Supplemental Materials

SVET Design: Target names.

Car names. Names in the SVET-Car consisted of make and model names (e.g., Honda Accord). All makes for both target and foil names were real car brands sold in the United States between 2000 and 2013 (e.g., Toyota, Ford, Audi). Target model names were real models of sedans sold in the United States between the years 2000 and 2012 (e.g., Camry, Focus, A6). Foil model names were either real words or non-words that (to the best of our knowledge) had not been used as 20th or 21st century American car names (e.g., Olympic, Alepo, Primo). Target names always consisted of both a real make and real model name combined to form a real car name (e.g., Honda Accord). Foil names were of two forms, with equal frequency: 1) Mismatched, a real make and a real model name but that do not form a real car name when combined (e.g., Honda Camry); and 2) Fake, a real make and a fake model name (e.g., Honda Napa).

Plane names. Target names in the SVET-Plane were names of model airplanes used in the United States in the past 20 years, with the exception of 8 trials that were plane models used in World War I or World War II. Although planes could be referred to by a manufacturer name, model name and sub-model name (e.g. Airbus A340-300), we aimed to use only the model name that a person with knowledge of planes would use (e.g. A340). Plane models were from several types of aircraft: commercial (16 trials), general aviation (7 trials), World War I (1 trial), World War II (7 trials), military aircraft including fighter, fighter trainer, transport, and bomber (12 trials), drones (3 trials), and business jets (2 trials). Foil names were created to match the format of real plane model names, such that some were all numbers, combinations of letters and numbers, or words.

Transformer names. Target Transformer names were the names of characters capable of changing form (not human characters or the names of other objects or locations) from the Transformers entertainment franchise produced by Takara Tomy and Hasbro toy companies. Names were selected from *Generation 1, Generation 2,* and *Beast Wars* series of comics and television and from the recent film series (2007, 2009, 2011 movies). Foil names were created to match the style of real Transformer names and were words or non-words.

Dinosaur names. Target dinosaur names were the common names of discovered dinosaurs that are generally accepted by the scientific community. Names were taken with roughly equally sampling across time period (e.g., Jurassic, Cretaceous) and other dinosaur traits (e.g. herbivore vs. carnivore, bipedal vs. quadrupedal). Foil names were created to match the style of real dinosaur names, with some names based on physical attributes denoted by Greek roots (e.g. using roots tetra meaning four and cerato meaning horns) and others named after places or fictitious people who may have discovered them.

Shoe names. The VET-shoe and SVET-shoe both refer to knowledge of women's high-heeled pumps. Shoes are perhaps a particularly interesting category for name knowledge. Although individual shoes do have a model name on the box (e.g. Moxy, Delilah), these names change every season and would rarely be used to identify a shoe even by those who are very skilled at visual shoe recognition (see Study 2B). Instead, we used the brand (or designer) names of women's high-heeled pumps as the target names. We hypothesized that these were the names that one would acquire knowledge of as they become more experienced with shoes. All brand names are brands of women's high-

heeled pumps currently sold in the United States at Nordstrom or Saks Fifth Avenue department stores. Foil names were created to match the style of real brand names (e.g. one or two words or the name of a designer) and were words or non-words.

Bird names. Target names for the SVET-bird were all common names of passerine, or perching, birds found in a large portion of North America. Real bird names were selected to sample across a variety of passerine families (e.g. flycatchers, orioles, jays, finches) and east and west coast birds. Foil names were created to match the style of real bird names and were words or non-words.

Leaf names. Target names for the SVET-leaf were all common names of deciduous trees found in a large portion of North America. Foil names were created to match the style of real leaf (tree) names and were words or non-words.

Mushroom names. Target mushroom names were all common names of mushroom species found in North America. An effort was made to avoid using multiple names that refer to the same species. Most of the mushrooms used are edible, although some (6 trials) are poisonous or potentially poisonous.

Design of VET 2.0 Trials

In the VET 2.0 for each category, 6 object identities (e.g. cars: Chevrolet Cobalt, Lincoln MKS, Acura RL; birds: Cedar Waxwing, Blue Jay, Horned Lark) were used as target objects. One exemplar of each target was used at study and in same-exemplar trials. Three other exemplars of each target object were used for different-exemplar trials. The different exemplars of the targets differed from the studied exemplar in one or more ways including background, viewpoint, position, color, and other non-diagnostic features, but were always the same species or model. The objects were selected for each category according to the same guidelines as the SVET, described previously, to be species or models found in North America when applicable; all birds were passerine birds and only male birds were shown, cars were sedans, leaves were from deciduous trees, shoes were women's high heels. Transformers were shown in multiple forms from any of the series used in the SVET, and planes were a mix of commercial and military planes. Foil images were objects from the same category (e.g., cars, planes, leaves) but of a different type (e.g., model or species) than any of the six target objects. Different exemplars of the same foil object occurred between one and four times per VET, but never on the same trial. Catch trial foil images were obviously different from studied objects and were usually selected from a similar category or sub-category that was not studied (e.g. SUVs in the VET-Car, wading birds in the VET-Bird, sneakers in the VET-Shoe).

Complete SVET 1.0 Tests

The following pages present the complete SVET 1.0 tests for eight object categories. Each row shows the 3 item names presented in each trial. Catch trials are indicated. The bolded name in orange is the correct response.

SVET-Ca		Nama 2	Nama?
Trial	Name1 Infiniti Kobuk	Name2 Scion dT	Name3
1 2			Dodge Viper
3	BMW M56	Mercury Manitu	Ford Mustang
<u> </u>	Pontiac G7	BMW Caspari	Ford Taurus
	Lincoln Leaf	Nissan Sentra	Porsche Crossfire
5	Chrysler Osprey	Mitsubishi Prancer	Nissan Altima
6	Volvo Focus	Mercedes-Benz C300	Mercury Alero
7	Hyundai Altitude	Mitsubishi Eclipse	Kia Gala
8	Chevrolet Flash	Volkswagen El Peso	Buick Regal
-	Toyota Prius	Jaguar Lisbon	Scion xR
10	Volvo GS350	Chevrolet Lancer	Dodge Charger
11	Hyundai Yucatan	Buick LeSabre	Lincoln Jetta
12 Catch	Honda Civic	Palm Tree	Snickers Bar
13	Toyota Calisto	Chrysler PT Cruiser	Hyundai Corolla
14	Pontiac GTO	Aston Martin Matrix	Subaru Woodlands
15	Pontiac Sky	Cadillac DeVille	Volvo Z60
16	Volvo S60	Suzuki 911 Carrera	Volkswagen Juniper
17	Nissan Muse	Audi A6	Chevrolet LaCrosse
18	Hyundai Elantra	Saturn Neon	Kia Cloud
19	Dodge Festival	Audi Vita	Mazda Miata
20	Chevrolet Camaro	Cadillac Escort	Subaru Malibu
21	Jaguar XJ	Lamborghini Nuvola	Acura NRX
22	Audi Z4	Mazda Kizashi	Chevrolet Volt
23 Catch	Winter Storm	Ford Fiesta	Rose Garden
24	BMW 580d	Volkswagen GTI	Toyota Lucerne
25	Nissan Azera	BMW 550i	Kia Golf
26	Suzuki Prestige	Infiniti G37	Pontiac S550
27	Lamborghini Gallardo	Toyota Sonata	Lincoln Olympic
28	Oldsmobile Cavalier	Lexus Aventador	Volvo C70
29	Chrysler Concorde	Lexus CD350	Buick Inspiron
30	Mercury Grand Marquis	Suzuki Avenger	Honda Yaris
31	Buick Chesapeake	Subaru Impreza	BMW 490x
32	Mazda Blaze	Ford Fiber	Honda Fit
33	Saturn Fuze	Honda Soul	Toyota Avalon
34	Kia Forte	Mitsubishi STZ	Infiniti Dream
35	Dodge Grand Prix	Mitsubishi Ion	Subaru Legacy
36	Saab Eban	Lincoln MKZ	Lexus Sable
37	Scion G6	Mercury Galant	Cadillac XTS
38	Oldsmobile Primo	Porsche 538	Mercury Milan
39	Saab 3-9	Hyundai Genesis	Cadillac Revel
40	Bentley Continental GT	Mercedes-Benz Park Avenue	Chrysler Crusader
41	Lexus ES300	Ford Impala	Acura Optima
42	Acura QR320	Porsche Cayman	Subaru Camry
43 Catch	Denim Skirt	Yorkshire Terrier	Toyota Matrix
44	Chrysler Maxima	Scion tC	Lamborghini Magnum
45	Volkswagen Mulsanne	Buick Intrepid	Oldsmobile Aurora
46	Saab 9-5	Acura Sebring	Nissan xD
47	Aston Martin DB9	Honda Octave	Infiniti ILX
48	Lexus LF-CC	Bentley Beetle	Jaguar 9-3
49	Saturn Fusion	Acura TSX	Saab S80
50	Audi Allroad	Cadillac Amethyst	Bentley Baltic
51	Audi A9	Oldsmobile Rocoto	Honda Insight

SVET-Pla Trial	Name1	Name2	Name3
		Utah	
1	F-16		Vapor
2	737	Serpens	Sheffield
3	Hellcat	W-66	LP-8
4	949	B-52	Flyingfish
5	C-130	Su-800	Black Skiff
6	P-209	Libra	B-2
7 Catch	747	Lean Cuisine	Facebook
8	Me 200	ES-69	F-105
9	HLB	J-49	DC-3
10	Starlight	Bouncer	717
11	A400	Cygnus	777
12	87A	CS100	1020
13	96Y	Hawk	Roehr
14	8030	T-38	Bylon
15	NDA	DC-10	Bowman Cx36
16	Lester	Rotterdam	Liberator
17	877	A320	Ruby
18	MD-80	Q70	1010
19	C-17	MD-20	S1-60
20	N7	X-1	RYY
21	A-10	D789	BV 10
22	Falcon 900	Courante	T-017
23	A380	B-6 Sprinter	Robson
24	8900	A2 Lobo	Spitfire
25 Catch	Barnes and Noble	A319	Cool Whip
26	A-49	F/A-18	898
27	L-300	P-51	Тетро
28	CS300	Td 500	R-180
29	Gopher	Panther	MD-11
30	Lagrange	A340	797
31	Y 88	Juno	Citation Jet
32	DA20	Locus	51-md
33	Predator	T700	Ocelot
34	6690	Cub	r590
35	Protector	Dakota	78K
36	Yuri	CRJ 5007	E175
37 Catch	Reese's Cup	Walgreens	F2
38	KZ-66	AirPrince	L-1011
39	Yak-130	XX-30	MK-477
40	432	King Air	LF-105
40	Cherokee	Z-7	Arizona
42	Missouri	J25	Raven
43	AM 99	LJ 431	Su-47
43	67V	Booker B-8	Otter
44	Mosquito	Western Lair	A480
43	393	VB-40	Starship
40	Z1	Ju 88	RT-9
47			
48 49	BT10	Bf 109	Nova 8
	Ural	DC-300	Camel
50	F-25	Dash 8	19-10 Ni-1 (marked)
51	Me 262	F-41	Nightranger

CTT.		DI	
SV	'ET	-14	lane.

SVET-Tra	Name 1	Name 2	Name 3
		Outlook	
1	Uppercut		Megatron Translation
2	Courage	Starscream	Top Notch Riot
3	Fivepin	Razorclaw	
4	Lavaman	Chromoburn	Quickstrike
5	Lightning Rod	Thunderclash	Firecraft
6	Highboxer Bumblebee	Tigatron	Terraclash
		Astromega	Receptor
8	Torrent	Ironhide	Delta Minor
9	Lordov	Amphius	Scorch
10	Quatraquake	Boomerjet	Sideswipe
11	Mallet	Dom	Soundwave
12	Ratchet	Volcano	Dasher
13	Wind Dagger	Camrod	Smokescreen
14	Dustrage	Roll Archer	Orion
15	Fox	Ricochet	Pitfall
16 Catch	Dunkin Donuts	Cheddar Cheese	Shipwreck
17	Fireflight	Triblast	Dune Snare
18	Bluebreak	Moor Knight	Grapple
19	Spearonus	Inferno	Fuse
20	Roadbuster	Combust	Loggerhead
21	Vulture	Blitzwing	Crash
22	Skyhammer	Starshooter	Neoblot
23	Moonrider	Windcharger	Converse
24	Terp	Prowl	Carbonspin
25 Catch	Frosted Flakes	Vanquish	Oatmeal Raisin
26	Flytrap	Tungsten	Reflector
27	Obsidian	Double Dare	Excelsion
28	Sunstreaker	Septawave	Proton
29	Cliffjumper	Nailclaw	Tanji
30	Grimmel	Giltwheel	Mirage
31	Jetstorm	Megaglide	Springshot
32	Speedswoop	Razorbyte	Talon
33	Thundercracker	Buzzcraft	Vilius
34	Flashrun	Solopred	Jazz
35	Hoverburst	Mort	Blurr
36	Enemy	Sonic Thunder	Bounce
37	Raincharge	Crosscut	Hustler
38	Zeus	Hurricane	Airlock
39	Long Haul	Quickjet	Junction
40	Breacher	Dawn Bird	Tracker
41	Wolfspur	Night Boomerang	Chase
42	Barracuda	Hubcap	Koben
43 Catch	Shrapnel	Diet Coke	J. Crew
44	Barricade	Ironwheel	Skidbit
45	Space Terror	Omicron Prime	Air Raid
46	Waveracer	Hound	Sotter
47	Canis Major	Cheetor	Sharpstrike
48	Hornet	Kickback	Crossfire
49	Punch	Deepwave	Roadflux
50	Arcee	Grimbolt	Victorion
51	Suntracker	Steelhead	Pointblank
J 1	Sunnackei	Steenieau	1 Unitolank

SVET-Transformer.

Name1	Name2	Name3
Tyrannosaurus Rex	Asperdatylus	Telemosaurus
		Ditlosaurus
Brachiosaurus		Fabrilukosaurus
		Velociraptor
		Plateosaurus
	· · · · ·	Ceratosaurus
		Microtarius
		Reginasaurus
		Lanaptasaurus
		Amerivenator
		Scuriosaurus
		Segisaurus
		Nike
		Maxiosaurus
		Megalosaurus
		Delphysis
		Latimosaurus
2		Gymnodontosaurus
		Dneipidosaurus
		Appellasaurus
		Stegoceras
		Iguanodon
		Dirulius
		Microsoft
		Andromelosaurus
		Ceralopus
		Artemidorus
	*	Draconychus
		Rugosaurus
		Ankylosaurus
*	*	Plateothersaurus
	*	Gallimimus
		Okavangosaurus
		Voltaeodon
		Barocheirus
		Deinocheirus
		Homodagnius
		Achillobator
		Lambeosaurus
1 4100544145		
Brassicasaurus	Deinosternus	Lannarentosaliriis
Brassicasaurus Hentalogodon	Deinosternus Zephyrosaurus	Procerimimus
Heptalogodon	Zephyrosaurus	Procerimimus
Heptalogodon Prontosaurus	Zephyrosaurus Orthithomimus	Procerimimus Hydrapentasaurus
Heptalogodon Prontosaurus Decacornutosaurus	ZephyrosaurusOrthithomimusEuovatosaurus	Procerimimus Hydrapentasaurus Stygimoloch
Heptalogodon Prontosaurus Decacornutosaurus Cadillac	ZephyrosaurusOrthithomimusEuovatosaurusCrock-pot	Procerimimus Hydrapentasaurus Stygimoloch Conchoraptor
Heptalogodon Prontosaurus Decacornutosaurus Cadillac Ornitholopolus	ZephyrosaurusOrthithomimusEuovatosaurusCrock-potNiposcephales	Procerimimus Hydrapentasaurus Stygimoloch Conchoraptor Mircovenator
HeptalogodonProntosaurusDecacornutosaurusCadillacOrnitholopolusSeismosaurus	ZephyrosaurusOrthithomimusEuovatosaurusCrock-potNiposcephalesTyrannoraptor	Procerimimus Hydrapentasaurus Stygimoloch Conchoraptor Mircovenator Pallosaurus
HeptalogodonProntosaurusDecacornutosaurusCadillacOrnitholopolusSeismosaurusMicroceratus	ZephyrosaurusOrthithomimusEuovatosaurusCrock-potNiposcephalesTyrannoraptorDryptoplatyornis	Procerimimus Hydrapentasaurus Stygimoloch Conchoraptor Mircovenator Pallosaurus Rhynchodon
HeptalogodonProntosaurusDecacornutosaurusCadillacOrnitholopolusSeismosaurusMicroceratusCorposaurus	ZephyrosaurusOrthithomimusEuovatosaurusCrock-potNiposcephalesTyrannoraptorDryptoplatyornisMonocyclosaurus	Procerimimus Hydrapentasaurus Stygimoloch Conchoraptor Mircovenator Pallosaurus Rhynchodon Mussaurus
HeptalogodonProntosaurusDecacornutosaurusCadillacOrnitholopolusSeismosaurusMicroceratus	ZephyrosaurusOrthithomimusEuovatosaurusCrock-potNiposcephalesTyrannoraptorDryptoplatyornis	Procerimimus Hydrapentasaurus Stygimoloch Conchoraptor Mircovenator Pallosaurus Rhynchodon
	Tyrannosaurus Rex Phoboraptor	Name1Name2Tyrannosaurus RexAsperdatylusPhoboraptorTriceratopsBrachiosaurusParamaxilosaurusLopholuriusPirongocoelusCanthusiusMeranoleptesTarbonyxDragosaurusPentaceratopsEudontidectesPachycephalosaurusNamibiasaurusPlesiosaurusTimorspondylusToniviusAmygdalodonGeldanosaurusSpikosaurusNodocaudosaurusSpikosaurusBarosaurusBetty CrockerDyptiodonProtoceratopsTetrachelodonColeopteraCeleritasaurusDilophosaurusBactronychusDilophosaurusDromopedosaurusDiplodocusLestipidiusParasaurolophusHerbiodonArchacopteryxMontanasaurusErhinodonStuthioceratopsCentaurisaurusRamseysaurusCaenagnathusKitchenAidTitanosaurusSpinosaurusRoxithromiusSaurolophusAllocephaleCompsognathusAmorispinaxTetramorphodonOviraptorAngusticeratopsHepatolodonHerbiodonArchacoptorySaurolophusAllocephaleCompsognathusAllocephaleCompsognathusLetoraptorAngusticeratopsYukonsaurusVoloceratopsHepatolodonHadrosaurusAllobrachiosaurusParaprantadonTetmatosaurusParaprantadonTetmatosaurusParaprantadonStyrenosaurus

SVET-Dinosaur.

Trial	Name1	Name2	Name3
1	Cristallo	Gucci	Fazzolari
2	Angelo Frega	Anong	Prada
3	Comoros	Christopher Phan	Anne Klein
4	Nine West	Rebecca Fox	Aloft
5	Kenneth Cole	Londa	Steve Hart
6	Carolyn Palmer	Clover	Dolce Vita
7	Birdie Hamel	Thaksin	Michael Kors
8 Catch	Cuisinart	Honda	Vigotti
9	Semillon	Jimmy Choo	Madison Long
10	Guillaume Deschamps	Oscar de la Renta	Eze
11	Le Chat Chic	Christian Louboutin	Lindsey Speegle
12	Tai Ladd	Elliott Pierce	Miz Mooz
13	Dahlia	Versa	Yves Saint Laurent
14	Parade	Betsey Johnson	Dowell
15	Ruby	Soustel	Etienne Aigner
16	Phillip Weinkopf	Lotte	Kate Spade
17	Paul Xu	Enna	Manolo Blahnik
18	Marcus Rivera	Aldo	Cimarron
19	Isaac Mizrahi	Six Swans	Lily James
20	Alexandre Birman	Portici	Larkin
21	Arzog	Brian Atwood	M. Rose
22	Anika Taylor	James Colver	Balenciaga
23	Nissa Takou	Olivia Skelt	Pedro Garcia
24	Piper	Joseph Blount	Miu Miu
25	Zetta	Kalden White	Franco Sarto
26	Rebecca Minkoff	Daquin	Paolo Trella
27	Vasquez	Taryn Rose	Darby Hill
28 Catch	Hyundai	J. Renee	Pepperidge Farm
29	Giuseppe Zanotti	Francisco Soto	Sara and Sophie
30	Cole Haan	Operetti	Melissa Perry
31	Ava Amini	Ivanka Trump	Serra
32	Enzo Angiolini	Nicole Hall	Victor Russo
33	Azzuri	Via Spiga	Maison du Roi
34	Steve Madden	Isabelle Laurent	Five Degrees
35	Kevin Dunn	Badgley Mischka	Cecille
36	Lola Wong	Sam Edelman	DBA
37	Pollini	Arresi	P. Van Vliet
38	Marcelino	Stuart Weitzman	R. Campbell
39	Nina	Adele Hirsch	Molinelli
40	Sigerson Morrison	Pebble and Stream	Michael Williams
41	Alston Brett	Tiger Pearl	Seychelles
42 Catch	Alfani	John Deere	Duracell
43	Alice + Olivia	Belle Amie	Vega
44	Laurel	Charlotte Olympia	J.R. Santuk
45	Cote Vert	Vince Camuto	Sergio Nicoletti
46	Elizabeth and James	Joshua Gold	Claudia Escotto
47	Graham Wood	Gravelle	Chinese Laundry
• /	Joan & David	Antonio Zaccaro	Harry and Hampton
48			
48 49			
48 49 50	Emilio Fenzi Donald J Pliner	Kelsi DaggerBella Domani	Poz Poz Eve Hatton

SVET-Shoe.

SVET-B	ird		
Trial	Name1	Name2	Name3
1	Ochre Gabbro	Kassam Thrasher	Mountain Bluebird
2	Masked Golong	Blue Jay	Canyon Kingfisher
3	Great Mulmul	Streak-tailed Dogbird	Northern Raven
4	Purple-breasted Shrew	Olive Mohee	Barn Swallow
5	Savannah Sparrow	Tufted Gemthroat	Green Huckaloo
6 Catch	JCPenney	White-eyed Vireo	Tea Kettle
7	Gray-capped Woodear	Allegheny Bog Swallow	American Goldfinch
8	American Robin	Bluegrass Chickadee	Eastern Scrub Nutcracker
9	Wilmer's Cuckoo	Black-billed Cuckoo	Long-billed Rogalin
10	Holtcissel	Mountain Chickadee	Missouri Starwing
11	Blue Downbill	Cliff Swallow	Antique Sage
12	Winter Lazio	Pine Plover	Horned Lark
13	Bay Pipin	White-winged Parakeet	Liriope
14	Hooded Warbler	Cape Cod Myna	Western Kobuk
15	Northern Mockingbird	Silver-crowned Oriole	American Goldenwing
16	Long-tailed Steckle	Chesapeake Broadwing	Red-winged Blackbird
17	Rock Wren	Scoria	Oregon Groswing
18	Yellow-banded Vireo	Belted Kingfisher	Gold-collared Shortspur
19 Catch	American Tree Sparrow	Microwave Oven	Hyundai
20	Northern Cardinal	White-eyed Dotter	White-ringed Magpie
21	Fox Sparrow	Cascade Sparrow	Mouse Geum
22	Lapland Longspur	Orchard Spot-breast	Weigela
23	Scarlet Tanager	Blue-stripe Binbeak	Tri-colored Wheatear
23	Baltimore Oriole	Cloaked Queenbird	Broadbent's Flycatcher
25	Black-headed Peehatch	Brown-winged Digger	California Towhee
26	Hesperus Kinglark	Painted Ozark	Cassin's Kingbird
20	Thistle Grosbeak	Sage Thrasher	Wood Pennytail
28	Orange Shrub Vireo	Alder Flycatcher	Waxhaw
20	Jefferson's Bunting	Loggerhead Shrike	California Alewife
30	Warbling Vireo	Bush Moppet	Siouxland Jay
31	Brownpoll	Northern Gibbon	Gray Catbird
32	Coastal Abelia	Brown-spotted Foxtail	Tufted Titmouse
33	American Pipit	Scruffy Fletcher	Dark-horned Thrasher
34	Lark Tango	Phainopepla	Knight's Solitaire
35	Rose-throated Congaree	Brogan's Jay	Bicknell's Thrush
36	River Pointwing	Bohemian Waxwing	Dusky Nimpkin
37	Spot-breasted Pixie	McCown's Longspur	Pale-eyed Baylin
38	Kieffer Tanager	Bronze-headed Truit	Western Wood-Pewee
39 <i>Catch</i>	Reebok	Ziploc	Bullock's Oriole
40	Evening Grosbeak	Dakota Raven	Antietam
40	Yellow-eyed Junco	Kipp's Grackle	Red-throated Severne
41 42	Pinyon Jay	Vermilion-tipped Finch	Eastern Ruffe
42	Whiskered Thrush	Kirkland Waterthrush	
43	Green-notched Starling	Indigo Bunting	Black-capped Gnatcatcher Yellow-eyed Tatterfly
44	Missippi Kinglet	Kate's Warbler	Budgerigar
43	Violet-green Cowbird	Bobolink	Tortoise Crossbill
40	Pine Siskin	Crimson Wrenrobin	Blue Swinger
47	Emerald Mockingbird	Valerian	Eastern Phoebe
48 49			
	Grey Mountain Pinchot	Great Kiskadee	Cobbler's Oriole
50	Shiny Ridgehawk	Veery	Honeyed Manokin
51	Red-rumped Rusbin	American Treetit	Ovenbird

SVET-Bird

SVET-Le Trial	Name 1	Name 2	Name 3
111a1 1	Weeping Willow	Sweetnut	Dandelion Ash
2			
3	River Birch Red Mountainwood	Winternut Venuswood	Bronze Mountain Elm American Sycamore
<u> </u>			Flowering Placket
5	Bur Oak	Green Hazel	
	Monte Cassino Oak	White Ash	Purple Watertree
<u>6</u> 7	Goldenbark Burr	Tennessee Grapin	Apricot
8	Prairie Redbark	Cat-eye Hickory	Sugar Maple
<u>8</u> 9	Japanese Maple	Orange Planterwood	Roundleaf Alder
	Black Walnut	Yirgacheffe	Calumet Sycamore
10	Silver Firth	White Bruck	American Mountain-ash
11	Capaya	Boxelder Maple	Saranac Tupelo
12 Catch	Scarlet Oak	Cheese Nips	Adidas
13	Northern Winslow	Rock Elm	Wallich's Cherry
14	Pignut Hickory	Anthurium	Pittberry
15	Alstroemeria	Quaking Aspen	Yellow Oolong
16	Lily Elm	Pendleton Oak	American Beech
17	Flowering Dogwood	Yellow Cottonwood	Bristleleaf Catalpa
18	Mouse Oak	Norwegian Silkbark	Pecan
19	Yellow Poplar	California Bargo	Feather Willow
20	Rooibos	Redbud	Moon Plum
21	Victorian Poplar	Tibouren	Black Cherry
22	Cherrybark Oak	Brisco Birch	Broadleaf Dago
23	Black Brandywine	Crimson Walnut	Oregon White Oak
24 Catch	Springer Spaniel	Bigleaf Maple	American Airlines
25	Bigtooth Aspen	Martin's Locust	Western Tolvo
26	Dancing Ash	Cone Maple	Southern Magnolia
27	Southern Kamut	Post Oak	Red River Vosch
28	Christmas Maple	Red Alder	Pewter Oak
29	Montana Green Oak	Paper Birch	Coppernut
30	Slippery Elm	American Moffett	Meridan Whitewood
31	Sweetgum	Peruvian Hickory	Sepia
32	Mississippi Alder	Ebony Spleenwood	Blue Ash
33 Catch	Cadillac	Siamese Cat	Black Cottonwood
34	Coffee Gum	Horse Chestnut	Black Linwood
35	Mowamba	Black Tupelo	Sourroot
36	Delta Maidenhair	Jubilee Magnolia	Live Oak
37	Spanish Maple	Black Muscat	Eastern Cottonwood
38	Frosted Beech	Sassafras	Japanese Painted Birch
39	White Kava	Overcup Oak	American Finwood
40	Sweeney's Oak	Notched-bark Cottonwood	Honey Locust
41	Regal Poplin	Red Loden	Littleleaf Linden
42	Shellbark Hickory	Hudson Willow	Terrywood
43	Trembling Elm	Hackberry	Shiny Gum
44	Spine Oak	Sickle-leaf Willow	Ginkgo
45	Butternut	Colonial Bricktree	Honey Boxwood
46	Baldcypress	Ringed Dogwood	Littleleaf Tappan
47	Silver Aster	Valley Walnut	Tulip Poplar
48	Kentucky Coffeetree	Dixiewood	Mottlewood
49	Henwood	Water Tupelo	Jade Birch
50	Chervil	Netleaf Hackberry	Sierra Hickory
51	Yorkshire Aspen	Goldenrain	Sun Cypress
~ 1	i orikonne rispen	Solucinan	Sui Cypross

SVET-Leaf.

Trial	Ishroom. Name 1	Name 2	Name 3
1 riai 1	Portabello	Witches Brew	Pignoli
2			Fiddle
	Porcini	Cabbage	
3	Fluted Russica	Cannelle	Shiitake
4	White Truffle	Milky Scaber	Sugar Siullus
5 Catch	Dishwasher	Cauliflower	Taco Bell
6	River Vervain	Red-capped Scaber	Fern
7	Wood Ear	Molasses	Steely Wood
8	Vinegar	Black Saddle	Barrel
9	Cardoon	Bunny Ear	Green-spored Parasol
10	Black Perigord Truffle	Cat's Paw	Bachilucium
11	Fan	Russell's Redfoot	Wine-cap Stropharia
12	Zeller's Bolete	Camel	Death in the Afternoon
13	Black Tollius	Bleeding Plovit	Black Trumpet
14	Sea String	Mountain Puff	Matsutake
15	Burgundy Top	Morel	Hiziki
16	Midoni	Crimini	Scarlet Tulip
17	Painted Bark	Brown Shandy	Death Cap
18	Udupi	Cinnamon Cap	Mauricus
19	Chanterelle	Globe	Mozuku
20	Button	Snowcap	Beaver Tooth
21	Cipolini	Teddy Bear	Reishi
22	Horn-toothed Bolete	Shaggy Parasol	Habutai
23	Pig's Ear	Mouse of the Woods	Raven Claw
24 Catch	Macy's	Velveeta	King Bolete
25	Amber Stalk	Tavel	Enoki
26	Cognac	Cloud Ear	Sousaire
27	Portalo	Gombe	King Trumpet
28	Urikandji	Canopy	Velvet Foot
29	Oyster	Potelle	Ten Penny
30	Shiso	Palm	Bleeding Milkcap
31	Hen of the Woods	Egoji	Conch
32	Tarutake	Candy Cap	Alsace Brown
33	Sun-dotted	Bear's Head	Tri-colored Culotte
34	Courgette	Golden Needle	Chandelier
35	Parkeo	Straw	Giblet
36	Smoke	Salmon	Honey
37	Green Cap	Ballast	Old Man of the Woods
38	Petaluma	Paddy Straw	Bogie
39	Fawn	Starburst	Midnight Korme
40	Clam	Shaggy Mane	Royal Gilded
40 41 Catch	Field	Hershey's	Google
41 Calch 42	King's Head	Ivory Plume	Yellowfoot
42		Gnome's Hat	Bobbin
43	Blue Foot		
44 45	Cassava Eropah Tardia	Angel Wings	Patapan Summar Cabalt
	French Tardis	Hedgehog	Summer Cobalt
46	Crab Brittlegill	Elephant Trunk	Glass Cap
47	Fontanelle	Birch Bolete	Spring Fiori
48	Willow Ash	Diving Bell	Sweet Tooth
49	Fairy-ring	Ruffle Cap	Pag Lace
50 51	Satin Top Horse	Harutake Dotted Pin	Slippery Jack
		Lottod Um	Jester

SVET-Mushroom.

Birder Specific Experience Questionnaire. Extended bird-specific experience questions for birders used in Study 2. Note that for the order of the responses for question 6 are reversed from the others and so responses were adjusted before analysis.

1. At what age did you first develop an interest in birds? __(Age)

2. At what age did you first start birding relatively seriously (e.g., spending time learning bird identifications, going on planned bird walks, joining local Audubon or ornithological societies, etc.)

_(Age)

3. How often do you go birding (specifically set aside time for bird watching at home or elsewhere)?

_Less than once a year

- _1-3 times per year
- _4-6 times per year
- _ 7-12 times per year (every 1-2 months)
- _ 13-24 times per year (1-2 times per month)
- _25-48 times per year (every 1-2 weeks)
- _ 49 or more times per year (several times each week)

4. How often do you travel outside of your region (more than 1 hour travel time from your home), at least in part, for specific bird watching opportunities?

_Almost never

_1 time per year

_ 2-3 times per year

- _4-6 times per year
- _7 or more times per year

5. How often have you planned a vacation with a primary intent of birding, on average?

_I am a professional who regularly identifies birds (e.g., ornithological research, photographer, tour leader, educator, wildlife resource manager)

_ More than once a year

_Once a year

- _ Every other year
- _Once every few years
- _Rarely or never

6. Do you keep a log (journal, online list, etc.) of birds that you see?

- _Never
- _ Sometimes
- _ Almost always

7. About how many different types of birds (specific species or subspecies) have you observed in person while birding during your lifetime?
 __(Number)

8. How would you rate your own bird expertise for birds where you live?

_ I am a novice. Nearly all other birders I meet are more skilled than I am.

I am a beginner. Most birders I meet are more skilled than I am, but I occasionally meet other beginners like me when out birding.

_ I have intermediate birding skills. While there are many birders more skilled than I am, I can identify many birds that beginners cannot.

_ I have advanced birding skills. While I am not the most expert birder that I know in my area, I often identify birds quicker and more accurately than others.

I have expert birding skills. While not a professional, I often lead birding trips for my local birding societies, organize local bird counts, etc.

_ I have expert birding skills. While I have met some people who are more expert than I am, I have done things like lead birding tour groups professionally, conduct

ornithological research, educate about bird identification and bird conservation, or work in wildlife management.

_ I have expert birding skills. I am recognized by my peers in my state, nationally, or internationally as someone other experts would turn to because of my expertise.

9. How many birding periodicals (magazines, newsletters, journals) do you subscribe to?

_(Number)

10. How many local, national, or international birding organizations do you belong to (groups involved in planning or tracking bird sightings, science of birds, bird identification, formal groups of bird enthusiasts, etc.)

_(Number)

11. How often do you attend birding events, conferences, or meetings with other bird enthusiasts?

_Almost never

_1-3 times per year

_4-6 times per year

_ 7-12 times per year (every 1-2 months)

_13-24 times per year (1-2 times per month)

_ 25-48 times a year (every 1-2 weeks)

_ 49 or more times per year (several times each week)

The case of a category without semantic labels.

We hypothesized that the underlying abilities that support the acquisition of visual and semantic knowledge may be independent and predicted that the only common contribution to visual and semantic performance for a given category would be experience with that category. Even keeping with the original assumption, another possible reason for a correlation between visual and semantic performance could be the use of labels to help encode and remember the objects in a visual task like the VET. While labels are not used in the VET, some subjects with domain-relevant semantic knowledge may still use object names during the task. Therefore, it is important to consider the extent to which performance on the visual tasks is potentially contaminated by verbal strategies.

However, a verbal strategy may not be equally available for all categories. There are categories for which every exemplar has a name that is likely available to experts, such as cars. For other categories, semantic knowledge, at least individual object names, might not be as readily available, even to an expert. This would reduce the potential overlap between semantic knowledge and performance on a visual task. Shoes (in our case women's high heels) are a good example of such a category. Individuals highly familiar with women's high heels might be very good at recognizing diagnostic visual features of women's high heels, such that they would do very well on the VET-Shoe in which they need to generalize across non-diagnostic features (color, material, viewpoint) but not diagnostic features (toe shape, heel design, heel height) to recognize different exemplars of the same pump. Yet, these subjects may not know the labels for specific shoes. While they might be able to recognize the style of some shoe designers, specific shoes models change frequently and those names are rarely used to identify shoes beyond the immediate shopping experience.

To test this, we compared two categories for which labels would be either available to experts, or not. After the VET and SVET in Study 2, we asked subjects to perform an explicit naming task for 18 images of birds and shoes taken from the VETs. For shoes, we expected that few subjects, if any, would provide a specific brand or model name, while for birds, we expected that some would be able to name the birds by common species names.

Bird and shoe image naming task. Images used for the naming test were the grey-scale images of birds and shoes used as foils in the VET-Bird and VET-Shoe, respectively. There were 18 trials for each category. Subjects completed the naming test as an online survey using REDCap electronic data capture survey tools (http://redcap.vanderbilt.edu; Harris et al., 2009)

hosted by Vanderbilt University. Each image was presented with a blank textbox below it in which subjects were instructed to type the most specific name they had for each object or "NA" if they did not have a name for the object. All of the bird trials were shown on a single page first, followed by all of the shoe trials on another page.

Results and discussion of naming task.

Shoe naming. No subject, even those with high VET-Shoe and SVET-Shoe scores, provided brand or designer names for shoes, as are used in the SVET, or specific shoe model names to name each shoe image. Instead, all shoe naming responses were descriptions of the pictured shoe. These descriptions were almost always either very

general category names (e.g., pump, stiletto, peep-toe, platform) or descriptions of the shoe's physical attributes including shape, color, fabric, and style (e.g., pointy-toe heel, ornate open-toed pumps, scalloped pumps, black bow, round-toe, beige suede). While some subjects included elaborate descriptions of shoes, suggesting an understanding of diagnostic shoe features, a specific subordinate-level name for the shoe was never given.

In general, this suggested that verbally recoding the shoe images with these labels would not be very helpful. Nonetheless, we scored naming performance according to whether they provided any detailed description. For each subject we looked at all 18 shoe trials and assigned a single score based on their naming responses across trials. If a subject put "NA" or a single, general word (heel, shoe, pump) for more than half of the trials, they were scored as 0. Subjects were scored as 1 if they listed a more detailed description on more than half of the trials (N=133, 101 female). This descriptive measure was significantly and positively correlated with all shoe measures: experience (shoe experience aggregate; r(208)=0.37, $p\leq0.0001$), VET-Shoe (r(208)=0.29, $p\leq0.0001$), and SVET-Shoe (r(208)=0.28, $p\leq0.0001$). This suggests that the ability (or willingness to) provide detailed descriptions of shoes reflects domain-relevant experience. However these descriptions were long (e.g., nude peep toe pump, black suede closed toe stiletto with snakeskin back) and do not appear sufficiently unique to distinguish between shoes on the test.

Bird naming. To score the names subjects provided for each of the bird images, we counted any name that was at least a partial match to the common species name of each bird as correct (e.g. for barn swallow: barn swallow, swallow, and swallow with a different sub-species descriptor, such as tree swallow or cliff swallow, were all counted as correct). More than half of subjects (N=112) did not correctly name *any* birds. Overall, scores ranged from 0-7 birds correctly named out of 18 bird trials (mean=0.84 birds correct, SD=1.27).

Performance on the bird naming task was significantly correlated with all other bird measures: self-report bird experience aggregate (r(208)=0.46, $p\leq.0001$), VET-Bird (r(208)=0.37, $p\leq.0001$), and SVET-Bird (r(208)=0.42, $p\leq.0001$). While many subjects could not name any birds, those who did correctly name even a few birds performed better on both the visual and semantic bird tests. These naming data provide further evidence of the convergent validity of our measures and suggest that with greater levels of bird experience, people typically acquire greater knowledge of subordinate-level bird names.

A positive correlation between VET and SVET performance was found for a category for which expertise affords the ability to name objects (birds: r(208)=0.35, $p\leq0.0001$), but also for a category for which objects cannot be named at the subordinate-level by experts, as demonstrated by our naming survey (shoes: r(208)=0.42, $p\leq.0001$). This suggests that subordinate-level names are not required to demonstrate shared variance between visual and semantic performance.