

Chapter 1

Preposition Definitions

This appendix contains the preposition definitions used by this work. Mappings to definitions from The Preposition Project (<http://www.clres.com/prepositions.html>) used in the SemEval 2007 Preposition Sense Disambiguation Task (<http://nlp.cs.swarthmore.edu/semeval/tasks/task06/description.shtml>).

ABOUT

- 1) on the subject of; concerning (as of communication, thoughts, information, fights, etc.)

TPP mapping: $\approx 1(1)$

- 1.1) so as to affect, as in “do something about it”

TPP mapping: $\approx 2(1a)$

- 2) indicating a focal point or region in space; partially, if not fully, encircling

TPP mapping: $\approx 3(2) \cup 3(2)-1 \cup 4(3)$

ABOVE

- 1) at, in, or to the extended space vertically higher than
TPP mapping: $\approx 1(1) \cup 2(1a) \cup 3(1b) \cup 4(2)$
- 2) higher/greater than along a particular (but, perhaps, unmentioned) scale.
TPP mapping: $\approx 5(2a) \cup 6(2b) \cup 9(3)$
- 2.1) higher/greater than along the scale of desirability/preference.
TPP mapping: $\approx 7(2c)$
- 3) in spite of / at a higher pitch or volume than (as in the case of interfering noise)
TPP mapping: $\approx 8(2d)$

ACROSS

- 1) from one side of to another. (e.g., he ran across the bridge)
TPP mapping: $\approx 1(1)$
- 2) indicating a time period through/over which something happens or remains unchanged (e.g., changed across the centuries)
TPP mapping: $\approx 1(1)-1$
- 3) located on/at the other side of (e.g., the house across the river)
TPP mapping: $\approx 2(2)$

AFTER

- 1) following in time (and, in some cases, also caused by) (e.g., happen after the wedding)

TPP mapping: $\approx 1(1) \cup 1(1) - 1 \cup 3(1b) \cup 4(1c)$

- 2) moving so as to follow or intercept; in the direction of someone/something that is moving further away (e.g., walked after him)

TPP mapping: $\approx 5(2) \cup 6(2a) \cup 7(3)_{\subset}$

- 3) indicating the subject of a desire or inquiry (e.g., inquired after the stolen diamonds)

TPP mapping: $\supset 7(3)$

- 4) indicating a base model (as of design or imitation) or namesake (e.g., designed after the Taj Mahal)

TPP mapping: $\approx 9(5) \cup 10(5a)$

- 5) at a subsequent position in a sequence or ranking (e.g., B is after A)

TPP mapping: $\approx 8(4)$

- 6) used in phrases indicating repetition or continuation (e.g., night after night)

TPP mapping: $\approx 2(1a)$

AGAINST

- 1) indicating an opposed, mitigated, or disfavored party/thing, including conceptual abstractions (e.g., argued against it)

TPP mapping: $\approx 1(1) \cup 2(1a) \cup 3(1b) \cup 4(2) \cup 5(2a) \cup 6(2b)$

- 2) indicating opposition by physical forces, usually involving contact (e.g., the broom against the wall)

TPP mapping: $\approx 10(4)$

- 3) in relation to (an amount of money owed, due, or lent) so as to reduce, cancel, or secure it (e.g., paid money against his debts)

TPP mapping: $\approx 7(2c)$

- 4) *in contrast to*

- 4.1) in conceptual contrast to (e.g., must compare it against the alternative)

TPP mapping: $\approx 8(3)$

- 4.2) in visual contrast to (e.g., the yellow stood out against the black background)

TPP mapping: $\approx 9(3a)$

ALONG

- 1) positioned, extending, traversing, or moving in parallel with some sort of path

TPP mapping: $\approx 1(1) \cup 3(2)$

- 2) used to indicate a process that progress is being made on

TPP mapping: $\approx 2(1a)$

- 3) in adherence/accord with

TPP mapping: $\approx 4(3)$

AMONG

- 1) situated more or less centrally in relation to (several other things); surrounded by (e.g., walk among the trees)

TPP mapping: $\approx 1(1)$

- 2) expressing membership in a group (e.g., foremost among them)

TPP mapping: $\approx 2(2)$

- 3) indicating connection(s), interaction(s), or relationship(s) involving two or members of a group or community (e.g., fight among the miners)

TPP mapping: $\supset 3(3)$

- 4) shared or possessed by (a group or community) (e.g., thoughts among dockworkers)

TPP mapping: $\supset 3(3)$

- 5) indicating a set of two or more people/things in the context of selection, division, and/or differentiation (e.g., choose among them, split it among them)

TPP mapping: $\approx 4(4)$

(A)ROUND

- 1) positioned, extending, or moving so as to form a curved path or arc (e.g., he ran around the corner)

TPP mapping: $\approx 1(1) \cup 4(3) \cup 5(4)$ (for 'around')

TPP mapping: $\approx 1(1) \cup 3(2) \cup 4(2a) \cup 5(3)$ (for 'round')

- 2) located at a position on the other side of something (e.g., the building around the corner)

TPP mapping: $\supset 3(2)$ (for 'around')

TPP mapping: $\supset 8(4)$ (for 'round')

- 3) in, to, and/or through many places throughout (an area or space)

TPP mapping: $\supset 3(2)$ (for 'around')

TPP mapping: $\supset 8(4)$ (for 'round')

- 4) about; on the subject of

TPP mapping: see also 2(1a)

TPP mapping: see also 2(1a)

- 5) used figuratively to indicate a challenge, obstacle, or problem, as with avoidance or circumvention (e.g., get around that problem)

TPP mapping: see also 2(1a)

TPP mapping: see also 2(1a)

AS

- 1) indicating the function or character someone/something has or is supposed/assigned/believed to have

TPP mapping: $\supset 1(1)$

- 2) while acting in (the function/role specified) / during the time while being (the function/role/thing specified)

TPP mapping: $\subset 2(2)$

AT

- 1) expressing location or arrival at a particular place or position (e.g., he is at the store)

TPP mapping: $\approx 1(1), 4(2b)$

- 2) in the direction of (e.g., threw coins at the bottle)

TPP mapping: $\supset 9(5)$

- 2.1) in the direction of , specifically in the case of repetitive (and perhaps unsuccessful) actions (e.g., claw at the portrait)

TPP mapping: $\approx 10(5a)$

- 3) expressing the time when an event takes place (e.g., happened at night)

TPP mapping: $\approx 2(2) \cup 3(2a)$

- 4) indicating a position on a scale (e.g., room was at 100 degrees)

TPP mapping: $\approx 5(3)$

4.1) indicating the age of someone/something (e.g., was foolish at 17)

TPP mapping: $\approx 6(3a)$

5) indicating the subject matter (often one that provokes a mental reaction or an expression indicative thereof) (e.g., angry at Joe)

TPP mapping: $\approx 11(6)-1$

6) expressing a relationship between an individual and a skill or a level of skill and the skill itself (e.g., good at singing)

TPP mapping: $\approx 8(4a)$

7) indicating the target or goal of an attempt, action, thought, or plan (e.g., attempts as unification)

TPP mapping: $\supset 9(5)$

8) expressing a state, condition, or circumstance (often somewhat idiomatic) (e.g., they are at odds)

TPP mapping: $\approx 7(4) \cup 11(6)$

BEFORE

1) preceding in time (e.g., snack before bedtime)

TPP mapping: $\approx 1(1)$

2) in front of (e.g., the food before her)

TPP mapping: $\approx 2(2)$

- 2.1) in front of, specifically in situations of judgment or examination (e.g., brought before the judge)

TPP mapping: $\approx 3(2a)$

- 3) in an earlier position in a sequence or ranking; in preference to

TPP mapping: $\approx 4(3)$

BEHIND

- 1) at or to the far/rear side of

TPP mapping: $\approx 1(1) \cup 3(2) \cup 4(2a)$

- 2) influencing, responsible for, or underlying (as of reasons or purposes) but not necessarily readily obvious to an observer

TPP mapping: $\approx 2(1a) \cup 6(3a)$

- 3) in support of or giving guidance to (someone/something else)

TPP mapping: $\approx 5(3)$

- 4) less advanced than (someone or something) in terms of achievement or development

TPP mapping: $\approx 8(5)$

- 5) having a lower score than (another competitor)

TPP mapping: $\approx 9(6)$

BENEATH

- 1) at, to, or through an area or location positioned vertically lower than

TPP mapping: $\approx 1(1) \cup 2(1a) \cup 3(2)$

- 2) lower in status or rank than

TPP mapping: $\approx 4(2a) \cup 5(2b)$

- 3) not obvious, as if hidden behind an appearance metaphorically

TPP mapping: $\approx 6(2c)$

BESIDE

- 1) indicating a location at the side of / next to

TPP mapping: $\approx 1(1)$

- 2) in comparison with , as though next to each other so as to make differences
apparent

TPP mapping: $\approx 2(1a)$

- 3) other than; in addition to

TPP mapping: $\approx 3(2)$

BETWEEN

- 1) in, into, or across the space separating (two objects or regions) (e.g., between the
house and the garage)

TPP mapping: $\approx 1(1)$

- 2) in the period separating (two points in time) (e.g., between May and July)
 TPP mapping: $\approx 2(2)$
- 3) in the interval separating (two points on a scale / in a series) (e.g., between N and Z)
 TPP mapping: $\approx 3(3)$
- 4) indicating a connection, interaction, or relationship involving two or more things
 (e.g., discussion between the two factions)
 TPP mapping: $\approx 4(4) \cup 5(4a)$
- 4.1) with reference to decision-making processes involving two or more things being
 considered together/against each other, as with choices or the discernment of
 differences (e.g., choose between them)
 TPP mapping: $\approx 7(4c)$
- 4.2) with reference to a contrast or failure to correspond (e.g., the difference between
 them)
 TPP mapping: $\approx 6(4b)$
- 5) by combining (or summing over as in arithmetic) the resources or actions of (two
 or more things) (e.g., between the two of them, they own 50% of the city)
 TPP mapping: $\approx 8(5) \cup 9(5a)$

BY

- 1) indicating the logical subject (that is, the word that would be the subject in an active construction), typically some form of agent (e.g. provided by Joe)

TPP mapping: $\approx 1(1) \cup 2(1a) \cup 3(1b)$

- 1.1) indicating the creator/author of (e.g., plays by Shakespeare)

TPP mapping: $\approx 4(1c)$

- 2) indicating the means of achieving something (e.g., melt it by cooking it)

TPP mapping: $\approx 5(2)$

- 2.1) indicating a term or name to which some meaning or referent is assigned (e.g., what is meant by 'fair')

TPP mapping: $\approx 6(2a) \cup 7(2b)$

- 2.2) indicating the means/medium/route of transport (e.g., travel by car)

TPP mapping: $\approx 8(2c)$

- 2.3) indicating the means/criteria/basis of judgment (e.g., judge by looks)

TPP mapping: $\approx 15(3c)$

- 2.4) indicating the other parent of someone's/something's child[ren] (e.g., his children by his ex-wife)

TPP mapping: $\approx 9(2c) \cup 9(2d)$

- 3) indicating the size or amount, as of a margin (e.g., increase by 7%)

TPP mapping: $\approx 12(3), 13(3a)$

- 4) as in phrases where something is happening repeatedly or progressively, indicating the unit of time (e.g., month by month)

TPP mapping: $\approx 14(3b)$

- 5) (mathematics) expressing multiplication (e.g., 6 feet by 7 feet)

TPP mapping: $\approx 16(3d)$

- 6) near; close to in space (e.g., the tree by the house)

TPP mapping: $\approx 18(5)$

- 6.1) near but then past and beyond, as of movement (e.g., drove by the house)

TPP mapping: $\approx 19(5a)$

- 7) indicating a deadline or the end of a particular time period (e.g., be done by Friday)

TPP mapping: $\approx 17(4)$

- 8) indicating the period in which something happens (e.g., 'by day')

TPP mapping: $\approx 20(6)$

- 9) according to; concerning (e.g., did well by him)

TPP mapping: $\approx 21(7)$

- 10) as used in oaths/swearing (e.g., swore by God)

TPP mapping: $\approx 22(8)$

DOWN

- 1) at or to a lower point of something (e.g., he went down the hill)

TPP mapping: $\approx 1(1)$

- 2) moving toward or located at a point further along a path (e.g., he went down the road)

TPP mapping: $\approx 3(1b)$

- 2.1) moving toward or located at a point lower in elevation along a water course (e.g., a river)

TPP mapping: $\approx 2(1a)$

- 3) throughout a period of time (e.g., down the ages)

TPP mapping: $\approx 5(2)$

DURING

- 1) throughout, within, or at a particular point in the course or duration of (a period of time) (e.g., ate a hamburger during the match)

TPP mapping: $\approx 1(1) \cup 2(1a)$

FOR

- 1) used to or intended to contain (e.g., jar for cookies)

TPP mapping: $\supset 5(4)$

- 2) with the purpose of mitigating, preventing, or reducing (e.g., cure for cancer)
 TPP mapping: $\supset 5(4)$
- 3) with the purpose of performing or engaging in (an activity) (e.g., hammer for building)
 TPP mapping: $\supset 5(4)$
- 4) with the purpose of obtaining, accessing, experiencing, or detecting (e.g., asked for the book, paid \$5 for it)
 TPP mapping: $\supset 5(4)$
- 5) indicating something given or required in exchange (e.g., bought it for \$5)
 TPP mapping: $\approx 10(8a)$
- 6) indicating the topic of desire (e.g., longed for peace)
 TPP mapping: $\supset 6(5)$
- 7) indicating the focus of an emotion (other than desire) (e.g., disdain for chocolate)
 TPP mapping: $\approx 2(2)_{\subset} \cup 3(3)_{\subset}$
- 8) indicating the destination of movement (e.g., headed for the door)
 TPP mapping: $\approx 7(6)$
- 9) indicating the intended/expected recipient (e.g., bought it for her)
 TPP mapping: $\supset 3(3)$
- 10) benefiting; in favor of (e.g., ruled for the defense)
 TPP mapping: $\approx 1(1)_{\subset} \cup 3(3)$

- 11) indicating the employer (e.g., worked for the bank)
 TPP mapping: $\approx 4(3a)$
- 12) *indicating an extent*
- 12.1) indicating the temporal extent (e.g., for 16 minutes)
 TPP mapping: $\approx 12(10)$
- 12.2) indicating the distance/extent (e.g., for 7 miles)
 TPP mapping: $\approx 13(11)$
- 13) indicating the ordinal position within a series (e.g., for the 5th time)
 TPP mapping: $\approx 14(12)$
- 14) indicating the justification (and, perhaps also the topic) (e.g., criticize for losing)

 TPP mapping: $\supset 6(5)$
- 15) relative to the expected norm (e.g., soft for a turtle shell)
 TPP mapping: $\approx 11(9)$
- 16) regarding; in respect/relation to; with purpose(s) related to (e.g., a name for it)
 TPP mapping: $\approx 2(2) \cup 2(2) - 1 \subset 5(4) \subset$

FROM

- 1) indicating the physical starting point, as of movement or extension (e.g., travel
 from Maine, a rope from the front to the back)
 TPP mapping: $\approx 1(1) \cup 2(1a) \cup 10(7) \subset$

- 2) indicating the vantage point (e.g., see from the tower)
 TPP mapping: $\approx 8(5)$
- 3) indicating the location where someone/something who is communicating is at
 (e.g., he called from the lobby)
 TPP mapping: $\supset 4(3)$
- 4) indicating the origin of an entity or object, as of where it/they came into existence
 or developed (e.g., people from Britain)
 TPP mapping: $\supset 4(3)$
- 5) indicating the location associated with someone/something, as of where some-
 one/something was originally or is generally encountered (e.g., friends from
 school)
 TPP mapping: $\supset 4(3)$
- 6) so as to be or become (non-physically) separated, unassociated with, or not in
 accordance with (e.g., defect from the party)
 TPP mapping: $\supset 10(7)$
- 7) indicating a previous state or condition (e.g., recovered from illness)
 TPP mapping: $\approx 10(7)_{\subset} \cup 7(4a) \cup 10(7)-1$
- 8) indicating the creator or performer of something (e.g., criticism from Joe)
 TPP mapping: $\approx 12(9)-1$

- 9) indicating the cause of something (e.g., was cold from the wind)
 TPP mapping: $\approx 12(9)$
- 10) indicating an input used in a creative process (e.g., made from recycled paper)
 TPP mapping: $\supset 9(6)$
- 11) indicating a source of knowledge or basis for judgment (e.g., concluded from his remarks)
 TPP mapping: $\approx 13(10)$
- 12) indicating the source of obtainment (e.g., I bought it from Joe)
 TPP mapping: $\supset 10(7)$
- 13) indicating the starting point along a particular scale or range (e.g., rose from \$5)
 TPP mapping: $\supset 6(4)$
- 14) indicating the starting point in time (e.g., from January onward)
 TPP mapping: $\approx 3(2) \cup 5(3a)$
- 15) indicating something against which a distinction/difference is made or perceived
 (e.g., distinguish old from new)
 TPP mapping: $\approx 14(11)$
- 16) indicating something that is avoided (e.g., abstain from drugs)
 TPP mapping: $\approx 11(8)$

IN

- 1) indicating a location that surrounds (or can be viewed as surrounding) something else (e.g., the cow in the meadow)

TPP mapping: $\approx 1(1) \cup 7(5)$

- 2) indicating the (perhaps abstract) place where information is stored, written, or perceived (e.g., stored in the database)

TPP mapping: $\supset 7(5)$

- 3) indicating the location (typically a body part/region) where contact is made, typically some form of striking, AND in may not be replaced by into in this context (e.g., hit him in the jaw)

TPP mapping: $\supset 2(1a)$

- 4) indicating clothing being worn; wearing (e.g., was in a blue dress)

TPP mapping: $\approx 1(1)-1$

- 5) indicating a state/condition/form, often a mental/emotional one that is being experienced (it may in addition be the trigger of some response) (e.g., be in agony)

TPP mapping: $\approx 5(4)$

- 6) (into) expressing motion or extension to a position within or surrounded by (e.g., jumped in the pit)

TPP mapping: $\approx 2(1a)$

- 7) (into) indicating a state/condition/form that is entered (e.g., tie in a knot)
 TPP mapping: $\supset 5(4)$
- 8) indicating a time period during which something happens or continues (e.g., in the morning)
 TPP mapping: $\approx 3(2)$
- 9) indicating an age range (e.g., in their 20s)
 TPP mapping: $\supset 5(4)$
- 10) indicating the substance/material something is made of (usually somewhat restricted) (e.g., sweater in wool)
- 11) indicating the language, medium, or means of encoding (e.g., spoke in German)
 TPP mapping: $\approx 7(5)_{\subset} \cup 9(7)$
- 12) indicating the color or pattern of (e.g., clothes in blue)
 TPP mapping: $\approx 9(7)-1$
- 13) indicating the key of a piece of music (e.g., in B flat)
 TPP mapping: $\approx 10(7a)$
- 14) indicating a group as a context (e.g., tension in his squadron)
 TPP mapping: $\supset 7(5)$
- 14.1) indicating a group/organization that someone/something is a member/employee of (e.g., he is in the navy)
 TPP mapping: $\supset 7(5)$

- 15) indicating an academic or occupational subfield or other activity (e.g., he works in astrophysics)

TPP mapping: $\approx 7(5)_{\subset} \cup 8(6)$

- 16) indicating a manner that something happens or is done, often somewhat idiomatic (e.g., done in a neat way)

TPP mapping: $\approx 6(4a)-1$

- 17) during; due to exposure to or involvement with (e.g., died in the earthquake)

TPP mapping: $\supset 7(5)$

- 18) expressing participation with an activity (e.g., he was involved in the planning)

TPP mapping: $\supset 7(5)$

- 19) indicating the aspect with respect to which a change occurs (e.g., change in its color)

TPP mapping: $\supset 6(4a)$

- 20) indicating the quality or aspect with respect to which an assertion or judgment is made; similar to the idiom “in terms of” (e.g., brilliant in its style)

TPP mapping: $\approx 6(4a)_{\subset} \cup 7(5)_{\subset} \cup 11(8)_{\subset}$

- 21) used in conjunction with ‘delight’ or ‘interest’

TPP mapping: $\supset 7(5)$

- 22) expressing the length of time before a future event is expected to happen (e.g.,
will happen in 1 hour)

TPP mapping: $\approx 4(3)$

INSIDE

- 1) in; situated within the confines of (something)

TPP mapping: $\approx 1(1)$

- 1.1) into; moving or extending so as to become/end within (something)

TPP mapping: $\approx 2(1a)$

- 1.2) metaphorically within (a person's body or mind), as of emotions and sensations
(i.e., the anger burned inside him)

TPP mapping: $\approx 3(1b)$

- 1.3) (in soccer, rugby, and other sports) closer to the centre of the field than (another
player)

TPP mapping: $\approx 4(1c)$

- 2) in less than (the period of time specified)

TPP mapping: $\approx 5(2)$

INTO

- 1) moving or extending so as to end within (something) (e.g., ran into the house)

TPP mapping: $\approx 1(1)_{\subset} \cup 3(3)$

- 1.1) indicating the clothing being used to dress someone/something (e.g., got into his suit)

TPP mapping: $\supset 1(1)$

- 1.2) indicating a time period (being) entered (e.g., we are into the third week)

TPP mapping: $\approx 1(1)-1$

- 2) to a position of contact with, typically used with verbs expressing forceful motion or collision (e.g., rammed into him)

TPP mapping: $\approx 2(2)\cup 4(4)$

- 3) indicating a topic of observation/analysis (e.g., inquiry into the cause)

TPP mapping: $\approx 5(5)$

- 4) expressing a state, condition, form, or activity being entered (e.g., broke into pieces, jolted into despair)

TPP mapping: $\approx 6(6)\cup 7(7)_C$

- 4.1) indicating a group/collection being added or assigned to (as a member) (e.g., election into congress)

TPP mapping: $\supset 7(7)$

- 5) (mathematics) expressing division (e.g., divide 8 into 2)

TPP mapping: $\approx 8(8)$

- 6) taking a lively and active interest with regard to (something) (e.g., got into sky diving)

TPP mapping: $\approx 9(9)$

LIKE

- 1) (specific to verbs / actions) in the manner of; as if done by; as if the complement of the preposition were the subject of an active voice sentence using the same verb or predicative adjective (e.g., screamed like a banshee [screams], smells like a dog [smells])

TPP mapping: $\approx 2(1a) \cup 4(1c) \cup 5(1d) \cup 1(1)_C$

- 2) (specific to verbs / actions) in a manner appropriate to; as if done to; as if the complement of the preposition were the object of an active voice sentence using the same verb (e.g., eating it like [one eats] candy, petting it like [one pets] a cat)

TPP mapping: $\approx 3(1b)$

- 3) (specific to verbs / actions) in the manner of (another event or action), often used with demonstratives (i.e., this/that)

TPP mapping: $\approx 6(2)$

- 4) (specific to noun-like-noun) used to express similarity or resemblance between two nouns

TPP mapping: $\supset 1(1)$

- 5) such as; for example

TPP mapping: $\approx 7(3)$

OF

- 1) (part/member-of-whole) indicating the whole in a part-of-whole relationship
(e.g., the roots of the tree)

TPP mapping: $\approx 1(1) \cup 6(3)_C$

- 2) *connecting a number, quantifier, or partitive noun with the thing(s)/substance
that compose(s) it*

- 2.1) (measure/number/amount -of- something(s)) connecting a formal measure term
or count with what is being measured/counted (e.g., six of them)

TPP mapping: $\supset 3(1b)$

- 2.2) (collection/configuration/series -of- members/parts) connecting a collec-
tion/configuration term with the member(s)/part(s) that constitute it (e.g.,
group of people)

TPP mapping: $\supset 3(1b)$

- 2.3) (substance/material/ingredient) indicating a/the substance/material/ingredient
constituting something (e.g., ball of paste)

TPP mapping: $\approx 3(1b)_C \cup 17(8)$

- 2.4) expressing a (species/variety -of- specimens) relationship (e.g., genus of plant)

TPP mapping: $\approx 10(5a)$

- 3) (container -of- contents) connecting container(s) (or containing area(s)) with their contents (e.g., basket of apples)

TPP mapping: $\approx 3(1b)-1$

- 4) indicating the direct object, theme, or patient (the thing modified) associated with the governing verb-derived/verb-like noun (e.g., modification of cars)

TPP mapping: $\approx 11(6) \cup 12(6a)$

- 5) indicating the agent or logical grammatical subject of a verb-like noun (e.g., conclusions of the report)

TPP mapping: $\approx 10(5a)$

- 5.1) expressing the relationship between a creator/producer and their product(s), most often for artistic works (e.g., books of J.K. Rowling)

TPP mapping: $\approx 7(3a)$

- 6) indicating a secondary argument not paraphrasable using ‘about’ (limited to a small set of verbs) (e.g., drained it of money, convict him of theft)

TPP mapping: $\supset 14(7)$

- 7) indicating the subject/topic matter; about (e.g., spoke of the trouble)

TPP mapping: $\approx 15(7a)$

- 7.1) expressing and/or motivated by (e.g., grin of happiness)

TPP mapping: $\supset 6(3)-1$

- 8) expressing an equative relationship, often where the second of the preposition's arguments is a specific instance of the class of things specified by the first (e.g., sacrament of baptism, city of Perth)
 TPP mapping: $\approx 9(5)$
- 8.1) expressing the relationship between a scale or measure and a value (e.g., a loss of 5%)
 TPP mapping: $\approx 4(2)$
- 9) indicating the time when something occurred, existed, or came into being (e.g., the famine of 1745)
 TPP mapping: $\supset 6(3)$
- 10) indicating the location where something is at/from (e.g., people of Toledo)
 TPP mapping: $\supset 6(3)$
- 11) (mental experience -of- experiencer) indicating the experiencer who experiences the thought(s)/emotion(s) (e.g., fury of voters)
 TPP mapping: $\supset 11(6)$
- 12) (possession -of- possessor) indicating the possessor who owns or otherwise holds rights towards something (e.g., the house of the Johnsons)
 TPP mapping: $\supset 6(3)$
- 13) connecting an attribute with the person/thing that exhibits it (e.g., that was smart of him)
 TPP mapping: $\supset 13(6b)$

- 14) caused by (used mostly with death, perceptions, and feelings) (e.g., died of cancer)
TPP mapping: $\supset 16(7b)$
- 15) (with verbs of smell/taste) indicating the thing that is detected or resembled (e.g., stinks of beer)
TPP mapping: $\supset 16(7b)$
- 16) indicating a possessed attribute such as age or color (e.g., cloak of blue)
TPP mapping: $\approx 5(2a) \cup 6(3) - 1_c$
- 17) indicating an action/activity something is involved with or is used for (e.g., rod of smiting)
TPP mapping: $\supset 9(5)$
- 18) indicating the complement of a relational noun (e.g., son of, price of)
TPP mapping: $\supset 6(3)$
- 18.1) indicating the complement of a measurable noun such as de-adjectival nouns (e.g., adequacy, compatibility, width)
- 19) indicating the complement of a predicative adjective (e.g., symptomatic of cancer)
TPP mapping: $\supset 13(6b)$

OFF

- 1) moving away from so as to no longer be located at or in contact with (e.g., walk off the stage)

TPP mapping: $\approx 1(1) \cup 4(3)$

- 2) abutting and extending away from (e.g., a road off the main boulevard)

TPP mapping: $\approx 2(2)$

- 3) in or at a position separated from (e.g., the bird was off its perch)

TPP mapping: $\approx 1(1)$

- 3.1) in or at a position in a body of water separated from (e.g., the boats off the coast)

TPP mapping: $\approx 3(2a)$

- 4) indicating a substance (often a drug or something that can be viewed as such) being abstained from (e.g., stay off drugs)

TPP mapping: $\approx 6(3b) \cup 7(4)$

- 5) indicating an activity (typically work) avoided or not engaged in (e.g., he took time off work)

TPP mapping: $\approx 5(3a)$

ON

- 1) physically in contact with and supported by (a surface) (e.g., the book on the table)

TPP mapping: $\approx 1(1) \cup 2(1a) \cup$

- 1.1) indicating a surface that, due to contact with, serves as the cause or means of causing something (e.g., cooked on the open flame)

see also 3(1b)

- 1.2) onto; indicating where (or against what) contact is made (e.g., threw spaghetti on the wall)

TPP mapping: $\approx 5(1d) \cup 11(5) - 1_{\subset} \cup 16(7b)_{\subset}$

- 1.3) indicating the part(s) of the body supporting the rest of the body (e.g., stood on his feet)

TPP mapping: $\approx 4(1c)$

- 1.4) indicating the vehicle or mode of transportation (e.g., flew on a plane)

TPP mapping: $\approx 15(7a)$

- 1.5) in the possession of; being carried by (e.g., a gun on him)

TPP mapping: $\approx 6(1e)$

- 2) forming a distinctive or marked part of the surface of (e.g., a smile on his lips)

TPP mapping: $\approx 7(2)$

- 3) having (the thing mentioned) as a topic; about (e.g., knowledge on sailing)

TPP mapping: $\approx 8(3) \cup 11(5) - 1_{\subset}$

- 4.1) having (the thing mentioned) as criteria used in judgment or evaluation or as a/the justification for an action (e.g., judged on his actions)

TPP mapping: $\supset 9(3a)$

- 4.2) having (the thing mentioned) as a/the basis for a monetary action (e.g., was charged on his loan)

TPP mapping: $\approx 9(3a)-1$

- 4.3) having (the thing mentioned) as a/the basis being adhered to or system of rules governing an action or situation (e.g., employed on a contract)

TPP mapping: $\supset 9(3a)$

- 5) indicating a time; at the time of (e.g., happened on Oct. 22nd)

TPP mapping: $\approx 17(8) \cup 18(8a)$

- 6) indicating some foodstuff that is being consumed or otherwise forms the basis of a diet/meal (e.g., dined on fine wine)

TPP mapping: $\supset 9(3a)$

- 7) indicating some substance (e.g., a drug or medicine) one is currently taking or under the influence of (e.g., he is on drugs)

TPP mapping: $\approx 20(10)$

- 8) indicating the means/medium used for storing or transmitting information (e.g., talked on the phone)

TPP mapping: $\approx 12(6) \cup 13(6a)$

- 9) in the course of (a journey) (e.g., it happened on the way to the store)
 TPP mapping: $\approx 14(7)$
- 10) indicating an activity engaged in (e.g., he was on a mission)
 TPP mapping: $\approx 19(9)$
- 11) indicating the target of some action or behavior; metaphorically onto or against
 (e.g., get revenge on Sam)
 TPP mapping: $\approx 11(5)_{\subset} \cup 11(5) - 1_{\subset}$
- 12) denoting a particular level or setting along a scale or range (e.g., set the dryer on
 Permanent Press)
 TPP mapping: $\approx 23(13)$

ONTO

- 1) moving (or extending) to a location on the surface of
 TPP mapping: $\approx 1(1)$
- 1.1) moving aboard a vehicle of transportation
 TPP mapping: $\approx 2(2)$
- 2) (mathematics) in reference to an ‘onto’ mapping

OVER

- 1) (above and across) vertically above and moving/extending (at least partially)

across (e.g., flew over the plains)

TPP mapping: $\approx 2(1a)_C \cup 3(1b) \cup 4(2)_C \cup 13(4b)_C$

- 2) (above) vertically above (e.g., the halo over his head)

TPP mapping: $\approx 1(1)_C \cup 4(2)_C$

- 3) expressing passage or trajectory across (but without implied vertical separation);

expressing a location that could be reached by travel across (e.g., journey over the desert, the house over the hill)

TPP mapping: $\approx 11(4) \cup 3(1b)_C$

- 4) located at the other side of

TPP mapping: $\approx 13(4b)$

- 5) across so as to form a covering (e.g., spread jam over it)

TPP mapping: $\approx 2(1a)$

- 6) expressing the means by which something is done (e.g., talk over the phone)

TPP mapping: $\approx 15(6)$

- 6.1) by means of the resistant surface constituted by (an object), as with striking or

hitting (e.g., broke his club over Joe's head)

TPP mapping: $\approx 15(6)-1$

- 7) in cases of perceived despite some sort of interference, usually some sort of audible noise (e.g., heard it over the rock music)

TPP mapping: $\approx 9(2e)$

- 8) indicating the subject of (and, sometimes, the reason for) (e.g., fought over the trophy)

TPP mapping: $\approx 16(7)$

- 9) indicating a time period during which something happens or persists (e.g., the food spoiled over the weekend)

TPP mapping: $\approx 14(5)$

- 10) expressing dominance or influence, as of authority, rank, or victory (e.g. power over him)

TPP mapping: $\approx 5(2a) \cup 6(2b) \cup 7(2c) \cup 8(2d)$

- 11) indicating some foodstuff available/consumed during an event/activity (e.g., discuss it over coffee)

No mapping

THROUGH

- 1) expressing passage, extension, or perception that goes (perhaps to many places) within (and, perhaps, out of) someplace/something; or alternatively, into and then out of (e.g., go through the tunnel)

TPP mapping: $\approx 1(1) \cup 2(1a) \cup 3(1b) \cup 4(1c) \cup 5(1d) - 1 \cup 10(3) - 1$

- 1.1) being positioned/located beyond or at the far end of something, as of openings or obstacles (e.g., her house is through the woods)

TPP mapping: $\approx 5(1d)$

- 1.2) expressing the extent of rotation/turning from one orientation to another (e.g., turn through 90 degrees)

TPP mapping: $\approx 6(1e)$

- 2) so as to reach the end of (an experience, situation, or activity, often a tedious or stressful one) (e.g., worked through the process)

TPP mapping: $\approx 7(2) \cup 8(2a) \cup 9(2b)$

- 3) indicating a collection, container, inventory, or publication being at least partially searched or inspected (e.g., go through the newspaper)

TPP mapping: $\approx 10(3)$

- 4) indicating a means by which something happens or is done (e.g., got a job through his uncle)

TPP mapping: $\approx 12(5) \cup 13(5a)$

- 5) up to and including (a particular point in an ordered sequence, often a point in time) (e.g., March 2nd through the 5th)

TPP mapping: $\approx 11(4)$

TO

- 1) expressing the end location of motion or extension (e.g. walked to NYC)
TPP mapping: $\approx 1(1) \cup 2(1a)$
- 1.1) indicating attachment or linkage with something (e.g., attached to the car)
TPP mapping: $\supset 13(5)$
- 2) approaching or reaching (a particular state/condition/circumstances/relationship)
(e.g., turned to dust)
TPP mapping: $\approx 5(2) \cup 6(2a)$
- 3) expressing an extent or point reached along a particular scale or range (e.g.,
changed to \$5)
TPP mapping: $\approx 3(1b)$
- 4.1) indicating the recipient of communication (e.g., talked to Joe)
TPP mapping: $\supset 8(3)$
- 4.2) indicating the recipient of possession (e.g., bequeathed the ball to Joe)
TPP mapping: $\approx 8(3)$
- 5) indicating the target of focused perception (e.g., listen to Joe)
- 6) indicating the topic or subject matter (used with a handful of assertive communicative words such as ‘testify’) (e.g., testify to the truth)
- 7) indicating a complement of a relational noun, verb, or predicative adjective (e.g.,
allergic to corn)
TPP mapping: $\approx 8(3) - 1 \cup 9(4) \cup 10(4a) \cup 14(6)$

- 8) (telling the time) until/before (the time/hour specified) (e.g., 5 minutes to noon)
 TPP mapping: $\approx 4(1c)$
- 9) indicating a rate of return on something, for example the distance travelled in
 exchange for fuel used (e.g., it gets 40 miles to the gallon)
 TPP mapping: $\approx 11(4b)$
- 10) (mathematics) indicating the power (exponent) to which a number is raised
 TPP mapping: $\approx 12(4c)$
- 11) in comparison with (e.g., the club's nothing to what it once was)
 TPP mapping: $\approx 15(7)$
- 12) governing a phrase expressing someone's reaction to something (e.g., to her as-
 tonishment, he smiled)
 TPP mapping: $\approx 7(2b)$

TOWARD

- 1) indicating a location something moves, extends, or is oriented in the direction of
 (e.g., move towards him)
 TPP mapping: $\approx 1(1)$
- 1.1) indicating a point in TIME that is near and/or being approached (e.g., towards
 the end of November)
 TPP mapping: $\approx 3(1b)$

- 1.2) getting closer to achieving a goal; indicating a state/form/situation/action being approached

TPP mapping: $\approx 2(1a)$

- 2) indicating the person or thing that a manner of behavior is directed at (e.g., be polite towards him)

TPP mapping: $\approx 4(2)$

- 3) indicating the complement of a cognitive/emotional word (e.g., resentment towards him)

TPP mapping: $\supset 4(2)-1$

- 4) indicating the complement of a word indicating a tendency or bias (e.g., bias towards Harvard graduates)

TPP mapping: $\supset 4(2)-1$

- 5) indicating a cost being payed for (e.g., \$5 towards the cost of lunch)

TPP mapping: $\approx 5(3)$

WITH

- 1) indicating a participating entity/thing in an action/activity (e.g., talk with Joe)

TPP mapping: $\approx 6(4) \cup 1(1)_C$

- 2) indicating spatial accompaniment / proximity (e.g., he is with the bike)

TPP mapping: $\supset 1(1)$

- 3) indicating the group in a member-of-group relationship (e.g., Joe is with the marines, grouped with alternative medicine)

TPP mapping: $\approx 13(8)$

- 4) indicating the means or material used to perform an action or acting as the complement of similar participle adjectives (e.g., crammed with, coated with, covered with)

TPP mapping: $\approx 4(3) \cup 5(3a)$

- 5) because of / due to (the physical/mental presence of) (e.g., boiling with anger, shining with dew)

TPP mapping: $\approx 11(7b)$

- 6) indicating the manner or circumstances (but not cause or motivation) of something (e.g., fix with precision)

TPP mapping: $\approx 7(5)$

- 7) expressing a possessive relationship (e.g., the man with the hat)

TPP mapping: $\approx 2(2)_{\subset} \cup 3(2a) \cup 8(6) \cup 10(7a)$

- 7.1) indicating a part in a part-of-whole relationship (e.g., man with the red nose)

TPP mapping: $\supset 2(2)$

- 7.2) connecting an experiencer with some sort of experience, primarily ailments (e.g., person with schizophrenia)

TPP mapping: $\approx 2(2)_{\subset} \cup 3(2a) \cup 8(6) \cup 10(7a)$

- 8) indicating the information content brought to a communication/discussion (e.g.,
phoned him with the question)
TPP mapping: $\approx 4(3)-1$
- 9) expressing correlation (e.g., increases with age)
TPP mapping: $\approx 12(7c)$
- 10) *miscellaneous complements*
- 10.1) indicating the complement of a cognitive/emotional word (whatever it is oriented
toward) (e.g., angry with her)
TPP mapping: $\supset 9(7)$
- 10.2) indicating the complement of an adherence/conformity word (e.g., adheres with,
conforms with)
TPP mapping: $\approx 9(7)_{\subset} \cup 15(9)-1$
- 10.3) in respect to; in relation to; indicating something(s)/someone(s) towards which
some manner of behavior or being exists or is expressed (and doesn't fit
elsewhere) (e.g., be polite with her)
TPP mapping: $\approx 9(7)_{\subset} \cup 16(10)$
- 11) in the same direction as (e.g., shave with the grain)
TPP mapping: $\supset 15(9)$