THE SO-CALLED PSEUDO-PASSIVE REVISITED
(BY A COGNITIVE LINGUIST)

1. THE THEORETICALLY TROUBLESOME PSEUDO-PASSIVE

The construction known as the English pseudo-passive is exemplified in (1):

(1) a. This hotel room has been slept in by John Lennon.
    b. The lecturer was argued with by the disgruntled student.
    c. Yet another pay increase is being called for by the autoworkers.
    d. The guards were trampled on by hundreds of rampaging fans.
    e. She was glanced at surreptitiously by the reporter.
    f. A stinging retort to her remark was finally thought of by John.
    g. The order was gone over carefully and resubmitted by the clerk.

This construction has received a substantial amount of theoretical attention since Chomsky (1975 [1955]) first discussed examples like these within a transformational framework. It has continued to command interest because it is purported to involve the passivization of an oblique object NP rather than a direct object. Passive, especially in English, has long been used as a test of a verb’s transitivity or the direct objecthood of the post-verbal NP (cf. Chomsky, 1965; Perlmutter and Postal, 1977; Bach, 1980). Whereas the archetypal clause structure said to trigger passivization (to use the derivational metaphor) is [NP-V-NP], pseudo-passives arise from or are associated with active correspondents having [NP-V-P-NP] propositional structure.

Admittedly, the very existence of pseudo-passive-type sentences in English calls out for either a lexico-syntactic synthesis of the [V-P] complex or a re-thinking of the conditions underlying the passive construction. Most generative frameworks opt for the former approach, which I consider theoretically expedient but explanatorily unsatisfying. I will offer, instead, a cognitively-based analysis that looks at passive from a semantic perspective rather than a strictly structural one. This approach treats the pseudo-passive as one of many constructions
motivated by semantic forces underlying the phenomenon of transitivity rather than as a structural problem to be solved via the syntactic recategorization of lexical items. Using an extensive array of data as evidence, I will argue that clauses known as pseudo-passive respond to the same conceptually-based model of transitivity as the regular English passive. This model, which accounts for a wide range of acceptable and unacceptable passive clauses, will be presented in Section 2.

Structure-based theories, such as Chomsky (1965), Perlmutter & Postal (1977), or Postal (1986), have usually stipulated some mechanism whereby certain [V-P] sequences are reanalyzed as compound transitive verbs, [V-P]_{trans}. which, in turn, allows for the reinterpretation of the prepositional objects as direct objects. Such lexical coalescence and syntactic reanalysis in generative or universal (viz. Relational Grammar) accounts rarely receive independent support and this empirical neglect has caused no shortage of problems or ad hoc solutions. Furthermore, the need for morphosyntactic reanalysis in these frameworks does not alone make the pseudo-passive theoretically interesting. A number of syntactic and lexical inconsistencies in the data plague all solutions and have hindered neat grammatical explanations. Generative solutions have been hard pressed to explicate (a) why any [V-P] sequence should coalesce in the first place to form a new transitive verb; (b) why certain [V-P] sequences do not coalesce and strongly resist passive forms, as given in (2);

\begin{enumerate}
\item a. *The train station isn’t stopped at by this bus.
\item b. *She was rushed from by him with fear on his face.
\item c. *Pride was beamed with by the new father.
\item d. *Members of the hospital staff were spread to by the virus.
\item e. *The student was finally dawed on by the answer.
\end{enumerate}

and (c) why certain [V-P] sequences do coalesce, but only differentially, depending on such syntactically “extraneous” factors as context and the semantics of the passive clause in question. To illustrate, compare the grammatical and ungrammatical versions of identical passive V-P forms in (3) and (4), several of which were first noted in Chomsky (1975 [1955]).

\begin{enumerate}
\item a. John was run after by the angry crowd.
\item b. Peace has long been hoped for by both sides.
\item c. Your support is especially counted on by the foundation.
\item d. Chopsticks are only eaten with by the adventurous and dextrous.
\item a. *Lunch was run after by John.
\item b. *Three years were hoped for by the hostage’s sister.
\end{enumerate}

Most generative and universal approaches to the pseudo-passive problem have only made passing mention of such irregularities and have further shrunk from incorporating these anomalies into their analyses of the regular cases. Such an inclusion would fundamentally require a detailed study of the semantics of individual clauses, a response which runs counter to the spirit of maximal generativity and predictability but which is, in fact, warranted by the data. Although some non-generative or functionalist studies have actually focused on point (c), on how the particular semantics and context of individual tokens of the construction affect passivizability, they have done so in a fairly disjointed and overly atomized fashion. That is, they have tended to localize the acceptability or unacceptability of individual constructions in either the predicate semantics of the [V-P] complex or in the semantic affectedness or discourse prominence of the passive subject NP. These approaches, too, have regularly overlooked the special semantic contribution of the preposition independent of the meaning of the verb, thus failing to account for points (a) and (b) above. For example, Visser (1970-73) placed the locus of transitivity or passivizability on the semantic unity of the V+P; Bolinger (1975) on the genuine affectedness of the patient; Couper-Kuhlen (1979) on the semantic roles played simultaneously by the subject and oblique NPs; Davison (1980), likewise, attributed their passivizability to the physical or psychological effect attributed to the referent of the pseudo-passive subject NP. Riddle & Sheinbuch (1983: 546) cite role prominence as “the single, crucial condition on the occurrence of any NP as a passive subject, whether it be a patient, location, instrument, or bear any other type of semantic role”. The latter’s approach critically ignores the contribution of the individual preposition and the fact that, while context does affect the interpretation the clause receives by the speaker/conceptualizer, speaker construal is variable. In what follows, I advance a global approach to transitivity which more naturally accommodates a wide range of pseudo-passive data as well as examples in which the verb and preposition do not coalesce.

2. The Problem Resolved via a Cognitive Approach to Transitivity

Lakoff (1977) and Hopper & Thompson (1980) first moved syntactic theory in the direction of a clause- and discourse-oriented characterization of transitivity. For them, transitivity was not exclusively dependent on predicate-argument structure and the grammatical relations or semantic roles borne by the individual NP arguments. In the Hopper and Thompson approach, especially...
are the seeds of the integrated model I will argue for here as I reinterpret the pseudo-passive construction in terms of a conceptually-based model of transitivity. Hopper and Thompson (1980: 259) begin their discussion with a pseudo-passive construction in terms of a conceptually-based model of transitivity, Hopper and Thompson (1980: 259) begin their discussion with a non-syntactic view of the phenomenon:

Transitivity is traditionally understood as a global property of an entire clause, such that an activity is ‘carried-over’ or ‘transferred’ from an agent to a patient. Transitivity in the traditional view thus necessarily involves at least two participants... and an action which is typically EFFECTIVE in some way.

However, the activity ‘carried over’ or ‘transferred’ in a transitive event is often indeterminate or otherwise underspecified by the verb and its major arguments. What is even less clear is how, under what conditions, and between what types of entities the transfer can occur. The Hopper and Thompson analysis revolves around 10 binary features such as NUMBER OF PARTICIPANTS, PUNCTUALITY OF EVENT, MODE, AFFIRMATION, KINESIS, AFFECTEDNESS OF THE OBJECT, VOLITIONALLITY OF THE AGENT, etc., whose positive values are associated with a greater degree of transitivity. Unfortunately, their features give us no reliable or integrated metric to assess under what conditions the transfer succeeds or fails to meet some threshold of transitivity as measured in English by a clause’s ability to sustain a passive correspondent. In Rice (1987; Chapter 4) I demonstrate insufficiencies inherent in these features which stem not so much from their overly linguistic nature, but from the authors’ failure to tie these features together semantically or to link them to the concept of a transitive event. In many respects, the cognitive model presented in the next section is only a refinement and an integration of the Hopper and Thompson transitivity features. However, because it is explicitly married conceptually to a transitive event prototype, it succeeds better in accounting for both prototypical and deviant cases of linguistic transitivity, such as the English pseudo-passive.

2.1. An integrated model of transitivity

I have argued elsewhere (Rice 1987) that there is a general pre-theoretic notion in linguistics that canonical transitive events require two types of contrasting participants: sentient and mobile initiators of action, which are prototypically realized by animate entities (canonical agents), and passive and relatively immobile recipients, which are prototypically realized by inanimate entities (canonical patients). These prototypes notwithstanding, it is the extent to which such entities participate in the transference, through its instigation or its effect, that determines whether or not the event is transitive. Transfer of any sort minimally requires a sender and receiver. A transitive event, likewise, requires a transmission source and goal, the two canonical participants mentioned above. But the essential properties of conceptual transitivity do not end here. The direction of transfer and discernible proof that the transfer was successfully completed are also relevant. Moreover, the two endpoints or the two participants of the transfer must be understood as being asymmetrically related since unidirectionality of transmission is a critical aspect of transitivity. A transitively-conceived transfer always passes from one specific entity (prototypically- and grammatically-speaking, an agent) to another (a patient), and not vice versa or bidirectionally.

Although we can dissect the salient elements of conceptual transitivity in terms of physical transmission (transitive events usually involve the transmission of force or energetic effect rather than some concrete entity), not all transitive transfers transpire in physical space. That is to say, not all events coded by clause types associated with transitivity (i.e., certain actives and all passives, among others) involve physical interactions. Consider, for example, the events underlying the (a), (b), and (c) sentences in (5):

(5) a. John successfully shot the puck into the net.
   b. John scored a point.
   c. John’s goal won the game.

(5b) and (c) represent a conceptual departure from the basic physical world event predicated in (5a). The basic physical event is more schematically conceived in (b) which tends to express a secondary or summary effect of the entire action. By contrast, (c) involves an even more indirect consequence of the original action. Furthermore, this effect is cognitively determined rather than directly perceivable. Thus, in (5a-c), we have a gradient between direct interaction in a physical domain and indirect interaction in a more epistemic domain. Nevertheless, all of the sentences in (5) sustain a felicitous passive with minimal pragmatic effort:

(6) a. The puck was successfully shot by John into the net.
   b. A point was scored by John.
   c. The game was won by John’s goal.

We would therefore want to assess all the sentences in (5) as sufficiently transitive since, on one hand, they code a particular type of energetic interaction deemed to be transitive by this model and, on the other hand, their passive versions are acceptable.
These trajectories or paths, frequently indicated by prepositional phrases, are usually thought of as simple verbal modifiers, especially when they occur with intransitive verbs. Many times, though, the preposition does more than specify a directed path of absolute motion or designate some particular locale for an event. Rather, it seems to serve as a lexical instantiation or elaboration of the channel or path that the action must “pass across” as its effect is carried from one participant to another:

(10) The suspect swung at the policeman.

In (10), the prepositional object seems less a spatial reference point than a full-fledged participant in the action. Not only is the action directed towards this NP, but potential or successful contact between it and the subject is implied. Moreover, it is fully capable of being affected by the action. The post-verbal NP thus behaves like a direct object complement with respect to passive and the preposition is available to coalesce semantically with the verb as in a verb particle construction:

(11) The policeman was swung at by the suspect.

What is remarkable about sentences like (11), the pseudo-passive case, is the construal of the prepositional object as a participant rather than as a setting, which I maintain is due to the preposition making explicit the nature and directionality of the channel of transfer whereby two participants engaged in an interaction send and receive some kind of contact, energy, or effect. In brief, my analysis of pseudo-passive constructions like (11) rests on the following claims: (a) prepositions are relational predications used to give structure to space; (b) we conventionally conceive of abstract domains spatially; (c) through the power of metaphorical mapping, prepositions are also used to structure abstract domains; (d) given this conceptual scaffolding function of prepositions, it is not surprising that, when used in certain transitive clause structures, they can make explicit the channel of transfer or the path linking the agent and patient. Put another way, certain prepositions resonate aspects inherent in our conceptual model of transitivity. It is these prepositions which are most likely to “coalesce” with certain verbs, yielding new, “passivizable” verbs.

The rest of the paper is organized as follows. In Section 3, I examine some transitive V-Ps, which I propose result from verbs forming with highly transitive prepositions. These are prepositions whose inherent semantic properties echo or induce properties of transitivity for the whole clause. For the most part, these constructions passivize. In Section 4, the discussion turns to phrasal verbs or V-PPs with non-transitive prepositions, that is, constructions that have a tendency to not passivize. Section 5 deals with the interesting cases of verbs followed by the preposition WITH which show no general tendency one way or the other. Here, individual groups of constructions must be looked at since the preposition itself resists a unifying characterization. Although space limits the discussion to only a handful of the prepositions forming V-Ps, I believe that recurring patterns of behavior evinced by large numbers of these constructions are indicative of fundamental conceptual constraints underlying grammatical organization in English. It is hoped that the inherent semantic properties and differential behavior of individual prepositions entering into these atypical transitive constructions will validate the cognitive model of transitivity outlined in Section 2.1 and advocated in Rice (1987).

3. V-Ps With Highly Transitive Prepositions

Since contact and a particular type of directedness have emerged from the general model given in Section 2 as important components of transitive events, this survey of passivizing V-Ps begins with those involving the most directed and/or proximal of the English prepositions: ON, TO, and AT. These prepositions are goal-oriented (cf. Hawkins (1984)). Furthermore, they are highly transitive since they conform to the directionality implicit in the cognitive model of transitivity. As will be shown later, they also maximally contrast with the non-transitive, source-oriented prepositions, such as OFF and FROM, OFF and FROM, along with complexes like OUT OF, which skew the directionality of motion or effect away from the goal, depart radically from the transitive event canon illustrated in Figure 1. They neither induce V-P coalescence nor participate in passive clauses.

3.1. Prepositional verbs with ON

Of the 140 or more V-Ps with ON in my corpus,3 fully two-thirds behave like pseudo-passive predicates. Most of the constructions fall within general semantic groupings. In the purely physical sphere, there are many V-Ps that predicate locomotion of the agent (TR) where the patient noun phrase (LM) specifies the path as in (12), or that make explicit the ensuing on-going contact between TR and LM following some initial vertical motion as in (13), or that involve repetitive physical contact between TR and LM as in (14). Most of these passivize fairly readily:

(12) The narrow bridge was regularly [walked on, tread on, run on, trampled on] by the villagers.

(13) a. The bed was [jumped on, climbed on, bounced on] by Tom.
From canonical examples of transitive events as coded in (5a) above, a transitive prototype emerges that, following Langacker (1991:285), we can represent diagrammatically as follows:

![Diagram of transitive event]

As schematized in Figure 1, a canonically transitive event involves two distinct and asymmetrically construed entities, an active participant or *trajector* (TR) and a passive participant or *landmark* (LM). These entities, our prototypical agent and patient, are involved in a unidirectional, forceful, and effective interaction. The notation represents other facets of successful transitive interaction as well. For example, the double arrow signifies that the interaction is dynamic and energetic; the arrow touches both participants, signifying some degree of contact between them; the single, squiggly arrow internal to the LM indicates that some sort of change has been effected. This change may be internally or externally realized, but should be outwardly demonstrable to an implicitly-understood viewer. Curiously, such force-dynamic interaction is most successfully predicated of abstract events that transpire in a non-spatial domain, a fact which will be discussed below.

The likelihood of an entity being a full-fledged participant in some activity or merely a non-participant *setting* for its occurrence is a matter of degree and oftentimes quite subject to prevailing interpretation and context. Variable construal is a notion that has been most extensively developed in Langacker (1991: 294-298 *et passim*). It is also a notion implicit in many functionally-based accounts of the passive and pseudo-passive constructions. Clearly, a passive construction gives special discourse prominence to the acted-upon entity in a transitive event. In fact, in some cases the passive construction alone can impart a certain forcefulness, dynamism, or affectedness by virtue of its use.

This is tantamount to claiming that passive has a certain schematic meaning that can help tip the balance in favor of a transitive construal for the interpretation of a marginally transitive event. Much of this determination is probabilistic at best and, like so much in language, facilitated or hindered by subjective construal. I would caution that subjective construal does not wholly account for the (un)acceptability of passive forms just as predicate-argument structure is itself an insufficient determiner of transitivity. There must be some degree of congruence with the conceptual model sketched above. Conformity with the model is often difficult to assess for a given sentence in the absolute, which is why I shall rely on sets of sentences to demonstrate the relative goodness and therefore relative proximity to the transitive prototype of individual sentences. Such an approach necessarily requires the examination of a considerable amount of data in order to demonstrate the sensitivity of the model.

### 2.2. The often-overlooked contribution of the preposition

The thesis I will develop in the remainder of this paper is that the English pseudo-passive involves an activity whose effective transfer between the event participants is reinforced conceptually by semantic properties of certain prepositions. Inarguably, our general intuition or basic semantic model about prepositions makes reference to space. However, given the pervasiveness of space as an all-purpose organizing schema, the ubiquity of prepositions in grammatical constructions referring to both concrete/spatial and abstract/nonspatial concepts should not be surprising. At some fundamental level, we understand the English prepositions as establishing spatial parameters for entities or events in a variety of ways. On one hand, they can set up (static) referential loci for noun phrases:

(7) The cat **in** the hat is blue.

Or they can situate an entire action spatially:

(8) Mary exercises **in** the living room.

Prepositions also describe trajectories taken by moving participants in more dynamic action-event sequences.

(9) John ran **to** the lighthouse and **up** the stairs.
b. The little sofa was [sprawled on, slept on] by the tired, old dog.

(14) The kitchen window was [tapped on, banged on, drummed on, pounded on, hammered on] by the impatient salesman.

Sometimes the contact can be indirect or incomplete because it is mediated by some unspecified instrument, but the effect of the potential contact is nonetheless highly salient:

(15) The policeman was [breathed on, spit on, bled on] by the alleged AIDS victim.

By far, the largest number of transitive V-Ps with ON predicate events which transpire primarily in non-physical space. In the cognitive domain of mental or perceptual activities are found many passive V-Ps:

(16) The verdict was [deliberated on, reflected on, ruled on] by the judge.

(17) A different outcome was [reckoned on, calculated on, planned on, figured on, counted on, banked on] by the voters.

There are also many predications involving visual attention:

(18) The playing children were [focused on, gazed on, spied on, checked on] by the anxious babysitter.

In the domain of personal interaction, almost all the V-Ps with ON passivize:

(19) The new policy was [reported on, harped on] by the droning bureaucrat.

(20) The treaty was [agreed on, conferred on] by the allies.

(21) The kid was [picked on, told on, cheated on] by his conniving older brother.

(22) Their wild behavior was [frowned on, smiled on] by the neighbors.

(23) The government’s continuing financial support was heavily [relied on, depended on] by the small radio station.

There are also many V-Ps with ON lacking a felicitous passive. Given the apparent prevalence of pseudo-passive expressions with ON, dismissing the exceptions as lexically-based would miss important generalizations about the semantic nature of verb-preposition coalescence and transitivity as well. My hypothesis is that non-passivizing expressions with ON are less transitive than passivizing ones, since they signal an unsuccessful “carry-over” of some action from participant to participant. This reduced or absent transitivity may be attributable to any number of factors. In the spatial domain, the event may not be dynamic but purely configurational, such that the entities involved do not interact, but simply share a particular physical orientation as in (24) or a single participant may be oriented relative to some setting as in (25):

(24) *The town is [abutted on, bordered on, neighbored on] by the river.

(25) *The water’s surface was [bobbed on, swum on, floated on] by the playful seal.

Indeed, other V-Ps with goal-oriented prepositions, specifically, V-Ps with TO and AT, behave similarly with regard to some of the transitivity factors identified here.

3.2. Prepositional Verbs with TO

Of the approximately 160 V-Ps with TO in my corpus, only about 40 do not passivize. Again, the likelihood that a V-P sequence will coalesce to form a pseudo-passive-type verb is fairly straightforward once the various predications are examined from the perspective of the conceptual model of transitivity. In the physical sphere, there are predications involving locomotion whereby the preposition and post-verbal NP specify endpoints along some path taken by the active participant. These V-Ps with TO do not passivize uniformly:

(26) *John was [come to, gone to] by Mary, who needed a favor.

(27) *The countryside was [come to, gone to] by Mary, who needed a rest.

Arguably, come to and gone to do not have purely physical senses, since social interaction between the participants is also relevant to the predications. Come to and go to, though deictic opposites, are both neutral motion verbs. However, when manner is conflated with motion within a predication (thereby reinforcing the dynamic motion sense of the V-P) we still find variable passives:
(28) John was {rushed to, run to} by Mary, who needed a favor.

(29) *The countryside was {rushed to, run to} by Mary, who needed a rest.

The operative difference, I believe, lies in the nature of the endpoint nominal. Animacy is not relevant here so much as the discreteness of John versus the diffuseness of the countryside as potential participants. The more diffuse or spacious the endpoint is, the less likely it will serve as a participant in the action and the more likely it will be construed as a non-participant, of which setting is a special case. There is clearly a tendency imposed by Gestalt-forming properties of the general conceptual system to seek spatial and temporal compactness wherever possible. It is generally easier to construe inanimate settings as participants than animate entities as non-participants, although the latter is possible because this distinction is not categorical, but a matter of degree. Note the unacceptability of (30) featuring a plural (though still animate) patient:

(30) *All of her relatives were {come to, gone to, run to, rushed to} by Mary, who needed a favor.

(31) and (32) further illustrate the unacceptability of passive with motion predicates directing (or extending) the subject towards an areal endpoint:

(31) *The drawing room was {retired to, adjourned to} by the guests.

(32) *Israel was {escaped to, fled to} by thousands of Jews after the war.

In the previous section on V-Ps with ON, it was shown that contact (either punctuated or continual) plays a role in transitivity. The following V-Ps with TO involve complete and continuing contact in the physical world, yet they are unacceptable as passives:

(33) *The wall is {adhered to, clung to, stuck to, conformed to} by the self-stick paper.

The sentences in (33) are ungrammatical because these V-Ps all seem to share an imperfective reading which renders the predicated situation static over time. Transitivity typically characterizes dynamic or perfective event sequences where things change or move. This quality is lacking in the V-Ps given above, partly because of the inherent semantics of the verbs and partly because present tense does not readily foster perfective interpretations. However, acceptable passive versions of these predicates exist for physical events involving an animate TR or for cognitive events involving, by default, a cognizing and animate TR:

(34) a. The climbing wall is securely {adhered to, clung to, stuck to} at all times by the careful mountainer.
   b. The script was strictly {adhered to, clung to, stuck to, conformed to} by the under-budgeted film director.

Here, animacy seems to be a very important transitivity factor for it renders otherwise configurational predications more effortful and dynamic. The animacy of the agent, however, does not solely contribute to the passivizability of a V-P, nor does it always facilitate a perfective construal. In (35), the agent is animate (as is the patient by virtue of metonymy) yet the sentence is unacceptable:

(35) *The underground party was secretly belonged to by the student.

What may account for the intransigence of belong to with regard to passive is the sense of partial or total incorporation of one participant within the other. Of course, incorporation is a fairly nebulous concept once it is removed from a purely physical domain. Belong to involves the adoption or assimilation of one entity by another, specifically, of the agent by the patient. The two participants in (35) lose their individual integrity and differentiation. As long as the participant entities are construed as separate, unincorporable, and, ideally, maximally differentiable, passive obtains for most of these predications.

In this same vein, symmetrical predications provide cases in which the two main participants may be distinct, but are conceived of as equivalent. Hence, the subjects and objects can reverse positions without any major semantic disturbance or grammatical irregularity. These predications are perceived as poor exemplars of transitive events. Below are a small set of "equivalence" V-Ps with TO that resist passive. I contend that passive counterparts to the following sentences are unacceptable because the relationship between the participants is fairly symmetric and reversible:

(36) The facts relate to the theory / The theory relates to the facts.
(37) *The theory is related to by the facts / *The facts are related to by the theory.

In sum, if there is incorporation of one participant by another, or if a clause describes a situation where one participant is seen as equivalent to another, or if one entity is seen as a constituent of the other, transitivity suffers.
There are only a handful of activities coded by V-Ps with TO that transpire solely in a mental (perceptual or conceptual) domain. Perhaps this lexical gap is indicative of TO's external and directed path-like nature. Perceptual and mental activities are rarely outwardly evident although they may be focused. However, as we can take in several sensory experiences at once and can even think about several ideas simultaneously, cognitive predications with TO may seem counter-intuitive. As such, the V-P in (38) sounds strange in the active and is completely unacceptable in the passive:

(38) a. ?Bill looked to the building (when he heard the scream).

b. *The building was looked to by Bill.

Visual perception is only partially a focused activity. We perceive motion, for instance, best at the periphery of our visual field and we certainly cannot take in an entire building in the limited scope of our fovea unless it is very far away. Grammatically and semantically, it is more felicitous to look at a building for reasons we shall examine later. Of course, look is a very neutral verb and generally so underspecified that it lacks much semantic content. Neutral verbs often fail to participate in certain grammatical constructions. (39) likewise features a mental V-P with TO that does not passivize:

(39) a. John thought to himself for a moment.

b. *John was thought to by himself for a moment.

Reflexives generally make poor passives, to be sure, perhaps due to crossover effects, perhaps due to the fact that the subject and object are so minimally distinct. However, in (39), it is very strange to construe anything as being "carried over" or "passed across" from one participant to another.

The few conceptual V-Ps with TO that do passivize all involve an agent cognitively directed towards some entity and consequently undergoing some internal change. As stated in Section 2.1, notions about what constitutes a prototypical transitive event will vary from one cognitive domain to another. Whereas a prototypical physical world event will involve external change on the part of the passive participant, it is the active participant that undergoes change in the sphere of mental activity, and that change is usually internal. The passives in (40) are marginal because the conceived change is covert:

(40) a. The new situation was [adapted to, adjusted to] by John.

b. Islam was eagerly [converted to, conformed to] by John.

c. ?His old habits were eventually reverted to by John.

The largest number of V-Ps with TO predicate events that occur between human (or at least highly animate) participants within a social domain. Sentences containing these V-Ps passivize very readily. Many examples are given below (41)-(43) representing direct verbal communication, indirect communication, and overt signalling respectively:

(41) John was [spoken to, talked to, listened to, lied to, called to, read to, sung to, proposed to, apologized to] by Mary.

(42) John was [wired to, telephoned to, written to] by Mary.

(43) John was [signaled to, motioned to, waved to] by Mary.

In the following few cases, verbal interaction is not being predicated so much as social interaction. Furthermore, the active and passive participants (TR and LM) are quite asymmetrical by virtue of differing social status or relative power and influence as required by the predicate. Thus, with predications of command or subjugation as in (44) and (45), the passives are fully acceptable:

(44) The poor family was [attended to, administered to] by the priest.

(45) The officer was [catered to, pandered to] by the sniveling informant.

V-Ps with TO of communication or social interaction may take an inanimate passive participant as long as it is perceptually or conceptually discrete and understood to be of communicative relevance for both the active participant and some "off-stage" or otherwise pragmatically inferrable participant(s). The V-Ps in (46)-(48) involve a directed focus, which signals some sort of agreement or admission:

(46) The murder weapon was [alluded to, pointed to, referred to, motioned to] by the prosecuting attorney.

(47) The new accords were [agreed to, consented to, subscribed to] by the former allies.

(48) The truth was [attested to, admitted to, confessed to, sworn to] by Mary.

From this partial list of V-Ps with TO we can see several trends emerging.
TO is a goal-oriented preposition that defines a particular orientation and hence requires a discrete target. V-Ps with TO passivize best with point-like objects that are the endpoints of motion in the physical world or the foci of communicative intent in the social world. In the next section, we examine a different goal-oriented preposition, AT, that is much less channeled than TO. Rather, it has more of a "located" sense. Nevertheless, the behavior of V-Ps with TO and V-Ps with AT is not too dissimilar.

3.3. Prepositional verbs with AT

Curiously, more V-Ps form with AT than with any other preposition in the corpus. Of roughly 175 combinations, only about one-seventh do not passivize. This suggests that, indeed, AT is highly transitivizing. This finding may at first seem surprising since we have just discussed AT as having a "located" rather than a "channeled" sense, such that it apparently instantiates an endpoint of transfer rather than a path of transfer. As we shall see, AT is a contact preposition and furthermore, a goal-oriented one. However, the contact predicated by V-Ps with AT must be understood to be the result of movement or the result of some dynamic interaction between participants or else passive does not obtain.

The V-Ps with AT that represent physical world predications fall out into three classes, all of which can be characterized by some general antagonism rubric whereby they share a sense of the agent's intended harm or damage to the patient. The classes differ due to the type of movement and contact mediated by the V-P. The first class of verbs code repeated, partial, or physical contact through some sort of punctuated movement. These verbs are all inherently transitive, i.e., minus the preposition AT they are still transitive. Curiously, the preposition, rather than creating an oblique object for these verbs, simply signals a change in how the patient is affected. There is clearly a meaning contrast between each V and its corresponding use in a V-P as illustrated (with accompanying paraphrases) below:

(49) a. The dog was kicked by John. (John kicked once and made contact with the dog.)
   b. The dog was kicked at by John. (John may have kicked more than once but may not have made contact with the dog.)

(50) a. The purse was snatched by the thief. (The purse was stolen.)
   b. The purse was snatched at by the thief. (It wasn't stolen.)

These sentences demonstrate that the presence of AT does not induce a predictable meaning change nor does it de-transitivize the verb. Instead, a new predication is created. The following V-Ps refer to intended, partial, or repetitive contact between TR and LM that has a potentially malevolent effect:

(51) a. The door was [banged at, beaten at, hammered at, tapped at, thumped at, pounded at, knocked at] by the workmen.
   b. The heavy undergrowth was unsuccessfully [chopped at, cut at, hacked at, slashed at, whacked at] by the gardener.
   c. Superstars like Michael Jackson are always being [clutched at, grabbed at, pulled at, poked at, tugged at] by teen-aged fans.

Along these lines are several predications of ingestion in which the agent reduces the physical extent of the patient through repeated contact:

(52) a. This bone has been [gnawed at, nibbled at] by the dog.
   b. The lima beans were picked at by Johnny.
   c. The bottle was barely sucked at by the baby before he fell asleep.

A second class of physical V-Ps with AT is characterized by predications involving some agent approaching a patient with an intent to attack. Again, potential contact (as a result of movement) is presumed and the situation is extremely force-dynamic (after Talmy, 1985) since the two participants are in (potential) opposition. Although, intuitively, AT seems to have a located, configurational sense (as in I am at home most evenings), there are many expressions in English in which AT by itself imparts a sense of dynamic interaction between co-participants: Let me at him! or My mother is always at me for this or that. The following V-Ps constitute this second class:

(53) The corporate president was [come at, gone at, run at, rushed at, charged at, jumped at, leapt at, lunged at] by the crazed consumer.

A final class of V-Ps with AT of potential harm or attack involve indirect contact. The agent intends contact with the patient by means of a weapon or other projectile:

(54) The policeman was [shot at, fired at, sniped at, spit at] by the killer.

To this last group we might add aim at and point at. Although the contact is unrealized and only indirect at best, there is a sense of intended injury or harmful consequence wished for on the part of the agent and mediated by a weapon, or in the case of (55 b), a finger:
There are several physical world V-Ps with AT that do not passivize. These, I contend, are noninteractive predications that signal a configurational relationship between some moving or stationary participant(s) and a setting. The V-Ps in (56) describe a starting or ending point for locomotion:

(56)  
  a. *Paris was [started at, begun at, ended at] by our tour group.  
  b. *Heathrow was [arrived at, landed at] by the plane.

The predications in (57) describe the location where the agent is remaining temporarily or semi-permanently, which is more of a static, configurational relation than a dynamic, interactive one:

(57)  
  a. *The Hôtel Odéon is [resided at, stayed at, lodged at] whenever we’re in Paris.  
  b. *The old cottage used to be [vacationed at, summered at, wintered at].  
  c. *The cafe was [remained at, tarried at] by the couple long after midnight.

Again, the failure of a felicitous passive for these expressions indicates the unsuccessful transfer of movement or energy between co-participants. Because these predications describe the activity of participants within some setting, they are not transitive.

Turning now to the domain of mental/perceptual activities, we find variability in terms of which V-Ps with AT passivize:

(58)  
  The actress was [gazed at, glanced at, glared at, leered at, peeked at, squinted at, stared at, looked at] by the man in the elevator.

Here, visual aim and perceptual contact are being predicated. The preposition serves to transitivize an intransitive verb and with the exception of look at, all the constructions readily passivize. Look at, having the sense of visual aim, is fairly neutral semantically, and for this reason may be less likely to passivize. The other visual V-Ps with AT all collapse the act of perception with the manner in which the perception takes place (e.g., furtively, briefly, lasciviously, at length, in an obvious way). When the speaker specifies the manner in which the perception is being carried out, the patient or “percept” is construed as being more likely to be aware of the observation, hence to be potentially more affected by the act of perception. Indeed, one usually glares or leers or stares at someone in order to get his or her attention. The preposition in these predications serves to channel the gaze of the agent so as to effect contact with the perceptual object. Otherwise, the preposition-less verb is intransitive. Look at does have a specialized meaning which can passivize. To look at a person or an object usually means to examine it for some evaluative purpose. The agent definitely makes contact and interacts with the patient, and moreover, the patient, if animate, is affected by being the focus of scrutiny. This sense of look at passivizes:

(59) The [house, car, patient, movie review] was looked at by Dr. Morrell.

In the domain of mental and perceptual activities, quite a number of predications of emotional reaction license passive, our syntactic marker of transitivity. Those V-Ps that do not sustain passive versions feature internally directed rather than external reaction to some person or event. Internal reaction on the part of the agent is not so easily assessed by either the patient (who cannot therefore be affected by the action) or the speaker (who cannot observe a successful transfer condition). Compare the sentences in (60) and (61), which contain predications of what I am calling external and internal reaction respectively.

(60)  
  a. Her performance was cruelly [laughed at, jeered at] by everyone.  
  b. The entrance of the Commendatore is always [trembled at, shuddered at, cringed at, winced at] by Leporello in Act Two.

(61)  
  a. *The thought of getting caught was [balked at, scoffed at] by the crook.  
  b. *The sight of blood is [sickened at, fainted at, turned at] by most men.

Although the acceptability judgments for the sentences in (60) and (61) vary appreciably among my informants, I believe these V-Ps contrast due to the nature and direction of the emotive response emitted by the agent in reaction to the patient. Internally directed reactions or attitude changes on the part of the agent are not easily evidenced by other participants or speakers. V-Ps which predicate such responses force a construal where the agent changes and is affected, the polar opposite of our hypothesized canonical transitive event where the patient assumes this role. Natural attention flow (cf. DeLancey, 1981) is such that, in a transitive event, our expectations and, perhaps, empathy lie with the patient. This is the participant that is the recipient of action, that gets
affected, or that is expected to respond. In short, our assessment of transitivity or of successful transfer is dependent on change perceived at this end of the chain of action.

A further illustration of the syntactic consequences (varying passivizability) of external versus internal reaction by the active participant is provided by a group of predicates describing facial responses. Facial expressions coded by V-Ps with AT that are most obvious to an observer are also most likely to passivize. Hence, the sentences coding overt facial reaction in (62) are better than those in (63) that code a more covert response:

(62) John's suggestion was {winked at, grinned at, frowned at} by Mary.

(63) *John's suggestion was {blushed at, shined at, fretted at} by Mary.

A more striking manifestation of differential syntactic behavior due to internal versus external reaction is evidenced by two V-Ps with AT that code sensory contact by olfaction, as in (64):

(64) a. That overflowing garbage can was sniffed at by several stray dogs.

b. *That overflowing garbage can was smelled at by several stray dogs.

The difference between these predications lies in the nature and origin of the sensory experience. In sniff at, the act of perception is directed by the agent towards a particular target. In smell at, which even lacks a felicitous active, the agent perceives a scent that is already present in the environment; in effect, the percept imposes itself on the perceiver and thus behaves more like a sensory setting than as a participant in a sensory event.

By far, the largest number of passivizing V-Ps with AT predicate interactions in the social or discourse world. Here we find many intransitive verbs of verbal exchange or verbal reaction with AT. The preposition seems to imbue these situations with a sense of dynamic conflict between co-participants – just the stuff characterizing the best transitive exemplars. The highly transitive notion of attack has now been removed to the domain of speech acts, a domain where contact between the two participants consists of the passive participant hearing an utterance spoken by the active participant, with the resulting (emotional) effect on the passive participant being neither predictable nor insignificant.

(65) John was {cursed at, grumbled at, hissed at, hooted at, jeered at, screeched at, shouted at, snapped at, snarled at, sneered at, sworn at} by his shrewish sister.

The effect on the passive participant, marking a successful carry-over or transfer of something, is perhaps the essence of transitivity. In the real world of three-dimensional space, an effect on this participant – the canonical patient, if you will – is assessed externally by the speaker who observes or deduces contact between the participants (John's boat reached the island), resulting movement of the patient (John threw the ball), or change of state in the patient (John broke the window). When events are removed to the mental or social world, effect on the passive participant is not always evident and must be assessed vicariously, and therefore, subjectively, by the speaker. In these cognitive domains, it is human participants that make the best patients. They are most affected by the agent's behavior because, as sentient beings, they can exhibit an infinite range of motor, verbal, mental, or emotional responses. It is in this vast potentiality of counteractions that human participants demonstrate affectedness. Humans are not just objects of contact or objects to be moved. They are objects which change in mysterious internal ways.

Let us now move to the other extreme of transitivity presented by constructions with prepositions that have a decidedly non-transitive effect on the predications at large: OFF and FROM. These phrasal verbs feature prepositions whose characterization is overwhelmingly source-oriented (again, following Hawkins, 1984). The preposition, moreover, invokes the path from some source along which the action proceeds or is directed. These constructions lack passive correspondents, from which we can infer that their meaning conflicts with the intuition we normally attach to transitivity due to unsuccessful transfer between participants.

4. Phrasal verbs with intransitive prepositions

There are two prepositions in English, OFF and FROM, that appear to function as a unit with a preceding verb, yet the post-prepositional nominal never quite assumes direct object status. These prepositions do not form pseudo-passives. I would like to attribute their failure to sustain passive forms to properties inherent in the preposition. One might argue that these contructions should not be treated like phrasal verbs at all, and as such are not relevant to the present discussion. However, I believe the failure of relational predications with OFF and FROM to passivize or otherwise behave like V-Ps is instructive on two counts. First, OFF and FROM, in effectively blocking passive, can give us clues at a conceptual level about transitivity (or intransitivity, as the case may be). Secondly, these expressions seem to occupy the middle ground between V-Ps and V-PPs, thus underscoring the fact that the grammaticization of concepts into linguistic categories is not an all or nothing enterprise. Linguistic expressions,
be they lexical items or full clauses, are rarely discretely categorizable, but rather are organized around prototypes and fall out along a continuum in terms of both form and usage.

4.1 Phrasal verbs with OFF

The paucity of regular predications with OFF in the corpus is indicative of OFF's intransitive nature and the unclear status the resulting constructions have in the grammar of English. Of the eleven recorded predicates with OFF, eight clearly do not passivize and three are marginal at best. In the physical domain, one finds the following expressions denoting movement (either by an animate or inanimate entity) away from the source location:

(66) a. *The shelf was {fallen off, tumbled off, slid off} by the book.
 b. *The stage was {walked off, run off, fled off} by the embarrassed actor.
 c. *The roof was finally come off by the cat.
 d. **My right shoe has been come off by the buckle.

Schematically, one can represent the active participant's movement as follows:

![Figure 2](image)

In (66), OFF instantiates the path or trajectory away from some landmark coded lexically by the post-verbal nominal in the active sentence (the shelf, the stage, the roof, my right shoe). Despite the fact that the verbs in (66) code manner and locomotion, the movement by the agent is not necessarily directed nor does it make contact with some specific goal or endpoint. For instance, in (66 a), the book may have landed on the floor or on a table positioned below the shelf. The endpoint of the trajectory taken by the dictionary is not relevant to the relation fall off, yet the lack of a lexically coded endpoint is relevant to certain grammatical constructions such as passive which are apparently quite sensitive to the semantic status of grammatical objects. Likewise for (66 c), just because the cat has finally come off the roof, it does not mean it is safe and sound. It could now be up a tree.

Somewhat acceptable in a passive clause is the predication keep off, perhaps because keep usually entails a force-dynamic situation. In (67), the TR is being controlled from making contact with something. The entire situation is energized, but the energy does not necessarily "transfer across" from one participant to another, nor is there motion away from any source:

(67) ??The grass must be kept off by all park visitors.

This sentence (as well as other passive sentences with keep off) remains marginal because the energy is internal to the agent and the agent fails to make contact with a second participant.

In the social world (there seem to be no mental predications with OFF), neither of the two constructions in my database has a passive form:

(68) a. *The family trust can be lived off by John once he reaches 21.
 b. ??He's always being sponged off by his relatives.

I suggest passive is more or less blocked in these cases because, conceptually, the direction of transfer is from patient to agent, counter to the prototypical transitive relation. Passive clauses canonically feature patients which are goals of transfer rather than sources. (68 b), though, is slightly more acceptable than (68 a), probably due to the fact that sponging off someone implies a certain degree of affectedness such as loss of assets, increased resentment, etc., as a result of the event in question. As these sentences demonstrate, factors affecting transitivity interact in surprising ways. As a result, one can motivate the felicity of a passive clause, but rarely predict its occurrence or non-occurrence.

In the next section, it is shown that constructions with FROM fail to passivize for reasons similar to those observed here - a reversal of transfer between participants. Because the agent is on the receiving end or is the goal of transfer or is simply the participant moving away from some source location, the canonical agent/patient transitive asymmetry does not prevail and passive is unacceptable.

4.2. Phrasal verbs with FROM

Of the 93 expressions with FROM in my corpus, only 5 or 6 are even remotely acceptable as passives. The evidence overwhelmingly suggests that
FROM is a non-transitive preposition that hinders V-P coalescence. Like OFF, the direction of transfer coded by FROM is skewed. It proceeds from patient to agent, from a passive source to an active goal, rather than the other way around. The grammatical consequence of this reversal on the transitive event canon is that its passive form is unacceptable. The majority of expressions with FROM are physical world predications. In (69), the active participant moves away from a source region and comes to lose its association with this region.

(69) a. *The treehouse was [descended from, fallen from, slipped from] by the boy.
b. *The yellowing page was [faded from, vanished from] by the signature.
c. *The plane was ejected from by the pilot.
d. *Harvard was [withdrawn from, retired from, transferred from, graduated from] by John.

In (70), the agent moves away from a region of relative inaccessibility while gaining prominence.

(70) a. *The submerged wreckage was ascended from by the divers.
b. *The mattress was [arisen from, risen from] by Fred.
c. *The cocoon must have been emerged from by the butterfly.
d. *A single package of seeds was [developed from, grown from, sprung from, stemmed from] by my entire tomato patch.
e. *A single carrier was purportedly [spread from, emanated from, radiated from] by the deadly virus.
f. *The hydrant was [dripped from, trickled from, oozed from, flowed from, spouted from, gushed from] by raw sewage water.

Nevertheless, the expressions in (69) and (70) remain schematically similar. They all predicate movement by a single participant away from some source location. This characterization applies rather uniformly to all phrasal verbs with FROM and my position is that this conception of FROM confounds the semantics of transitivity to the point that the source or location NP never gets construed as a full-fledged event participant and thus never heads a passive clause as subject. Intransitive movement away from a source location as instantiated by expressions with FROM is further illustrated by the following predications coding suspension, as in (71), physical deviation, as in (72) or even conceptual deviation as in (73):

(71) *The power lines were [hung from, swung from] by the parachutist.
(72) a. *The field was [wandered from, strayed from] by a few cows.
b. *The road was swerved from by the drunk driver.
c. *The course was [deviated from, diverged from] by the runner.
(73) a. *The path of truth and righteousness is willfully [deviated from, digressed from, strayed from] by drug-using, homosexual blasphemers.
b. *The text on the teleprompter was differed from significantly by the president’s latest speech.
c. *In the 17th century, the Church of England was dissented from by many Protestant groups.

Mental constructs such as facts, ideas, opinions, or conclusions can all “move away from” a source or standard, and as the following examples illustrate, predications coding such mental digressions do not passivize:

(74) a. *His erroneous assumptions were [followed from, derived from] by his ridiculous conclusions.

In addition, one responds emotionally to a very disturbing or repugnant stimulus by “moving away from” it. Again, these expressions only have active forms:

(75) a. *The sound of the gunshot was flinched from by the dog.
b. *His harsh words were recoiled from by the boy.

More difficult to characterize as a coherent group are the following predications which I shall itemize rather than explicate. They lack acceptable passive forms for, perhaps, a variety of reasons. Certainly, they all share FROM in the predicated relation, a preposition which codes movement away from some (abstract) source, which is itself a very untransitive notion.

(76) *1215 is dated from by the Magna Carta.
(77) *The Crusades were safely returned from by Louis IX.
(78) *The heat was [died from, fainted from] by the old man.
(79) *All of the possible answers were carefully picked from by Eloise.
(80) Catholicism was converted from by John.

(81) A lowly reporter was changed from by Clark Kent to Superman.

(82) Her husband was separated from by Sarah after the baby’s birth.

Finally, I mention a small group of phrasal verbs with FROM for which passives seem to be marginally acceptable for many of my informants. Felicitous passive forms may be attributable to two things: either semantic similarity with the preposition-less form of the verb as in (83):

(83) a. The Bill of Rights is often quoted from by pornographers and neo-Nazis.
    b. Mary was finally heard from by John the night before last.

or the imposition of force-resistance on the entire scene as in (84):

(84) a. This behavior must be [desisted from, ceased from] at once.
    b. His doctor suggested that coffee be [abstained from, refrained from].

The analysis I undertake here does not presume to be strongly predictive so the presence of exceptions to my characterization of FROM as a non-transitive preposition is not particularly bothersome. Furthermore, I fully acknowledge the effect of speaker construal or other discourse-determined contingencies that may give special prominence to an entity – a function, afterall, of the passive construction in general. A complex of factors comes into play in the eventual syntactic coding of semantic content. I simply maintain that the passive sentences throughout this section are primarily unacceptaable due to the presence of FROM. Any number of explanations may be possible for why a given sentence is acceptable and why constraints on form can be overridden. In the next section, I present phrasal verb data for a single preposition, WITH, which resists a unified summation as attempted in Sections 3 and 4 as either a transitive or a non-transitive preposition. The semantics of individual predicates with WITH and the differential passives observed substantiate some of the findings for the clearer cases examined earlier.

5. VPPs with a transitively-ambivalent preposition

As a preposition, WITH resists a clear transitive or non-transitive characterization. As I suggest below, this is because it lacks a coherent semantic base and is instead polysemous. The variability we find in the degree of verb-preposition coalescence and the concomitant acceptability of passive forms is attributable to the complex of inherent meanings ascribed to this preposition. For these cases, one cannot ask, “What does the preposition do?”, but rather, “What is the preposition doing here?”. We are forced to look at the semantics of the overall expression for clues into the nature of conceptual transitivity, which in turn seems to govern the syntactic behavior of individual clauses and predicates.

5.1. Prepositional verbs with WITH

There are 178 expressions with WITH in the corpus, of which 84 form marginal or unacceptable passives, while 94 are quite good. This is roughly a ratio of 1:1. These numbers indicate that WITH does not have a unitary semantic characterization and that its effect on the resulting complex verb is not deducible in isolation. For example, (85) is ambiguous:

(85) John fought with Bill.

It can mean John fought against Bill or John fought alongside Bill against some unspecified third participant. The “against” reading is conceptually consonant with notions of contact, interaction between participants, forcedynamic opposition, external reaction, and maximal differentiation between participants – notions which are all relevant to transitivity as discussed in Section 2.1. It is only this reading that sustains a passive. Unlike the active sentence, Bill was fought with by John is unambiguous. Conversely, the “alongside” reading of (85) is related to notions of proximity, coincidence, pure movement or action within a setting, internal constituency (John and Bill being on the same side), and minimal differentiation between participants. These two senses of WITH by no means exhaust the possibilities, but they do present semantic extremes which we might want to associate with transitivity and intransitivity. To be sure, predicates with WITH do not fall neatly into these two general categorizations and a case-by-case analysis is needed.

If the polysemyn inherent in WITH proves immediately unrevealing for explicating the differential passives observed in expressions with WITH, then one might next be inclined to examine specific expressions predicated against the different cognitive domains of physical, mental, and social space. Patterns of syntactic regularity with respect to passive may well emerge that eventually yield insights into the nature of transitivity. Unfortunately, with WITH, the different domains tell us little. Ultimately, the different meanings of WITH and the predicates specific to the different cognitive domains interact and, statistically speaking, we find no main effects for either preposition or cognitive
domain. Rather than break the discussion of these predicates into groupings based on domain, I will instead first discuss expression types which passivize and then expressions which do not. Predicates formed with WITH are especially insightful for teasing out and verifying the relevant parameters of transitivity identified earlier.

By far, the largest group of passivizing V-Ps with WITH involve predications which code a variety of human interactions. Obviously, such interactions transpire in the cognitive domain of social or communication space.

5.2. Phrasal verbs with WITH

Turning now to the VPPs with WITH whose passive versions are unacceptable or decidedly marginal, we find expressions that recapitulate notions of non-transitivity suggested in Sections 4.1 and 4.2. The ungrammatical passives in (92) are predications concerned with the extrinsic constituency of some entity. Either the active subject and direct object bear a container/containee relationship to one another or the active subject serves as a setting for the location of the other, which is usually a mass or aggregate NP. In either case, WITH codes the notion of being full of:

(92) a. *Water was [bulged with, swelled with] by the balloon.
   b. *Leaves were clogged with by the gutter.
   c. *Fleas are being crawled with by that poor dog.

Related to this idea of containment is the notion of internal reaction such as an emotional response. The following predications do not distinguish the existence of some animate entity from its internal emotional state. Stated otherwise, the agent serves as a container of emotion which may or may not be evident to a second participant or the speaker. These expressions do not passivize because WITH codes an internal reaction or emotion:

(93) a. *Anger was [burned with, burst with, seethed with] by John.
   b. *Fear was [quivered with, quaked with] by the security guard.
   c. *Exhaustion was faint with by the protester.

Several other predications with WITH code a configurational relationship holding between the clause’s two most prominent NPs. The post-prepositional NP designates a point on some pathlike course along which the event or action unfolds. Semantically, these predications usually mark an origin or endpoint and, syntactically, they make for very bad passives.

(94) a. *The French were originated with by that expression.
   b. *A joke was [started with, opened with] by the speaker.
   c. *A car chase was [finished with, ended with] by the movie.
   d. *The jury is rested with by the verdict.
There are other configurational expressions that might be subsumed under a general schema of coincidence. More specifically, these verbal expressions with WITH code relations of symmetrical association (95) or contiguity (96):

(95) a. *Chicken is gone well with by white wine.
   b. *HAT is rhymed with by CAT.
   c. *My findings are correlated with by those data.
   d. *Pepsi would probably be [merged with, combined with, incorporated with] by Coca-Cola if it weren’t for antitrust laws.

(96) a. *John couldn’t be [lived with, roomed with] by Bill.
   b. *The old man was never visited with by his family.
   c. *Mary is often [sung with, danced with, played with] by Bill.
   d. ??Mary has never been slept with by anyone.
   e. ??That mare has never been [mated with, copulated with].

(96d) and (e) are marginally acceptable passives. Perhaps this is because the action in question so thoroughly affects the patient and because the inherent asymmetry between agent and patient is so great that a modicum of transitivity must be present. The near acceptability of (d) and (e) corroborates other facets of transitivity presented throughout this chapter which suggest that actions that are interactive and dynamic tend to be construed as transitive and therefore can passivize.

A last group of predicates with WITH that do not passivize involve a lack of coincidence:

(97) a. *His theory can never be [conflicted with, jarred with] by data.
   b. *Mary’s theory was contrasted with by John’s.
   c. *The color orange is clashed with by lime green.

These passives are strange in part because the opposition is bi-directional, a fact which tends to give them a symmetrical interpretation as we saw earlier in V-Ps with TO in (36)-(37).

In this section, I have used verbal predications with WITH to corroborate patterns of meaning and syntactic behavior observed here with notions of transitivity and intrasitivity suggested elsewhere. The findings in this section dovetail those noted earlier in Sections 2.1., and Sections 3 and 4. Transitivity is something above and beyond morphological and syntactic form. Unlike many who approach the pseudo-passive construction as if the most intriguing issue was the problem of representing verb-preposition coalescence, I have found definite semantic patterns underlying the passivizing and non-passivizing or coalescing and non-coalescing cases which stem in large measure from the semantic contribution of the preposition. In Section 6, I summarize the findings of this survey and reaffirm the descriptive power afforded by a semantically-based approach to the pseudo-passive construction and the naturalness with which it aligns with a cognitively-based model of transitivity.

6. General findings

From this examination of passivizing and non-passivizing phrasal verbs, certain conceptual notions have emerged that appear relevant to the phenomenon of transitivity while being neither necessary nor sufficient to it. These notions, themselves, could be thought of as mini-continua that partially characterize a clause and that converge on some global yet variable threshold of transitivity that licenses passive. They are summarized in Figure 3:

### Dimensions of Transitivity

<table>
<thead>
<tr>
<th>+</th>
<th>static location</th>
<th>configurational relation</th>
</tr>
</thead>
<tbody>
<tr>
<td>contact</td>
<td>directed motion</td>
<td>force-dynamic interaction</td>
</tr>
<tr>
<td>directed motion</td>
<td>external reaction</td>
<td>rapid or forceful movement</td>
</tr>
<tr>
<td>force-dynamic interaction</td>
<td>interaction between co-animates</td>
<td>goal-oriented motion</td>
</tr>
<tr>
<td>external reaction</td>
<td>directed approach</td>
<td>independent participants</td>
</tr>
<tr>
<td>rapid or forceful movement</td>
<td>asymmetrical participants</td>
<td>maximally opposed participants</td>
</tr>
<tr>
<td>interaction between co-animates</td>
<td>perfective action</td>
<td>communicative effect</td>
</tr>
<tr>
<td>goal-oriented motion</td>
<td>non-spatial cognitive domain</td>
<td></td>
</tr>
<tr>
<td>directed approach</td>
<td>non-spatial cognitive domain</td>
<td></td>
</tr>
<tr>
<td>independent participants</td>
<td>non-spatial cognitive domain</td>
<td></td>
</tr>
<tr>
<td>asymmetrical participants</td>
<td>non-spatial cognitive domain</td>
<td></td>
</tr>
<tr>
<td>maximally opposed participants</td>
<td>non-spatial cognitive domain</td>
<td></td>
</tr>
<tr>
<td>perfective action</td>
<td>non-spatial cognitive domain</td>
<td></td>
</tr>
<tr>
<td>communicative effect</td>
<td>non-spatial cognitive domain</td>
<td></td>
</tr>
<tr>
<td>non-spatial cognitive domain</td>
<td>non-spatial cognitive domain</td>
<td></td>
</tr>
</tbody>
</table>

Figure 3

I have argued here that neither a syntactic definition nor an absolute semantic characterization of transitivity works to explain the English pseudo-passive. What distinguishes pseudo-passive verbs from intransitives with prepositional phrase complements is the degree to which the preposition resonates qualities of conceptual transitivity. My thesis has been that, in large
measure, the preposition of a V-P is responsible for signalling a path- or channel-like construal for the movement or energy transfer implied by the clause. These construal options determine whether or not the resulting expression will be transitive or intransitive and, consequently, capable of surfacing as a passive construction. Spatial properties inherent to some prepositions like ON, TO, and AT more readily suggest a channel of goal-directed transfer or contact, while properties inherent to other prepositions like OFF and FROM suggest a path of source-oriented movement. The preposition WITH is more removed semantically from a geometric characterization, although it has other properties which align with either (ON, TO, and AT) or (OFF and FROM) for syntactic purposes. Oftentimes, though, the preposition may lose its spatial sense and take on abstract qualities. Basically, the issue that most theoretical approaches have not directly grappled with is why certain V-P combinations coalesce to become or behave like pseudo-passive verbs. Which factors govern coalescence, passivizability, or high transitivity for seemingly equivalent but potentially ambiguous structures of the form, [V-P-NP]? Working at a strictly structural level, which at most can resort to special-case treatment of particular lexical items, it is counterintuitive to think that a preposition, in essence an oblique marker, could possibly make transitive an intransitive verb. However, as I have sought to demonstrate in this paper, at a cognitive/conceptual level, this apparent paradox can be resolved when endogenous properties of certain prepositions are explored and exploited.

Footnotes

1 This paper constitutes a revised version of the third chapter of Rice (1987).
2 VPCs form a very select class of constructions in English which are perhaps best characterized on the basis of their free-floating particle. They are further distinguished from V-Ps (pseudo-passive verbs) and intransitive V-PP sequences on the basis of intonational and syntactic phenomena which I will not go into here. Moreover, only a few prepositions participate in VPCs (notably UP, OUT, and OFF) and to a lesser extent their spatial "opposites", DOWN, IN, and ON, while a much larger inventory of prepositions form phrasal verbs, of which the pseudo-passive type is a special case.
3 My primary source is Couper-Kuhlen's (1979) monograph. While the spirit of her analysis is similar to mine, her focus is much different. She attributes the passivizability of particular prepositional verb constructions to the semantic case roles of the subject and object NPs, whereas I believe it is due to the high transitivity manifested by these constructions, which is itself a function of a complex of factors. I'm specifically targeting only one of these factors here: the inherent semantic properties of English prepositions, such as contact and goal-directedness, that reinforce elements of canonically transitive events.
4 (39) is even unacceptable with contrastive stress, which can override the crossover constraint.
5 These factors are definitely not transitivity components in the Hopper & Thompson (1980) sense. First of all, they are conceptual notions which may lack lexically realized correlates. Secondly, they do not necessarily covary. The independence of these factors and the degree to which they are relevant in a given sentence is attested by the subtlety of grammaticality judgments possible for the many passive forms and the non-categorical nature of phrasal verbs as a syntactic class of transitive or intransitive verbs. Furthermore, some of these notions are only meaningful to a particular cognitive domain. Nevertheless, there is a great deal of similarity between these factors and those of the Hopper

REFERENCES