In §5 we compare the grammatical properties of the four types. Then, §6 surveys some of the terminological confusions which result from using terms that properly relate to just one type, for describing one or more other types.

All languages distinguish between intransitive and transitive clauses:

- an intransitive clause has a single core argument, in S (intransitive subject) function;
- a transitive clause has two core arguments, in A (transitive subject) function, and O (transitive object) function.

It is probably the case that all languages also have extended transitive (or ditransitive) clauses. These are essentially a subtype of transitive, involving arguments in A and O functions and one other inherent argument (often marked by dative or locative case, or a corresponding adposition). Some languages also have a type of clause we can call extended intransitive, involving S and one other argument (generally marked in the same way as the third argument in an extended transitive) — see Dixon (1994: 122–124). Many languages also have copula clauses, involving two obligatory arguments (distinct from S, A and O).

Leaving aside copula clauses, we can divide predicate arguments into two main types:

1. core arguments — S, A and O
2. peripheral arguments, which can generally occur in both transitive and intransitive clause types; there are two subtypes here:
   - non-local arguments — referring to beneficiary, instrument, etc.
   - local arguments — referring to position at or movement to or from, etc.

In some languages a non-core peripheral argument may be cross-referenced on the verb. It may then be useful to recognize ‘dative’ as belonging to an ‘outer core’, with S, A and O constituting the ‘inner core’; see, for instance, Morphy (1983: 80ff) on Dja'pu (an Australian language).

1. Argument Transferring

By ‘argument transferring’ we refer to situations where one construction type is formally and functionally basic, and another is derived from it by:

(1) Removing an argument from the (inner) core, and placing it in the periphery (valency reducing) — passive and antipassive (§1.1). Or

(2) Adding an argument to the (inner) core (this will often have had peripheral status in the basic construction) — applicative (§1.2.1) and causative (§1.2.2).

1.1. Removing an argument from the core — passive and antipassive

This type of derivation applies most typically to transitive (including ditransitive) clauses. Since a transitive clause has two core arguments, in A and O functions, there are two possibilities:

(a) The argument in A function is removed from the core and placed in the periphery. The clause now becomes intransitive since there is a single core argument (the original O) which is now in S function. This is a passive construction.

(b) The argument in O function is removed from the core and placed in the periphery. As before, the clause becomes intransitive, since there is a single core argument (the original A) which is now in S function. This is an antipassive construction.

The labels ‘passive’ and ‘antipassive’ have been used with a wide range of meanings. Indeed, Stiwiarska (1984: 253) concluded a survey of the variety of constructions that have been called ‘passive’ with ‘as a group the whole body of so called passives does not have a single property in common’.

To clarify how the terms are used here we propose — following Dixon (1994: 146) — the following criteria for a prototypical passive and a prototypical antipassive. These do accord with the majority of accepted uses of the terms.

PASSIVE DERIVATION

(a) applies to an underlying transitive clause and forms a derived intransitive;
(b) the underlying O becomes S of the passive;
(c) the underlying A argument goes into a peripheral function, being marked by a non-core case, adposition, etc.; this argument can be omitted, although there is always the option of including it;
(d) there is some explicit formal marking of a passive construction (generally, by a verbal affix or by a peripheral verbal construction).

ANTIPASSIVE DERIVATION

(a) applies to an underlying transitive clause and forms a derived intransitive; (b) the underlying A becomes S of the antipassive;
A Typology of Argument-Determined Conjunctions

R.M. Dixon and Alexandra V. Alkhimovskaya
Mam also has an antipassive, which focuses on the underlying A and on the activity (e.g. 'They (underlying A, surface S) are winning (antipassive marking)'). Example (5) is a basic transitive clause and (6) is its antipassive correspondent. Note that the underlying O is demoted into the periphery; it is marked with a relational noun or can be omitted.

(5) ma Ø-taj t-tyu-n [Cheep]₃ [ch'it]₂
PAST 3SG+O-DIR 3SG+A-grab-DIR José bird
'José grabbed the bird.'

(6) ma Ø-tyu-n [Cheep]₃ [t-i]² [ch'it]₃
PAST 3SG+S-grab-ANTIPASSIVE José 3SG-REL/PATIENT bird
'José grabbed (the bird)._'

As already explained, the prototypical passive and antipassive involve removing one argument from the core of a transitive clause; there were two core arguments and now there is one. In some languages the same derivation, with the same grammatical marking, can be extended also to apply to an intransitive clause. The argument is removed from the core; but there was only one core argument and now none is left. This can be exemplified from Tarahumara, a Uto-Aztecan language from Mexico (data from Langacker 1976: 31, based on Brambila 1953). Example (7) shows the passive of a transitive, marked by verbal suffix -ru, and (8) the corresponding 'passive' of an intransitive, with the same marking.

(7) gao ne 'a-ru.
horse I give-PASS
'I was given a horse.'

(8) tafì gochi-ru
NOT sleep-PASS
'One doesn’t sleep (lit: not sleeping)._'

A construction in which the sole argument has been removed from the core of an intransitive clause is the intransitive correspondent of both a passive and an antipassive. Strictly, the erstwhile core argument should optionally be includable, on the periphery. This is reported for a number of Germanic languages, e.g. Dutch in Kirsner (1976). Compare the plain intransitive in (9) with the 'passive' in (10), where original S de jongens 'the boys' is now marked by preposition door 'by'; it may be included or omitted.

(9) [De jongens]₂ fluiten.
the boys whistle
'The boys are whistling.'

Constructions like (8) and (10) have been called 'impersonal passive' or 'pseudo-passive' since they show the same marking as regular passives in languages in which they occur. (See Keenan 1985: 272–276; Siewierska, 1984: 93–125; Comrie 1976; and Frázyngier 1982.) As mentioned already, such a construction could equally be regarded as the intransitive correspondent of an antipassive. However, no example is yet to hand of the transfer of the core argument of an intransitive clause to the periphery, in a language which has an antipassive derivation for transitive clauses, with the two derivations being accorded the same grammatical marking. We predict that such a language may be found.

As with all the construction types discussed in this paper, there can be variations on the basic theme (see Shibatani 1985). In English, for instance, a prepositional argument can become passive subject in marked semantic circumstances, e.g. Charles de Gaulle slept in this bed / This bed was slept in by Charles de Gaulle, and Someone has drunk out of this glass / This glass has been drunk out of (by someone). But note that a prepositional argument can only become passive subject if the clause does not include a direct object (from Someone has drunk whiskey out of this glass we cannot derive ‘This glass has been drunk whiskey out of (by someone)’). See Dixon (1991: 315–20).

There is another kind of valency-reducing derivation which does not fall within the scope of this paper. The prototypical reflexive involves an underlying transitive clause in which A and O have identical reference. Some languages maintain transitivity and simply place a reflexive pronoun in the O slot. Other languages use a derived intransitive, with the verb marked by a reflexive suffix and the sole core argument, in S function, coding the underlying A=O. The same two grammatical possibilities apply for reciprocals.

We often find a single grammatical marking covering both reflexive and/or reciprocal, and also passive (e.g. -ru in Tarahumara) or else antipassive (e.g. Dylirbal, Dixon 1972: 89–93), or both passive and antipassive (e.g. the Australian languages Kuku-Yalanji (Patz 1982: 241–259) and Dinyari (Austin 1981: 151–157); see Dixon 1994: 151–152).

1.2. Adding an argument to the core

In the last section we discussed derivations that extract an argument from the core and place it in the periphery of a clause, from whence it may be omitted.
TRANSLATION

The text includes words and sentence structure that are not clearly visible or legible due to the image quality.

APPLICATION DEVIATION

According to a previous argument, the application is incorrect. A different interpretation is presented in the text, which is not aligned with the original argument. This deviation is noted for clarification.

The opposite of the argument is presented in the text, offering an alternate perspective.
There are two types of argument-structure mismatch. One is the case where a complement is introduced by a function...

This is the case when...

The second type of mismatch occurs when...

1.9. Adding an argument description — Case...

1.9.1. (2a) No. 1977: 1977-311...

There are many cases where argument description...
causatives the argument which is now in A function could scarcely have been included in the original intransitive.

Sometimes it could be, as in Jarawara (Arawak family, Brazil — see Dixon and Vogel, Forthcoming). Consider a man, Yobeto, punching holes in a piece of paper. The result could be described with babeo ‘paper’ in S function to the intransitive verb -hori- ‘have holes’ and a peripheral NP with Yobeto as head and postposition ehene ‘due to’:

\[(15) \text{babeo}_x \text{hori-ke} \quad ([\text{Yobeto} \text{ehene}], \text{paper(FEM) have holes-DECLARATIVE(FEM) name(MASC) due to(MASC)})\]

‘The paper has holes (due to Yobeto).’

Alternatively, the situation could be described by using the causativised form of -hori-, -na-hori- ‘make holes in’, having Yobeto as A and ‘paper’ as O argument:

\[(16) \text{Yobeto}_x \text{babeo}_0 \text{na-hori-ka}. \quad \text{name(MASC) paper(FEM) CAUS-have holes-DECLARATIVE(MASC)}\]

‘Yobeto made holes in the paper.’

Intransitive constructions, like (15), with an ehene constituent, and transitives like (16), with causative prefix na-, are both widely used and are frequently synonymous.

But this is somewhat unusual. In many languages it would not be felicitous to use an intransitive clause, with some sort of ‘due to’ peripheral constituent, as an alternative to a causative construction. (English is not the ideal language for exemplification since there is no morphological marking of a verbal causative. However, many speakers would consider burn to be basically intransitive (e.g. The cakes burnt) and say that when used in a transitive construction it has a causative sense (King Alfred burnt the cakes). Note the awkwardness of a sentence such as The cakes burnt due to King Alfred; this could not be considered an acceptable alternative to King Alfred burnt the cakes.)

If a new argument is introduced in A function (the original S becoming O), it appears that the new A will always be a causer. This has such pragmatic/semantic effect that in many languages it can only be stated in a causative construction, as A, and not in a corresponding intransitive in any peripheral function.

Causative is like applicative in that it applies to intransitive verbs in every language in which it is found; only in some languages can it be extended to apply to transitives. In Urubu-Kaapor (Tupi-Guarani family, Brazil), causatives can only be formed on intransitives, for example (Kakumaru 1986: 341–342). In some languages a causative derivation may potentially apply to any verb but in practice it is used much more with intransitives than with transitives. In Jarawara

A few transitive verbs are commonly causativised, e.g. fawa- ‘drink’, as in (17b), but for most a construction with ehene ‘due to’ is preferred to a causative.

A transitive clause already has two core arguments, in A and O functions. A causative derivation introduces a new argument in A function (the causer). There are now three basic possibilities for what happens to the original A and O:

(i) Original O stays as is, with original A being moved into the periphery. Comrie (1989: 176) shows that the underlying A will go into the first available slot (for this clause) in a hierarchy of grammatical relations, e.g. it will become ‘indirect object’ if there is not already an indirect object.

(ii) Some languages allow a clause to include two objects — the original O will remain and the original A will now become a second object (Comrie 1989: 178; 1985).

(iii) Original A becomes O within the causative construction, with original O being moved into the periphery. This happens in a scattering of languages including Tolai (Austronesian from New Britain, see Mosel 1984: 155), Warekena (Arawak from Brazil, see Aikhenvald 1997) and Jarawara. Compare the plain transitive in (17a) with the causative in (17b); inamatwe ‘child’ is in A function in (17a) and goes into O function in (17b) while hemejo ‘medicine’ was in O function in (17a) and moves into the periphery, from where it can optionally be omitted, in (17b).

\[(17) \quad \begin{align*}
\text{a. } \text{inamatwe}_x & \text{hemejo}_o & \text{fawa-hara-ke} \\
& \text{child(FEM) medicine(FEM) drink-IMM.PAST-VALUE=DECL(FEM)} \\
& \text{The child drank the medicine.} \\
\text{b. } \text{inawa}_x & \text{inamatwe}_o & \text{na-fawa-re-ka} \\
& \text{shaman(MASC) child(FEM) CAUS-drink-IPE(MASC)-DECL(MASC)} \\
& \text{(hemejo jao)}, \\
& \text{medicine PERI} \\
& \text{The shaman made the child drink (the medicine).}
\end{align*}\]

There can be a variety of formal mechanisms for marking a causative construction — an affix or other morphological process to a verb, or a periphrastic verb (such as English make). And just as a language may have several passives or antipassives with different markings and distinct meanings (but similar or identical syntax) so there may be more than one causative. For instance, in Hindi suffix -a indicates direct and -wa indirect causation (Kachru 1976). In Kamaiurá (Tupi-Guarani family, Brazil) there are two causative prefixes to intransitive verbs: -mo-, indicating that the causer is not involved in the activity, and -(e)ro-, indicating that the causer is involved. Compare the intransitive
John came in and Mary saw him.

There are two categories of function in each language: (1) verb function and (2) noun function. The verb function is marked by the finite verb, the noun function is marked by a noun.

Although (21) and (22) have an argument in common, it is in S function.

(21) John came in and Mary saw him.
(22) Mary saw John.

However, we cannot simply coordinate (21) and (22).

John came in and Mary saw him.
John came in and Mary saw him.

We can get (20) from (21) by coordination:
John came in and Mary saw him.

Harry saw John.

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Harry saw John.
There are many languages which do not operate with a syntactic pivot — that is, they have no syntactic condition on the combining of clauses into complex sentences. The omission of a repeated argument is likely to relate to the meaning of the construction, rather than to the syntactic functions of the argument. In such a language ‘John hit Mary and Ø3 cried’ would be likely to be understood as saying that Mary cried (since a person who is hit is likely to be injured, and to cry) whereas ‘John hit Mary and Ø3 laughed’ might be understood to say that John laughed (since Mary would be unlikely to do so, in the circumstances). Compare these with English where in both of John hit Mary and cried and John hit Mary and laughed it is John who is said to be crying (however improbable this might be) and laughing. And Dviralb, where in corresponding sentences it would be Mary who was laughing and crying.

In the next subsection we will describe Jarawara, a language which does operate in terms of a pivot, but which does not require intransitivising derivations such as passive and antipassive, which change the syntactic function of predicate arguments. Instead, it has two transitive constructions which maintain the same arguments; one focuses on the A argument and the other on the O. These alternative construction types fulfill the same pivot-feeding function as do passive and antipassive derivations in other languages.

Then, in §2.2, we shall examine a similar series of focusing constructions in Philippine languages. These are grammatically very similar to the alternative construction types in Jarawara but differ in that they appear not to feed a pivot or discourse topic.

2.1. Jarawara

The linking of clauses in Jarawara operates in terms of a pivot. But there is not a restrictive S/A or S/O pivot. Instead, the language has two transitive construction types:

(i) An A-construction (Ac) is used when the pivot argument (an argument that is shared with preceding and/or following clause(s)) is in A function in this clause.

(ii) An O-construction (Oc) is used when the pivot argument (an argument that is shared with preceding and/or following clause(s)) is in O function in this clause.

An intransitive clause has one core argument, in S function, and masc(ulin)/fem(male) gender agreement of the verbal mood suffix (and some other verbal suffixes also) is with the S. This is illustrated in (15) and in (with square brackets enclosing the predicate constituent):

(27) Miotoₙ [Ø ki-joma-ke-ka].
    name(MASC) 3SG+O 3SG+ composite+DEC+MASC
    ‘Mioto (a man) came in.’

(28) Wataiₘ [Ø ki-joma-ke-ke].
    name(FEM) 3SG+O 3SG+ composite+DEC+FEM
    ‘Watai (a woman) came in.’

Now consider a transitive clause ‘Mioto saw Watai’ This may be expressed by an A-construction, as in (29a), or by an O-construction, as in (29b).

(29) a. Ac. (Miotoₙ) Wataiₘ [Ø Ø awa-ka].
    name(MASC) name(FEM) 3SG+O 3SG+ composite+DEC+MASC

(29) b. Oc. (Wataiₘ) Miotoₙ [Ø Ø hi-wa hi-ke].
    name(FEM) name(MASC) 3SG+O 3SG+A OC-s/com+DEC+FEM

If one wanted to say ‘Mioto came in and saw Watai’, then (27) would be coordinated with (29a), an A-construction which has Mioto as pivot, giving:

(30) Miotoₙ [Ø ki-joma-ke-ka]. Øₘ Wataiₘ [Ø Ø awa-ka].

Note that in an A-construction the mood (and some other verbal suffixes) agree in gender with the A argument — here masculine for Mioto. (Sentences [16], [17a] and [17b] in §1.2.2 are also A-constructions). The A NP is generally omitted, since it is known from a previous clause in which it was introduced as pivot argument. In an A-construction where both A and O are third person there is no prefix on the verb.

If one wanted to say ‘Watai came in and Mioto saw her’, then (28) would be linked to the O-construction, (29b), where Watai is pivot argument:

(31) Wataiₘ [Ø ki-joma-ke-ke]. Øₙ Miotoₙ [Ø Ø hi-wa hi-ke].

In an O-construction, gender agreement is with the O argument — here feminine for Watai. The O NP is generally omitted since it is known from a previous clause in which it was introduced as pivot argument. In an O-construction where both A and O are third person there is a prefix hi- on the verb (here hi- plus awa gives hi-aw), repeated before the mood suffix.

The transitive clause ‘Watai saw Mioto’ may also be expressed either by an A-construction, as in (32a), or by an O-construction, as in (32b):

(32) a. Ac. (Wataiₘ) Miotoₙ [Ø Ø awa-ke].
    name(FEM) name(MASC) 3SG+O 3SG+ composite+DEC+FEM
on Conception. The set of function and focus markers on NPs include:

This can be partially explained by another from Gumble (1989: 88-89).

on the NPs which bear the focus marker.

the scope of the function of the focused argument and by a focus marker.

of the focus is determined by the occurrence of the function marker.

example of them is shown by this argument. Thus, the focus marker is placed in focus.

Thus, the example shows that the expectation of the main argument is placed in focus.

In this case, the expected function and focus markers are placed in focus.

The focus can be a number of the philosophical arguments of a sentence.

2.2. Philippine Languages (Mamn)

Dependent (1661) and Akwarda (Mamn) - see Chappell and
another system of two transitive function types is found in other
exemples where it is used and is (focusing on constructs). If we
example some metals that make — see (9a), which makes the work
suggests that the other is a member of both or member of an
example). It is other than the latter part of the focus marker.
example of the two transitive types. What is beyond dox is that their will suffice to

There are other systems (see more complete) whose will suffice to

a person argument (can be by multiplying them in the sense

is an argumentation (there is no argumentation and so on) when

the question is repeated. When the question is repeated, it is repeated.

is a question (there is no question and so on) when the

the question is repeated. When the question is repeated, it is repeated.

In this section, I will discuss the main points I will discuss.

If we then are the second position, the focus will suffice to

When these are repeated by NPs as (23a) and (23b), there are two

Let us now look at the syntactic properties of transitive and non-transitive.

(23b) Money (Mamn) (23a) *Money (Mamn) (23a) *Money (Mamn)

This has a different view of the world. We consider the

and so we asked them in turn. We consider our (23c) and (23d), which

in which Maria is talking. Now we consider Maria, we consider our (23e) and (23f), which

and so we asked them in turn. We consider our (23c) and (23d), which

(23d) Money (Mamn) (23c) *Money (Mamn) (23c) *Money (Mamn)

Now we consider Maria, we consider our (23d) and (23e), which
A Typology of Argument-Determined Constructions

In Philippine languages the focused argument generally has definite reference, as indicated by the translations given for (36a-c) (see Adams and Mannheim-Ramer [1988] for discussion of exceptions). It need not be discourse topic; there is in fact another grammatical device — fronting an NP before the predicate — that marks a topic. But a focused argument does function as syntactic pivot for relativisation and for the formation of content questions (Shibatani 1991). Focusing in Philippine languages plays a syntactic role but also has pragmatic effect, highlighting the focused argument, as the centre of attention in that clause.

3. Argument Manipulating

In §1 we discussed derivations that either remove an argument from the core (passive, antipassive) or introduce one (applicative, causative). They necessarily change transitivity and alter the grammatical functions of arguments. In §2 we discussed alternative construction types that have the same transitivity value and identical grammatical relations but just focus on a different argument in each construction. This section will deal with another type of derivation, one which does not affect transitivity but which manipulates predicates arguments at the level of surface structure.

Exemplification will be drawn from Tariana in §3.1 (similar phenomena occur in other North Arawak languages from Brazil) and from English in §3.2.

3.1. Tariana

Tariana has both a passive and also what we are calling an argument manipulating derivation. It will be useful first to describe the passive, which shows expected properties, before going on to discuss the more unusual argument manipulating derivation.

The verb in Tariana bears a prefix cross-referencing the person and number of transitive subject (A) or the subject of an active intransitive verb (S). Constituent order is fairly free, with a preference for AOV and SV. In a straightforward transitive clause a pronominal NP in non-subject function is marked by suffix -na. Any non-subject NP, whether nominal or pronominal, may optionally take topicalising clitic -nuku. (Thus, a free pronoun can take both -na and -nuku.)

The passive derivation, which applies only to transitive verbs, has the following properties:
A Theory of Argument-Determined Constructions

P.M. Dixon and Alexandre Y. Athanasiadis
A Typology of Argument-Determined Constructions

(i) It is only possible in the presence of one of:
(a) One of a small sets of adverbs, e.g. well, quickly, easily, as in This oven cooks well. Those chocolate eggs sold quickly. This jug pours easily.
(b) Negation, e.g. The thick cream doesn’t pour.
(c) A modal, e.g. The new model of sports car ought to sell.
(d) Emphatic do, e.g. Those romance novels do lend, don’t they?

(ii) Any non-subject NP may potentially be promoted into subject position in surface structure. This can apply to:
(a) an O NP, e.g. Nylon carpet wears well.
(b) an instrumental NP, e.g. My steel-tipped boots kick (footballs) well.
(c) a locative NP, e.g. Studio B recorded Oscar Peterson well.

(iii) Promotion is only possible when the success or lack of success of the activity is due to some quality of the referent of the promoted NP. From They recorded Oscar Peterson in Studio B we can get Studio B recorded Oscar Peterson well, but from They recorded Oscar Peterson in Chicago it is not possible to derive *Chicago recorded Oscar Peterson well. The acoustic character of Studio B can contribute to the success of the recording activity; the town in which the recording was made does not do so.

(iv) The underlying subject NP is obligatorily omitted from the clause.

There is a clear distinction between promotion to subject and passive in English. Passivisation does not change or add to the semantic relation between object and verb — it merely focuses on the object or on the effect the activity has on it. In The linoleum was cleaned well the well is taken to refer to the skill of the referent of the transitive subject, even though this is not identified here. Compare this with The linoleum cleaned well where well refers to the cleanable quality of the linoleum. Notice also that the underlying A can be included in the passive — The linoleum was cleaned well by John — but not in a promotion to subject construction (we cannot say *The linoleum cleaned well by John.).

There is a further grammatical difference. In English a prepositional NP can become passive subject (if there is no O NP in the clause) but then leaves its preposition behind (e.g. This glass has been drunk out of (by John)). When an erstwhile prepositional NP is promoted into subject slot the preposition is lost e.g. from They recorded Oscar Peterson in Studio B we can get Studio B recorded Oscar Peterson well but not *Studio B recorded Oscar Peterson well in or *Studio B recorded Oscar Peterson in well.

In English (and in a fair number of other European languages, e.g. Russian and Portuguese) a non-subject NP may be moved into surface subject position in semantically specified circumstances, e.g. These mandarin oranges peel easily.

The characteristics of this argument manipulating derivation are:

(41) [ha sipi] [if'iri]3 nu-inu-ni-pi.
DEM gun animal 1sg+A-kill-ARG.MANIP-CLASS:LONG
'This gun, I kill animals with it.'
(i.e. this gun is for me to kill animals with)

In examples (38b), (39) and (40) the classifier incorporated into the verb has the same form as a noun or classifier in the manipulated NP (hipe 'land', yuwa 'hole' and amaku 'hammock' each acts as its own classifier). In (41) -pi 'long objects' is the classifier corresponding to sipi 'gun'. (A full discussion of classifiers in Tariana is in Aikhenvald 1994.)

It will be seen that, unlike in a passive, transitivity is maintained in constructions such as (38b), (39–41). A non-subject argument is placed in subject slot in surface structure but it is still felt to maintain its underlying function (as O or locative or instrumental). The original A or Ss argument is still shown as a pronominal prefix to the verb, even though any realisation as an NP may be omitted.

We mentioned that the clitic -nuka can be added (with a topicalising function) to any non-subject NP. It can be used with the demoted A in a passive, but never with an NP referring to underlying A or Ss in an argument manipulated construction.

In a passive construction the new S (underlying O) has all the grammatical properties of the subject (and the original subject has none of them): (i) it can undergo equi-NP deletion; (ii) it can feed a switch-reference (same subject/ different subject) constraint. The NPs promoted into surface subject position in (38b), (39–41) have property (i) but not (ii).

In summary, the argument manipulating derivation in Tariana assigns some, but not all, subject properties to a non-subject NP, while still retaining some of the subject properties on the original subject. This derivation is used to mark a constituent which is more topical than the underlying subject, within the section of discourse in which the clause occurs.

(Fuller information on Tariana grammar will be found in Aikhenvald Forthcoming-a and Forthcoming-b.)

3.2. English

In English (and in a fair number of other European languages, e.g. Russian and Portuguese) a non-subject NP may be moved into surface subject position in semantically specified circumstances, e.g. These mandarin oranges peel easily.
A Typology of Argument-Determined Conclusions

The success of the argument may be due to the superficial clarity; this would be possible only if the evidence were very clear and direct enough to be certain of its correctness. In some cases, the evidence may be quite ambiguous, so that the argument must be based on a more careful examination of the evidence. The argument is stronger if the evidence is clear and direct, but if the evidence is ambiguous, the argument must be based on a more careful examination of the evidence.
4. Marking the Referential Status of Arguments — Inverse Systems

The final type of alternative constructions, that are determined by the nature of the predicate arguments, concerns what are called ‘inverse systems’. We shall consider two representative examples — one from the Apachean subgroup of Athabaskan (exemplified here by Navajo) and the other from Algonquian. (Other examples, some extending the meaning of ‘inverse system’ are in Givón 1994.)

We are here dealing with two constructions, both transitive and with the same arguments in the same functions, which differ in their specification of which core argument is controller of the activity.

4.1. Navajo

Consider the following two sentences (first given in Hale 1973):

(43) a. \( tlf_A \) dzaanétz\(_O\) yi-\( z\)at.
   horse mule it+it-kick
   ‘The horse kicked the mule.’
   (the horse being responsible for what happened)

(43) b. dzaanétz\(_O\) tlf\(_A\) bi-\( z\)at.
   mule horse it+it-kick
   ‘The horse kicked the mule.’
   (the mule being responsible for what happened)

Each transitive clause can potentially occur in either form. In (43a) \( A \) precedes \( O \) and the verb bears prefix yi-; in (43b) \( O \) precedes \( A \) and the verb shows prefix bi-.

Sometimes only the yi- construction is possible, e.g. ‘the girl (A) drank the water (O)’; sometimes only the bi- construction is possible, e.g. ‘the snow (A) froze the dog (O)’. Other times each is perfectly acceptable but with different meanings, as in (43a, b).

The underlying principle is that the first position in clause structure (\( A \) for a yi- and \( O \) for a bi- construction) must be filled by whichever of \( A \) and \( O \) has a greater inherent capacity for control of the type of activity referred to by that verb. Basically, if just one of \( A \) and \( O \) is human, that must be in the first ‘controller’ position. If just one of \( A \) and \( O \) is animate, then that must be controller. All this is interpreted in terms of Navajo world-view. For instance, ‘horse (A) kicked man (O)’ must be a bi- construction with the O NP, ‘man’, in controller position. The Navajo believe that since a man is more intelligent than a horse, if he gets himself kicked by a horse then it must be his fault (if he had used his intelligence and acted in some different way, he could have avoided being kicked).

The actual nature of the activity is only likely to be relevant when two inanimates are involved. We may only use a yi- construction (never a bi- one) for both ‘the rock (A) rolled onto the tree (O)’ and ‘the tree (A) fell on the rock (O)’. Rocks naturally roll onto trees and trees naturally fall on rocks. A bi-construction here would imply that the tree did something (intelligently!) to get the rock to roll onto it, and so on, which is nonsensical.

(This account is based on Hale 1973; Creager 1974; and Witherspoon 1977, 1988.)

4.2. Algonquian

The terms ‘direct’ and ‘inverse’ have been used to describe the yi- and bi-constructions in Navajo. The same terminology is used to describe two kinds of construction in Algonquian languages. But whereas the choice between constructions in Navajo relates simply to which of \( A \) and \( O \) is seen as controller, in Algonquian direct/inverse marking describes how the referential contrast between \( A \) and \( O \) agrees with or goes against what would be expected.

The details vary only a little from language to language. Basically, there is a hierarchy:

(44) a. First and second person;
   b. Third person proximate;
   c. Third person obviative.

A verb will bear a direct-marking suffix if \( A \) is above \( O \) on this hierarchy (i.e. if \( A \) is first or second person and \( O \) third person, or if \( O \) is third person proximate and \( A \) is third person obviative) and it shows an inverse marking suffix if \( A \) is below \( O \). Compare, from Cree (Klaiman 1991: 191–192):

(45) a. ni-wāpam-āw.
   1SG-see-DIRECT+1SG
   I see him/her

(45) b. ni-wāpam-ik.
   1SG-see- INVERSE
   he/she sees me

There is a single prefix to the verb, 1sg \( ni- \), which is in \( A \) function in the direct construction (45a) and in \( O \) function in the inverse, (45b). In (45a) suffix -\( āw \) indicates both direct construction and 1sg subject, while in (45b) -\( ik \) indicates...
We can now summarize the critical properties which distinguish the four types of argument-deriving conjunctions, described in §4-1 (these are shown in Table 1).

5. Conjunction

expressed and precise, when it is certain in expectation. We may define it as the juxtaposition of argumentative function and strategy function as when the argument between argumentative function and strategic function is fixed. In this view, the strategic function is fixed.

Table 1: 

<table>
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<tr>
<th>Type of Conjunction</th>
<th>Description</th>
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<tbody>
<tr>
<td>Logical conjunction</td>
<td>Connects propositions</td>
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<tr>
<td>Argumentative conjunction</td>
<td>Connects arguments</td>
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<tr>
<td>Strategic conjunction</td>
<td>Connects strategies</td>
</tr>
<tr>
<td>Non-superficial conjunction</td>
<td>Connects non-superficial arguments</td>
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</table>

The present conjunction is used in argumentative function and strategy function. It is a special case of logical conjunction used to connect arguments and strategies. The conjunction is defined as the point at which two arguments are joined, with the notion of being a logical conjunction. The conjunction is defined as the point at which two strategies are joined, with the notion of being a strategic conjunction. The conjunction is defined as the point at which two non-superficial arguments are joined, with the notion of being a non-superficial conjunction. The conjunction is defined as the point at which two superficial arguments are joined, with the notion of being a superficial conjunction.

We can see that the argumentative function determines the truth of the conjunction. For example, if we have the conjunction "A and B", and we know that A is true, but B is false, then the conjunction is false. Conversely, if we know that A is true, and B is true, then the conjunction is true. This is consistent with our intuitive notion of the conjunction.

We can also see that the strategic function determines the truth of the conjunction. For example, if we have the conjunction "A and B", and we know that A is a good strategy, but B is a bad strategy, then the conjunction is a good strategy. Conversely, if we know that A is a good strategy, and B is a good strategy, then the conjunction is a good strategy. This is consistent with our intuitive notion of the conjunction.

We can conclude that the conjunction is a useful tool for connecting arguments and strategies, and for determining the truth of the conjunction. It is a fundamental concept in logical and argumentative reasoning.
Similar remarks might be taken to apply for (IV). Marking the referential status of arguments. The two constructions in an inverse system show identical transitivity and grammatical functions of their arguments. They differ simply in the reference of A and O arguments. The direct construction may be taken as unmarked from a semantic/pragmatic point of view (in terms of the expected reference of A and of O) and is often formally unmarked at the morphological level, but it may not be unmarked from a syntactic perspective.

(d) Does one construction type mark the control which a particular argument has over the activity?
YES — for (IV) Marking the referential status of arguments. This is particularly clear for the Navajo subtype, where the first position in clause structure must be filled by the argument which has the capacity to be controller (whatever its syntactic status). The Algonquian subtype operates in a slightly different way, marking whether — for the two arguments in core functions — that which would be expected (in terms of its reference) to be controller actually is controller in this instance.
NO — for (II) Argument focusing and (III) Argument manipulating, where the alternative construction types pay no attention to the matter of control.

In the case of (I), Argument transferring, we get a YES answer where an A argument is retained in or introduced into the core (antipassive and causative) and a NO elsewhere (passive and applicative). That is, antipassive involves O being moved out of the core and A becoming S; a semantic effect of antipassive is to focus on the underlying A being controller of the activity. Causative involves the introduction into the core of a new argument in A function, the causer, which necessarily exercises control. For passive, A is moved out of the core and with it information about the controller of the activity. With applicative, an O argument is introduced and there need be no idea of control, e.g. (13b) in §1.2.1.

One property that is common to all of (I)–(IV) is that in each construction (each derived construction for (I) and (III)) one particular predicate argument is foregrounded, or brought into focus. Type (II) answered NO to all of questions (a)–(d). Its main characteristic is the fact that in each construction one argument is brought into focus, hence our name ‘Argument focusing’.

But there is also focusing in (III) Argument manipulation — on the non-subject argument that is placed in surface subject position. And in (IV), Marking the referential status — the controller is focused on (being placed in first position in the clause) in Navajo, and whichever of A and O is higher in the hierarchy is focused on for Algonquian. Similarly for (I), Argument transferring — the argument that is retained in the core (underlying O for passive, underlying A for antipassive) or the argument that is introduced into the core (O for applicative, A for causative) is plainly in focus.

Another property that runs through the types is definiteness. In (II), Argument focusing, the argument in focus is almost always definite, for both the Jarawara and Philippines subtypes. In (III) Argument manipulating, the argument placed in surface subject slot must be definite in Tariana and there is a strong preference for it to be in English. In (I), Argument transferring, there is again a strong preference for the argument which is left in the core (underlying O for passive, underlying A for antipassive) or that which is introduced (O for applicative, A for causative) to be definite. And when (IV), Marking the referential status of arguments, relates to topicality — as in Algonquian languages — there is a clear correlation between being topic and being definite.

There are other properties which do not serve to distinguish the four types of argument-determined constructions but instead establish subtypes within them. For instance:

(e) Do the different constructions in the type feed a discourse topic or pivot?

(I). Argument transferring. In many (but not all) languages in which these derivations occur, one of the functions of passive and of antipassive is to feed a pivot. This is generally also a property of applicative but only very seldom of causative.

(II). The argument-focusing constructions in Jarawara are entirely oriented towards pivot organisation; those in Philippines languages appear not to be.

(III). The argument-manipulating derivation in Tariana is oriented towards discourse topic; that in English is not.

(IV). The inverse system in Algonquian languages is oriented towards discourse organisation in that a third person topic is generally marked as proximate and a non-topic as obviative. There is no evidence that inverse marking in Navajo is oriented towards discourse organisation.

The answers to questions (a)–(e), for the four types, are summarised in Table 1.
6. Termination

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Table 1: Comparison of objects of (1)-(17)

R.M. Dixon and Alexander Y. Ahrendt

A Typology of Argument-Determined Constructions

The study of argument-determined structures highlights the unique properties and characteristics that these structures possess. In a comprehensive examination of various construction types, a framework is developed to analyze and categorize these structures effectively. These frameworks provide insights into the nature of argument-determined constructions and their role in the overall discourse structure. The analysis reveals the intricate interplay between argument and discourse, illustrating how these components contribute to the overall meaning and coherence of the text. The study also explores the implications of these findings for linguistic theory and practical applications in areas such as natural language processing and computational linguistics.

The findings emphasize the importance of considering argument-determined constructions in a holistic manner, taking into account the syntactic, semantic, and pragmatic aspects of language. This approach enables a deeper understanding of how these structures function within the broader context of discourse, facilitating more accurate and insightful analyses of complex linguistic phenomena.
of established terms in different ways. The result is that basic typological
distinctions are confused.

The label 'middle' is established as the name for a third voice (alongside active and passive) in the grammar of Greek, with the meaning 'doing something for oneself' or 'acting on oneself'. There has been some recent discussion of (III), Argument manipulating, in English (but restricted to the promotion of the O constituent to surface subject position, ignoring the fact that the same possibilities can apply for instrumental and locative constituents). This has been called 'middle', even though its syntactic status and meaning are quite different from the middle in Greek. (For instance Keyser and Roep 1984, an article that also follows the misguided practice of recognising 'ergative constructions' in English — see Dixon 1994: 18–22 for a critique of misuse of the term 'ergative'.)

D. Payne (1994) uses the term inverse in a non-standard way. Tupi-Guarani languages have one cross-referencing strategy when A is above O on the hierarchy 'first person > second person > third person', and a different strategy when O is above A. She calls the latter 'inverse'. This differs from the normal use of inverse, as described in §4, since in Tupi-Guarani languages there is never any choice involved, relating to which core argument is controller of the activity (as there may be in Athabaskan, Algonquian, and similar cases).

Discussing the inverse construction in Navajo, Hale (1973) described it as generated by 'a syntactic rule which is similar to the passive'. Others have shown less restraint and have simply described inverses as 'passives' (or as 'ergatives' — see references in Klaiman 1991: 186).

The term 'passive' was first used to describe a derivation in which the original A is removed to the periphery and underlying O becomes passive S. But many authors use 'passive' to refer to focus-constructions in Philippine languages (Siewierska 1984: 80–81; mentions those linguists who use 'passive' — including Givón 1979, etc. — and those who prefer 'focus').

Cooreman (1982, 1987) has written on Chamorro, a language that has been provided with an excellent reference grammar by Topping (1973). Chamorro has both what can be described as an agentless passive (marked by verbal prefix ma-) and an optional focus system, on the Philippines model. As Topping describes it, this includes Goal Focus, marked by verbal affix -in-, and two varieties of Agent Focus, one where the O is indefinite (verbal affix man-) and another when O is definite (affix -um). Cooreman uses accepted terminology in a non-standard manner, employing the label 'passive' both for the actual agentless passive and also for the Goal Focus construction. She also calls the Actor Focus with indefinite O 'antipassive'. Thus (Cooreman 1982: 368):

<table>
<thead>
<tr>
<th>Construction type</th>
<th>Degree of topicality</th>
</tr>
</thead>
<tbody>
<tr>
<td>antipassive</td>
<td>Agent &gt;&gt;</td>
</tr>
<tr>
<td>ergative</td>
<td>Agent &gt;</td>
</tr>
<tr>
<td>-UM-construction</td>
<td>Agent =</td>
</tr>
<tr>
<td>-IN-passive</td>
<td>Agent &lt;</td>
</tr>
<tr>
<td>MA-passive</td>
<td>Agent &lt;&lt;</td>
</tr>
</tbody>
</table>

Note that 'ergative' here refers to a non-focus transitive construction. Cooreman (1987: 76) has a revised diagram, renaming 'ergative' as 'transitive' and omitting mention of the -UM-construction (Agent Focus with definite O):

<table>
<thead>
<tr>
<th>Construction type</th>
<th>Degree of topicality</th>
</tr>
</thead>
<tbody>
<tr>
<td>antipassive</td>
<td>Agent &gt;&gt;</td>
</tr>
<tr>
<td>transitive</td>
<td>Agent &gt;</td>
</tr>
<tr>
<td>IN-passive</td>
<td>Agent &lt;</td>
</tr>
<tr>
<td>MA-passive</td>
<td>Agent &lt;&lt;</td>
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</table>

In the introduction to a volume on Voice and Inversion, Givón (1994:8) gives a diagram which he attributes to Cooreman but which is in fact a substantially modified restatement:

<table>
<thead>
<tr>
<th>Voice</th>
<th>Relative topicality</th>
</tr>
</thead>
<tbody>
<tr>
<td>active/direct</td>
<td>AGT &gt; PAT</td>
</tr>
<tr>
<td>inverse</td>
<td>AGT &lt; PAT</td>
</tr>
<tr>
<td>passive</td>
<td>AGT &lt;&lt; PAT</td>
</tr>
<tr>
<td>antipassive</td>
<td>AGT &gt;&gt; PAT</td>
</tr>
</tbody>
</table>

It appears that Givón has renamed Cooreman's 'IN-passive' (actually a Goal Focus construction) as 'inverse'.

In interpreting these diagrams it is important to bear in mind that 'inverse', 'antipassive' and some uses of 'passive' refer not to Type (IV), Marking the referential status of arguments and Type (I), Argument Transferring, as described above, but to Type (II), Argument focusing. Three of the contributions to Givón (1994) quote either (47) or a combined version of (46) and (47), from Cooreman (Givón 1994: 116, 122, 235), while another three repeat (48) from Givón, following Givón in attributing it to Cooreman (Givón 1994: 149,
7. Conclusion

better understanding of how languages work

The ideas we have used here may be carried over and developed further.

Note

The Comment by which the Introduction of the same paragraph, which is used in the argument is

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