# Property concept roots and the semantics of categorization

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**Intro** *rop rt on pts* Cs D xon , d pson xpr ss ons suc as *t* or *pp* t at ar canon ca y cat or z as a ct v s n En s ar o t n cat or z as nouns or v rbs n ot r an ua s t s typ o var at on s w nown, w a r ss n t s ta t ss stu qu st on o w t r t x ca s ant cs o prop rty conc pts s syst at ca y t to ow t y ar cat or z For x p , Franc z Koontz Garbo n FKG s ow t at s C nouns o not c aract r z n v ua s as a ct v s o , but rat r not pr cat s o abstract qua t s *oo n ss*, a s t o port ons o oo n ss n t ass d a n M non anc va M bu on t s an con ctur t at t roots o n **all** prop rty conc pt wor s, n p n nt o cat ory, av FKG s ass s ant cs, t ou var at on n t orp os ant cs o cat or zat on pot nt a y as s t s un r y n un v rsa ty

**Claim** ar u or M s cor a t at C roots ar ass not n , raw n on ata rd nd na v rba an a ct va cat or zat on n t r unr at an ua s s ow t at, sp t var at on n cat ory, Cs n t s an ua s r c v a un ana ys s ass not n C roots ust b cat or z by a a nco n a poss ss v s ant cs to o pr cat s

**Background** M su st t at, un v rsa y, Cs ar bu on acat or a roots t at ust b cat or z by a a ntro uc n a poss ss v s ant cs n or r to cr at a pr cat o n v ua s r ana ys s s bas on Ma aya a Drav an , w c ac s an a ct va cat ory, w t ny C wor s nst a b n v rbs M ar u , bu n on FKG, t at Ma aya a n t s cas a s us o a **covert** cat or z n v a t at nco s poss ss on n or r to turn a ass not n root , $\sqrt{nall}$ nto a prop rty o n v ua s *n* av n oo n ss r su t n v rb s t n conv nt ona y turn nto a r uc r at v n pr cat construct ons, as s own n b or t x p n a

a ava [**nalla-**]va aanə
s [**having.goodness-**]F G E C
s oo on av n oo n ss

b [[[ $\sqrt{nall}$ $\varnothing_{v.poss}$ ]$_v$ ]$_v$ a]$_r$

**Proposal** t poss ss v cat or z r M propos s cov rt, w ar u t at s v ra unr at an ua s xpr ss t s typ o cat or z r **overtly** s typ o poss ss v cat or zat on s or ov r not t to v rba zat on w n v nc across an ua s or ov rt poss s s v cat or zat on r su t n n nouns, v rbs, as w as a ct v s D sp t t s var at on n cat ory ow v r, w propos t at a un s ant c tr at nt o t cat or z r can captur t u ran o pr s nt ata p c ca y, w ar u t at t cat or z r s ar s t o ow n prop rt s across an ua an cat ory t ntro uc s a poss ss v s ant cs as n an t cat or z s t root as n In a cas s, w tr at t root b n cat or z as not n a s t o stat s, o ow n arsons , Ba n **4**, an woo **4**, In t s way, r ar ss o cat ory, t an n o t cat or z r ta s a root not n a prop rty o stat s as ts rst ar u nt, r turn n a c aract r st c unct on o n v ua s poss ss n t at stat now onstrat t s n or ta w t nd na v rba an a ct va cat or z rs n wa as o, an En s

$v_{poss}\ n_{poss}\ a_{poss}$ $\lambda P_{\langle e,t\rangle}\lambda x_e\exists y[P\ y$ **have** $x,y\ ]$
$[_v\ n\ a\ [\ \sqrt{\ C\ }\ ]\ [\ v_{poss}\ n_{poss}\ a_{poss}\ ]]$

**Nominalization** FKG ar u t at t C cat or z r n wa M su u pan s a nd na z r n t o o t poss ss v su x Cruc a y, t s su x s us n bot nd na poss ss on an prop rty conc pt pr cat on **4**, A opt n t pr s nt ana ys s , o rs t r vat on o t an n av ta n ss

**4**

A b rto pan **-ka**
A b rto st c **-3.POSS**
A b rto s st c

A as **yu -ka** atran
s A **-3.POSS** w b
w b ta av ta n ss

a n ∼ λP