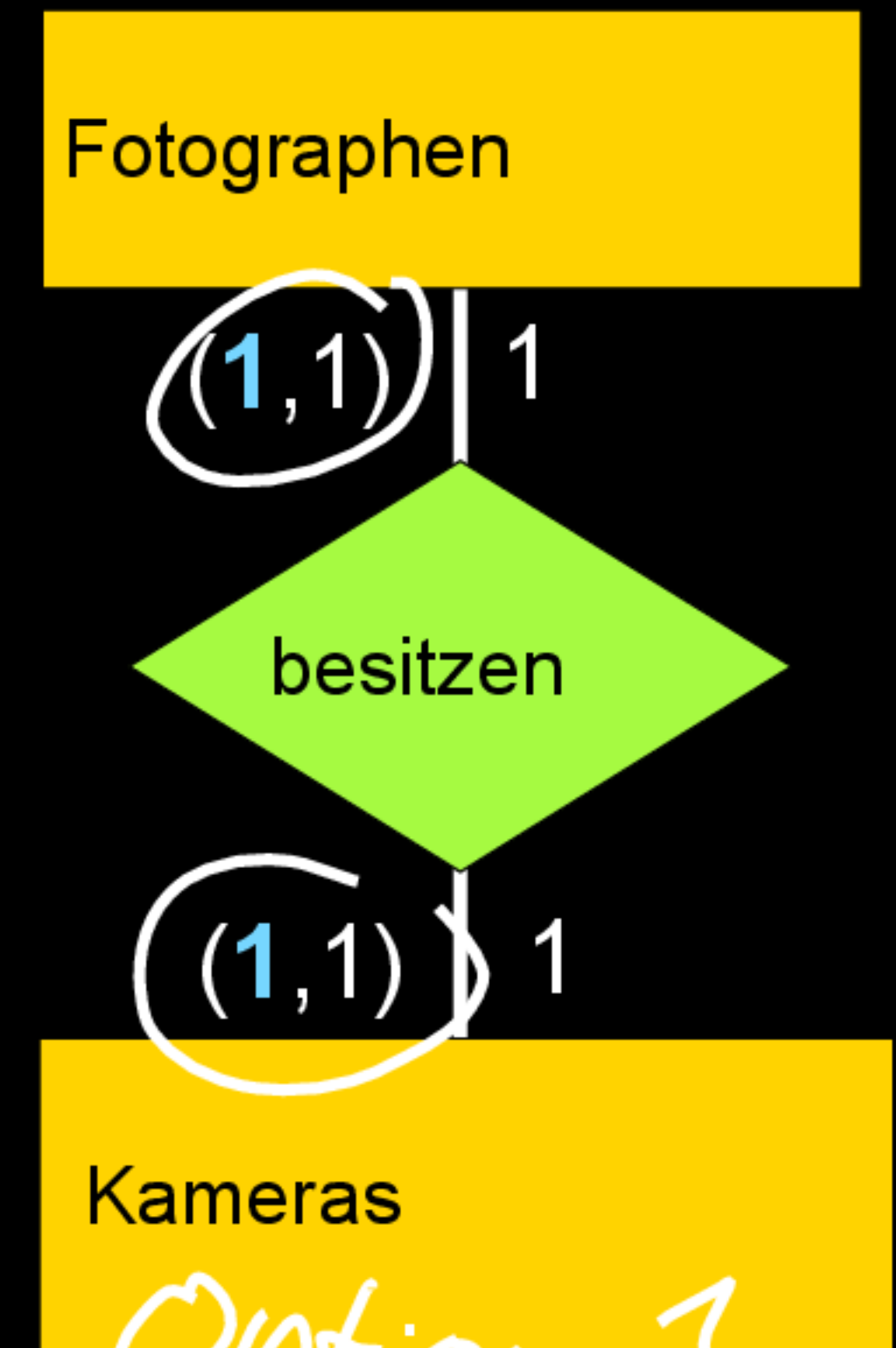
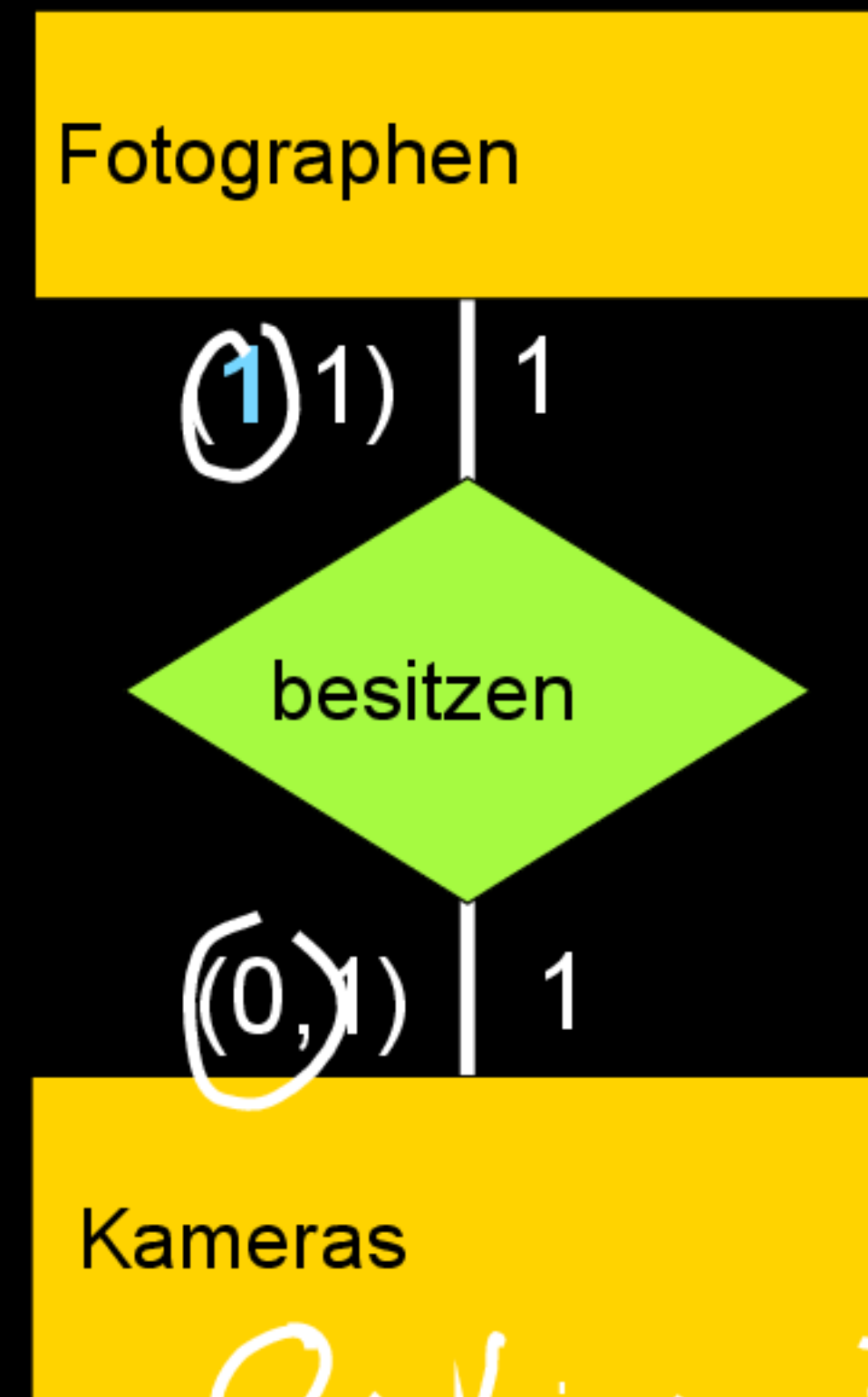
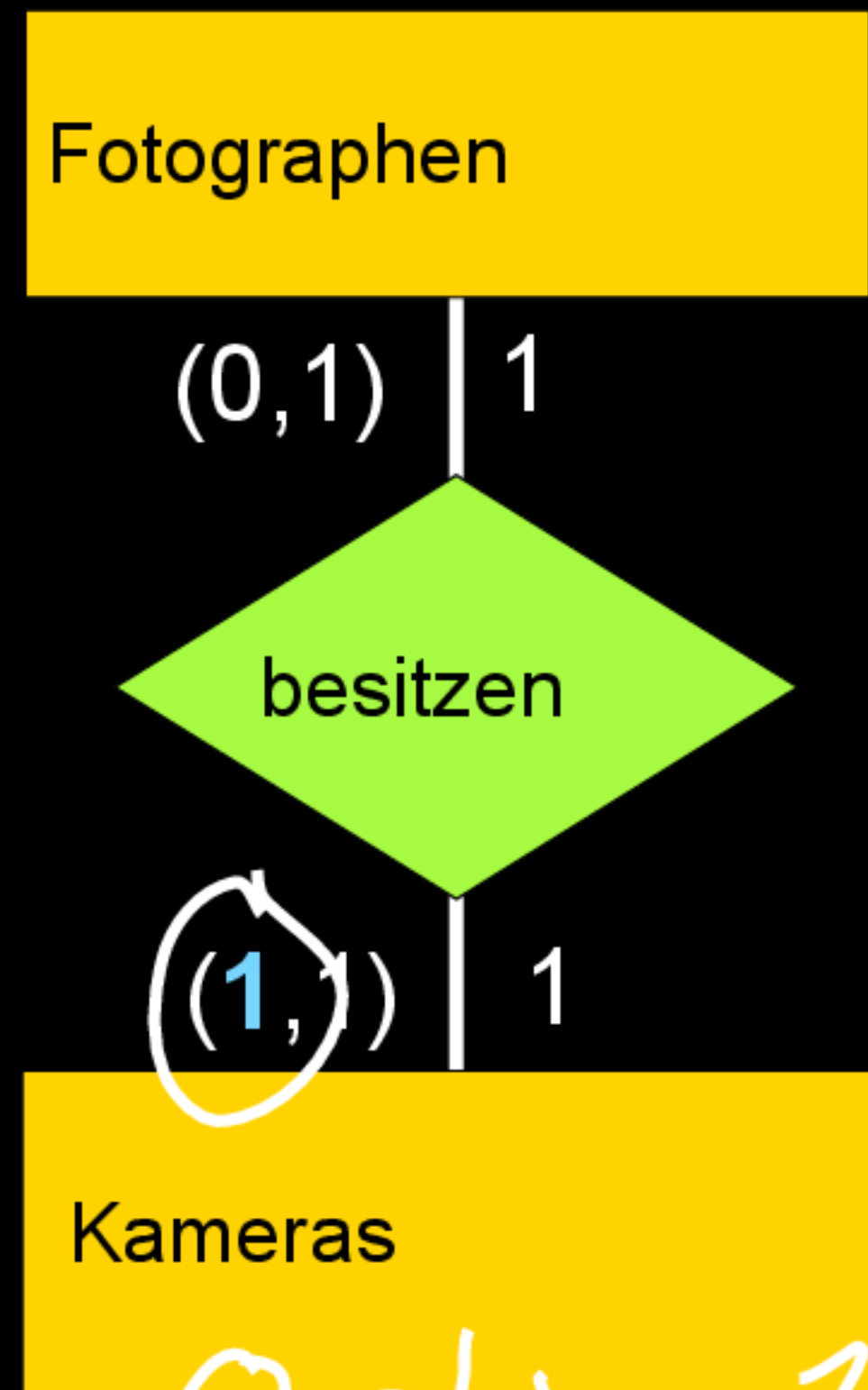
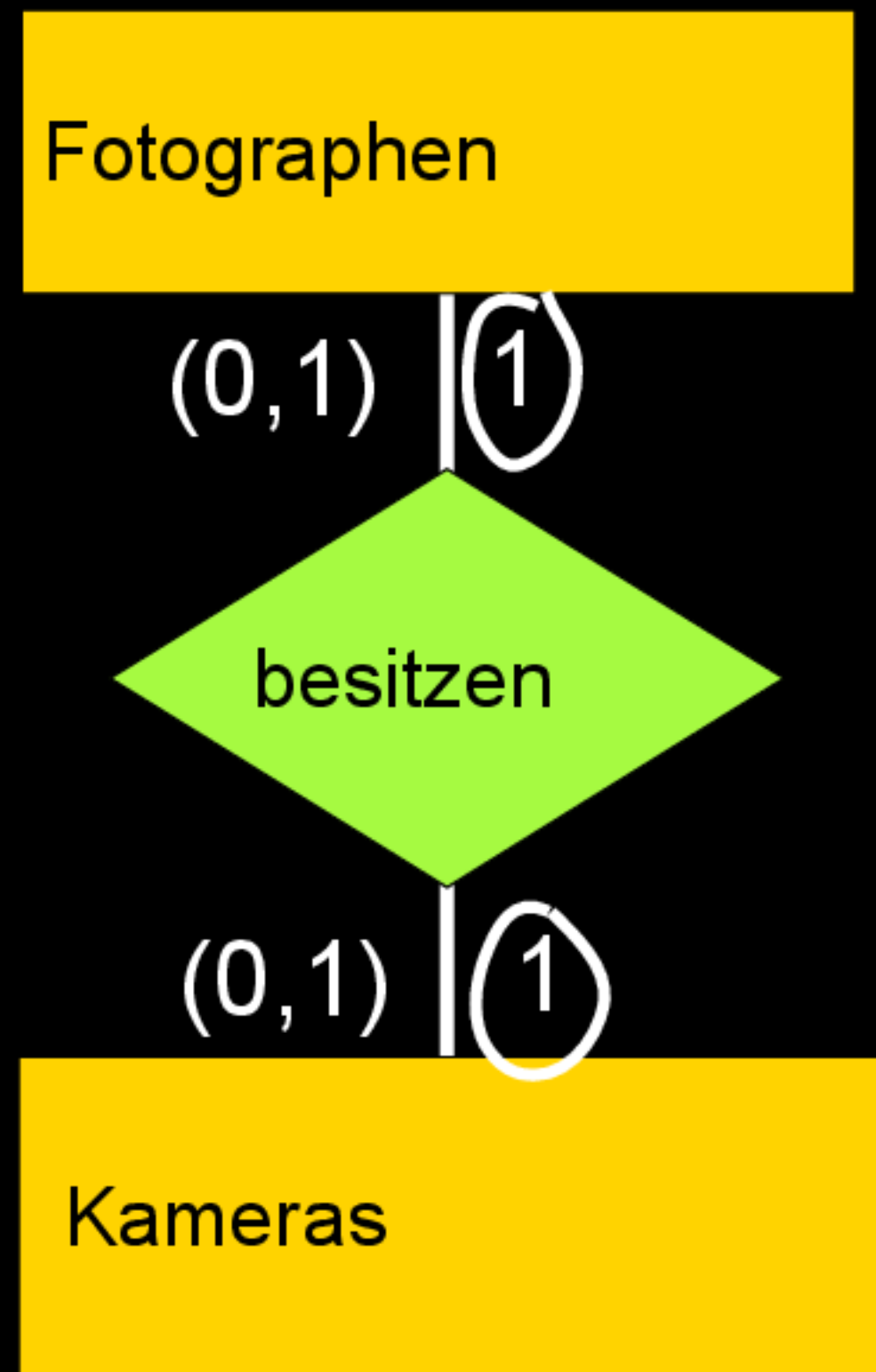


→ [Fotografaphen] : {[Name: string, Vorname: string, PersNr: int, besitztKamera: int]}

→ [Kameras] : {[KID: int, Marke: string]}

Vermeidung fehlender Fremdschlüsseinträge

NULL



Option 1

Option 2

Option 1

oder
Option 2

Option 1: [Fotographen] : {[Name: string, Vorname: string, PersNr: int]}
 [Kameras] : {[KID: int, Marke: string, PersNr: int]}

Option 2: [Fotographen] : {[Name: string, Vorname: string, PersNr: int, besitztKamera: int]}
 [Kameras] : {[KID: int, Marke: string]}