Magnetism data

Included 10 objects, 3 magnets (objects 1-3), 5 magnetic/metal s (4-8) and two plastic objects (9-10).

Rules 1-3 as described in the paper were then used to generate an interaction matrix as the observable data:

Object 1 interacts with objects 1,2,3,4,5,6,7,8

Object 2 interacts with objects 1,2,3,4,5,6,7,8

Object 3 interacts with objects 1,2,3,4,5,6,7,8

Object 4 interacts with objects 1,2,3

Object 5interacts with objects 1,2,3

Object 6 interacts with objects 1,2,3

Object 7 interacts with objects 1,2,3

Object 8 interacts with objects 1,2,3

Taxonomy data

Included 7 objects (animal, bird, fish, canary, eagle, shark, salmon) and 7 properties (breathes, can_fly, can_swim, can_sing, has_claws, can_bite, is_pink). The core relations were set up as in Katz et al. 2008 and used to generate the full set of true facts as the observable data:

has_a(animal,breathes),has_a(bird,breathes),has_a(fish,breathes),has_a(canary,breathes),has_a(eagle,breathes),has_a(shark,breathes),has_a(salmon,breathes),has_a(bird,can_fly),has_a(canary,can_fly),has_a(eagle,can_fly),has_a(fish,can_swim),has_a(shark,can_swim),has_a(salom,can_swim),has_a(canary,can_sing),has_a(eagle,has_claws),has_a(shark,can_bite),has_a(salmon,is_pink)

is_a(animal,animal),is_a(bird,animal),is_a(fish,animal),is_a(bird,bird),is_a(fish,fish),is_a(canary,bird),is_a(canary,animal),is_a(eagle,bird),is_a(eagle,animal),is_a(shark,fish),is_a(shark,animal),is_a(salmon,fish),is_a(salmon,animal),is_a(canary,canary),is_a(eagle,eagle),is_a(shark,shark),is_a(salmon,salmon)