PERSONAL AND IMPERSONAL PASSIVES IN SERI

Stephen A. Marlett

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0. In this paper I will examine and discuss passive constructions in Seri. My purpose will be basically two-fold: first, to present descriptive and typological facts concerning these constructions. My second purpose is to discuss how these facts should be accounted for in an explicit grammar. The paper is divided into three major sections in which alternative treatments of these clauses are discussed. In order to compare these alternatives, I will make them explicit in terms of relational grammar (Perlmutter (1978a, 1978b, in press, to appear), Perlmutter and Postal (1977, in press a, in press b, to appear)). Since I will argue in favor of the universal characterization of passives and impersonal passives proposed by Perlmutter and Postal (1977, to appear) and Perlmutter (1978a, 1978b), it will be necessary to present first some details of this framework.

Relational grammar views nominals and predicates as bearing grammatical relations to the clause. Grammatical relations for nominals include (among others): 1, 2, 3, Benefactive, Locative, and Instrumental. The first three, which basically correspond to the traditional terms "subject", "direct object", and "indirect object", respectively, are the sole members of the special set of grammatical relations (GRs) called terms. 1 and 2 are the nuclear term relations. GRs such as Benefactive and Instrumental
are oblique relations. A clause may be represented as a network consisting of a set of arcs that share a common tail, with the GR of a constituent indicated alongside the arc that it heads. The following diagram gives some basic information about the sentence "Dave gave roses to his wife." The verb bears the predicate (P) relation.

(1)

Relational grammar explicitly claims that in many cases it may be argued that, with respect to a given clause, a nominal bears a certain GR at one level and another GR at another level. For example, Perlmutter and Postal (1977) have proposed that passive clauses universally involve a nominal heading a 2-arc at one level and a 1-arc at the next. This fact that a clause may have nominals that bear different relations at different levels (strata) has led to the proposal of various universal constraints on well-formed networks. The following laws (Perlmutter and Postal, in press a) stated informally, will be of particular importance in the discussion of Seri passives.

(2) **Stratal Uniqueness Law.**

No two nominals bear the same term relation in any given stratum.

The claims of this law are important when considering clauses for which more than one level is posited. Personal passive clauses are claimed by Perlmutter and Postal (1977) to involve the advancement of the 2 of a transitive stratum to 1. (A transitive stratum is one that contains both a 1-arc and a 2-arc.) It is claimed that the resultant stratum does not violate the stratal uniqueness law because the nominal that heads the 1-arc in the initial stratum does not head a 1-arc in the second stratum. Rather, it is claimed by the following proposed law that this nominal bears the chomeur relation in the second stratum.

(3) **Chomeur Law.**

If a nominal a bears term relation x in a given stratum, and if a distinct nominal b bears term relation x in the subsequent stratum, then nominal a bears the chomeur relation in that stratum.

Therefore, simple personal passive clauses could be represented as (4).
There are alternative ways to prevent the violation of the Stratal Uniqueness Law; as I will demonstrate, however, the Chomeur Law makes the correct predictions for Seri.

The following laws have also been proposed:

(5) **Motivated Chomage Law.**

The chomeur relation exists only where predicted by the Chomeur Law.

(6) **Final 1 Law.**

Every clause has a nominal heading a 1-arc in the final stratum.

It should be emphasized that relational grammar claims that the notions outlined above are universals of grammar and that no language-particular grammars will contradict them. The analyses of the passive constructions in Seri which I will ultimately defend in this paper will support these claims.

1. The basic data. In Seri there exist clauses in which the initial 1 is not expressed or implied. The verbs of these clauses are marked with the prefixes /-p-/ and /-a?-/.

Note that these prefixes, which I will gloss as "PASS" (for "passive"), occur in the following clauses.

(7) a. i?p-t-p-ašt
   1sSUB-INT-PASS-tattoo
   Was I tattooed?

b. i?p-t-aʔ-kašni
   1sSUB-INT-PASS-bite
   Was I bitten?

c. im-t-p-ašt
   2sSUB-INT-PASS-tattoo
   Were you tattooed?

d. 0-t-p-ašt
   3sSUB-INT-PASS-tattoo
   Was he tattooed?

e. ktam ki? 0-t-aʔ-kašni
   man the 3sSUB-INT-PASS-bite
   Was the man bitten?

When the initial 1 is expressed or implied, these prefixes do not occur, as shown by the following examples.

(8) a. ktam k? ?im-0-t-ašt
   man the 1sOBJ-3sSUB-INT-tattoo
   Did the man tattoo me?

b. ?im-Ø-t-ašt
   1sOBJ-3sSUB-INT-tattoo
   Did he tattoo me?

c. kokašni ki? ma-Ø-t-kašni
   rattler the 1sOBJ-3sSUB-INT-bite
   Did the rattlesnake bite you?
d. i-∅-t-kə̀ni
   OM-3sSUB-INT-bite
   Did it bite him?

e. ma-ʔ-t-ʔaʃ
   2sOBJ-1sSUB-INT-tattoo
   Did I tattoo you?

f. iʔ-t-ʔaʃ
   1sSUB-INT-tattoo
   Did I tattoo him?

g. im-t-ʔaʃ
   2sSUB-INT-tattoo
   Did you tattoo him?

The distribution of the allomorphs of the passive prefix, as I shall refer to it from this point forward, is accounted for by the following spell-out rule.²

(9) Passive \( \Rightarrow p / \) before root-initial vowels
aʔ? / elsewhere

2. Passive vs. Active. I will compare two possible grammars: one, Grammar BP (Bistratal Passive), incorporates the proposed laws of relational grammar and the universal characterization of passivization proposed in Perlmutter and Postal (1977). Grammar BP would claim that the structure of (7a) can be represented by the following simplified stratal diagram:

(10) [Diagram]

The other grammar, Grammar A (Active), does not incorporate the notion 'passive'. (I will argue for the bistratal nature of the passive analysis in later sections; the arguments for Grammar BP given in this section would, however, be arguments for any grammar including passive over a grammar that does not.) Grammar A would claim that the structure of (7a) is more correctly represented by (11)

(11) [Diagram]

In Grammar BP the presence of the prefixes /-p-/, /-aʔ-/ would be accounted for by the following rule (given informally):

(12) The verb of a clause containing the substructure is marked with the passive prefix.
In Grammar A the presence of the 'passive' prefix might be accounted for by the following rule.

(13) If the final stratum of a clause contains a specified nominal heading a 2-arc and an unspecified nominal heading a 1-arc, the verb is marked with the 'passive' prefix.

Rules (12) and (13) are basically equivalent in their complexity and so these facts do not provide an argument for one grammar over another. However, the following arguments, which are based on morphological facts, will rest on the observation that in Grammar A repeated reference will have to be made to the specificity of the final 1, as in rule (13), whereas this will not be necessary in Grammar BP.

2.1. Argument one: Person agreement. As can be seen in the data in (7) and (8), verbs in Seri have person agreement. The person agreement markers are given in (14).

(14) 1s #/- / #p- 1pl #a-
     2s m- 2pl ma-
     3s ø- 3pl ø-

In Grammar BP the rule of person agreement could be stated as (15).


In Grammar A the agreement rule would have to be stated differently, perhaps as (16).

(16) Person Agreement (A):

   i) A verb agrees in person with a (final) 1 if the (final) 1 is a specified nominal.

   ii) A verb agrees with a (final) 2 if the (final) 1 is unspecified.

(Grammar A does not necessarily posit monostratal structures for all sentences; therefore it is not certain at this point whether the specification of level is necessary in rule (16).)

Since the agreement rule in Grammar A involves a disjunction, Grammar A is unable to state the generalization accounting for person agreement. Person agreement therefore provides an argument in favor of Grammar BP.

2.2. Argument two: First person subject prefix allomorphy. As can be seen by comparing (8f) and (17a-b), there are two allomorphs of the first person singular agreement prefix: /?/- and /?p-/. (The /i's are epenthetic.) The allomorph /?p-/ occurs always and only in clauses whose final strata are transitive, as in (8f), and the allomorph /?p/- occurs always and only in clauses whose final strata are intransitive,
as in (17).

(17)  

a. i?p-t-otx  
1sSUB-INT-arise  

Did I arise?

b. i?p-t-o:-it-im  
1sSUB-INT-DETR-eat-ITER  

Am I eating?

The allomorph /?p-/ occurs in passive clauses, as in (7a). Since Grammar BP incorporates the Chomeur Law of relational grammar, it predicts that passive clauses will have final intransitive strata. Therefore, in Grammar BP the distribution of the first person singular prefix allomorphs could be handled by the following spell-out rule.

(18) (BP) FIRST PERSON SG ⇒ ?- when the final stratum is transitive.  

?p- when the final stratum is intransitive.

In Grammar A it is claimed that the final strata of these clauses are transitive. The distribution of these allomorphs could be handled by the following spell-out rule. (An ergative is a 1 in a transitive stratum and an absolutive is a 1 in an intransitive stratum or a 2 in a transitive stratum.)

(19) (A) FIRST PERSON SG ⇒ ?- when agreement is with a (final) ergative.  

?p- when agreement is with a (final) absolutive.

Rule (19) is more complicated than rule (18) because it makes covert reference to the conditions stated in the person agreement rule (16). Therefore these facts provide an argument in favor of Grammar BP over Grammar A.

2.3. Argument three: Object prefixes. As shown by the data in (8), object prefixes occur on the verbs. The complete set of these is given in (20).

(20) 1s  ?im-  
2s  ma-  
3s  ø-  

1p1  ?iši-  
2p1  maši-  
3p1  ø-

In Grammar BP the occurrences of these prefixes could be accounted for by the following rule. (I will argue later that this formulation is inadequate.)

(21) Object prefixes (BP): Pronominal final 2s occur as object prefixes.
Since we have claimed that there is no final 2 in simple passive clauses, Grammar BP correctly predicts that object prefixes do not occur in passive clauses. In Grammar A these forms would be accounted for by the following rule, which would also account for their nonoccurrence in 'passive' clauses.

(22) **Object prefixes (A):** Pronominal (final) 2s occur as object prefixes if the (final) 1 is a specified nominal.

Otherwise, (final) 2s have no overt realization, although they trigger person agreement (16) in this grammar.

Note that Grammar A must make reference once again to the notion of 'specified' nominal whereas such repeated reference is not necessary in Grammar BP. These facts provide another argument in favor of Grammar BP.

2.4. Argument four: Number agreement. A verb is marked to agree in number with one of the nominals in the clause. This marking involves suffixation and/or stem modification. In Grammar BP the number agreement rule could be stated as (23).

(23) **Number Agreement (BP):** A verb agrees in number with its final 1.

Note that this rule accounts for the shape of the stems in the active sentences in (24).³

(24)  

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</thead>
<tbody>
<tr>
<td>a</td>
<td>i?-t-a?o</td>
<td>1sSUB-INT-see/SG</td>
<td>Did I see him/them?</td>
</tr>
<tr>
<td>b</td>
<td>(?a?-t-a?t</td>
<td>1p1SUB-INT-see/PL</td>
<td>Did we see him/them?</td>
</tr>
</tbody>
</table>

This rule also accounts for the fact that singular stems are used in the following passive clauses.

(25)  

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</thead>
<tbody>
<tr>
<td>a</td>
<td>i?p-t-p-a?o</td>
<td>1sSUB-INT-PASS-see/SG</td>
<td>Was I seen?</td>
</tr>
<tr>
<td>b</td>
<td>im-t-p-a?o</td>
<td>2sSUB-INT-PASS-see/SG</td>
<td>Were you seen?</td>
</tr>
<tr>
<td>c</td>
<td>(\theta)-t-p-a?o</td>
<td>3sSUB-INT-PASS-see/SG</td>
<td>Was he seen?</td>
</tr>
</tbody>
</table>

(Passive clauses with plural nominals as initial 2s will be discussed in section 4.)

In Grammar A the rule to account for the same facts has two parts, the second of which has two possible formulations, as shown below.
(26) **Number Agreement (A):**

i) A verb agrees in number with its (final) 1 if the (final) 1 is a specified nominal.

ii) A verb agrees in number with its (final) 2 if the (final) 2 is unspecified.

or

ii) A verb with an unspecified (final) 1 occurs in the unmarked (=singular) form.

Grammar A is unable to state the generalization that accounts for number agreement, and reference must be made once again to the specificity of the final 1. These facts therefore provide another argument in favor of Grammar BP.

2.5. Argument five: Relativization. In this section I will present some basic facts concerning relative clauses in Seri. I will simultaneously present the way in which they would be accounted for in Grammar BP. I will finally compare this account with the one that would be necessary in Grammar A.

If the final subject of the relative clause is coreferential with the head noun, the subject of the embedded clause does not appear and the subject nominalizer is prefixed to the verb. The rule in Grammar BP would basically say just that. The subject nominalizer has three allomorphs, whose distribution is governed in part by the morpheme that immediately follows.

(27) **SUBJECT (NONFUTURE) NOMINALIZER** ⇒  i / ____ NEGATIVE  
  ?a / ____ PASSIVE  
  k / elsewhere

Some examples are given below. I will use an informal notation by which the final GRs are indicated above the constituents.

(28) a.  

    1  P

    ktam [ ktam -m-atəχ ] > ktam [ i-m-atəχ ]

    man man NEG-go

    (the) man who isn't going / didn't go

b.  

    1  P

    ʃiχ [ ʃiχ -m-p-a?ɨt ] > ʃiχ [ i-m-p-a?ɨt ]

    thing thing NEG-PASS-eat NOM-

    (the) thing that isn't / wasn't eaten
If the final 2 of a relative clause is coreferential with the head noun, the object of the embedded clause does not appear and the object nominalizer is prefixed to the verb. The final 1 agreement on the verb is represented by the possessive prefixes. The object nominalizer has four suppletive allomorphs which are determined basically by the phonological shape of the following morpheme; the example below illustrates just one, which is underlyingly /-o-/.  

(29) ?akeWk [ ?- ?akeWk -afmox ] > ?akeWk [ ?-o:- fmox ]  
  firewood I firewood gather POS-NOM-  
  (the) firewood that I gathered

These facts would be accounted for differently in Grammar A. The contrast between sentences (28c) and (29) is the crucial point. Grammar A would analyze these examples as shown in (30).

(30) a. (cf. 28c)  
  2 1  
  \[ \text{thing thing} \]  
  \[ \text{thing that is / was eaten} \]

b. (cf. 29) (same as in Grammar BP)

The object nominalizer spell-out rule in Grammar A would have to be complicated by adding a clause to account for /?a-/ (which is considered to be an allomorph of the subject nominalizer in Grammar BP (cf. 27)).

(31) OBJECT (NONFUTURE) NOMINALIZER \( \Rightarrow \) ?a / ___ the final 1 is unspecified  
  o / ___  
  etc.

Since the clause accounting for the allomorph /?a-/ in Grammar A is more complicated than the clause in Grammar BP, these facts provide another
argument in favor of Grammar BP over Grammar A.

2.6. Argument six: The object marker in relative clauses. When the final stratum of a relative clause is transitive, the prefix /i-/ follows the relativizer. I will call this prefix the Object Marker.

(32) a. ktam [?im k-i-št ] (the) man who tattooed me
   man  me  NOM-OM-tattoo

   b. ktam [ ma k-i-št ] (the) man who tattooed you
      you

   c. ktam [ k-i-št ] (the) man who tattooed him

In Grammar BP these facts could be accommodated by the following rule.

(33) Object Marking in Relative Clauses (BP): The verb of a relative clause is prefixed by the Object Marker if it is transitive.

In Grammar A, however, the rule would be more complicated because this morpheme does not occur in nominalized 'passive' clauses, which it analyzes as having final transitive strata. Its counterpart to rule (33) would be (34).

(34) Object Marking in Relative Clauses (A): The verb of a relative clause is prefixed by the Object Marker if the final stratum is transitive and the final 1 is specified.

Since the necessary rule is more complicated in Grammar A than in Grammar BP, these facts argue in favor of the latter.

2.7. Conclusion. A comparison of the rules for person agreement, first person subject prefix allomorphy, object pronouns, number agreement, relativization, and the object marker in relative clauses has shown that a grammar of Seri may be considerably simplified by incorporating the notion of passive. I will henceforth assume in this paper that Seri clauses with an initial transitive stratum and with an initial unspecified 1 are passive, and that these are the constructions which bear the passive markers given in (9). In the next section I will argue for the bistratal aspect of these constructions.

3. Bistratal vs. Monostratal. Various analyses of passive clauses have been proposed in recent years. In this section I will compare Grammar BP with a grammar that analyzes passive clauses as being syntactically monostratal. The latter I will call Grammar MP. Perlmutter (1978b) points out that several recent theories of passivization are essentially monostratal. An analysis of the type proposed by Fillmore (1968) would claim that if the Object is chosen as the Subject, this fact is 'registered' on the verb; in Seri this registration would be the passive prefix. The final 1 of a passive clause does not head a 2-arc at any level syntactically in such an analysis. Sentence (7a) might therefore be represented by the
following simplified stratal diagram in which the semantic roles have not been indicated.

(35)

A passive clause in Grammar MP might be defined in terms of the choice of a 'nonnormal' subject (Fillmore 1968:37).

In the following sections I will discuss the claims of these two analyses and present empirical evidence that will enable us to choose between them.

3.1. Previous rules. The rules given in section 2 for Grammar BP would work equally well for Grammar MP, given the data shown so far.

3.2. Interaction with 3-2 Advancement. In this section I will discuss sentences for which Grammar BP would posit 3-2 Advancement. I will show that sentences that involve 3-2 Advancement as well as Passive provide arguments for choosing Grammar BP over Grammar MP.

The presence of a nominal whose final GR is a nonnuclear core relation (where 'core' includes the set of term and oblique relations, but excludes chomeurs) is marked by the 'Oblique' clitic on the verb. The forms are given in (36).

(36) 1sg/pl ?e=

2sg/pl me=

3sg/pl ko=

(Only one such clitic may appear before the verb, and the third person clitic may only occur in the absence of any other preverbal clitic.) Note that the final 3s in the following clauses occur as oblique clitics, as expected.

(37) a. tom ki? me=?-t-aipot  Did I pay the money to you? money the 20BL-1sSUB-INT-pay

b. me=?-t-aipot  Did I pay it to you? 20BL-1sSUB-INT-pay

c. tom ki? 0 ko=?-t-aipot  Did I pay the money to him? money the Juan ki? 30BL-1sSUB-INT-pay (John the)
Under varying conditions, however, the initial 3 occurs as an object prefix. This does not ever happen with some verbs. With other verbs (like the verb -aipot pay) the initial 3 optionally occurs as an object prefix if the initial 2 is specified. With yet other verbs (like -mi:it ask) this happens if and only if the initial 2 is unspecified. Some examples are given below.

(38)  

a. ma-ʔ-t-aipot

2sOBJ-1sSUB-INT-pay  
Did I pay you?

b. tom k

iʔ ma-ʔ-t-aipot

money the 2sOBJ-1sSUB-INT-pay  
Did I pay you the money?

c. ?im-ʔ-t-mi:it

1sOBJ-3sSUB-INT-ask  
Did he ask me?

d. *siχ  ʔo ?im-ʔ-t-mi:it

thing a 1OBJ-3sSUB-INT-ask  
Did he ask me something?

The fact that the transitive allomorph of the first person subject prefix occurs in (38a) is evidence that the final stratum of that clause is transitive (cf. section 2.2.).

I propose that Grammar BP incorporates 3-2 Advancement (as well as the Chomeur Law). Sentence (38c) would be represented by the following simplified stratal diagram.

(39)

I will assume that Grammar MP does not incorporate 3-2 Advancement. In this grammar, if there is no Object in the semantic structure, the Dative becomes the syntactic direct object. Sentence (38c) would be diagrammed as (40), for which the semantic relations have not been indicated.
Alternatively to (40) it could be claimed in Grammar MP that the Dative nominal has the shape of an object prefix when the Object is not specified in the semantic structure.

With the verb -e: *give* the initial 3 always occurs as an object prefix, even when the initial 2 is specified, as shown in sentence (41)

\[
\text{Did I give you a shirt?}
\]

I would claim for Grammar BP that the verb -e: *give* is marked to require 3-2 Advancement. Thus in Grammar BP sentence (41) would be diagrammed as in (42).

Note that it is claimed that the initial 2 is a final chômeur. Since the initial 3 is a final 2, it will occur as an object prefix.

I will assume that Grammar MP would treat (41) the same as it did (38c). In Grammar MP this verb could be treated as one that takes two direct objects, as diagrammed in (43), in violation of the Stratal Uniqueness Law.
I have now shown that Grammar BP and Grammar MP make different claims about the structure of these sentences. Grammar BP claims that the initial 2 is a final chomeur. I will demonstrate that the final strata of passivized ditransitive verbs are intransitive when the initial 3 is the final 1. This fact follows directly in Grammar BP because of the advancement of the 3 to 2 and the Chomeur Law, whereas this fact is not predicted in Grammar MP.

3.3 Argument one: First person subject allomorphy. Note that the verb in the following example agrees with the nominal that is the initial 3 in the bistratal analysis.

(44) kamliš ki? ?p-yo-p-e?e: I was given the shirt.
shirt the lsSUB-PAST-PASS-give

This sentence would be diagrammed as (45) in a bistratal analysis.

(45)

Since the final stratum is intransitive the allomorph /?p-/ of the first person singular subject agreement marker occurs (see section 2.2. and rule (18)).

In a monostratal analysis, however, this sentence would be represented by the following simplified stratal diagram.
Since the final stratum of this clause is transitve, according to Grammar MP, the occurrence of the 'intransitive' allomorph /p-/ is unexplained by rule (18), and therefore rule (18) must be revised.

(47) (MP) FIRST PERSON SG ⇒

\[ \begin{align*}
\text{p-} & \quad \text{when the (final) stratum is intransitive.} \\
\text{p-} & \quad \text{when the (final) stratum is 'passive'.} \\
\text{-} & \quad \text{elsewhere.}
\end{align*} \]

Since Grammar MP is unable to state the generalization necessary to account for the occurrences of the intransitive allomorph, these facts provide an argument in favor of a bistratal analysis.

3.4. Argument two: Infinitive allomorphy. When an upstairs final 1 and a downstairs final 1 are coreferential, an infinitive appears in the downstairs clause. I will assume that this fact is handled the same way in both grammars. Note that there are infinitives in the downstairs clauses in (48) below.

(48) (a) iʔa-ʔi: \-χο:-mšo INF-taste lsSUB-EMPH-want

\[ \text{iʔa-ʔi: \-χο:-mšo} \quad \text{I want to taste it!} \]

\[ \text{ik-oit} \quad \text{I want to dance!} \]

\[ \text{ik-ʔaʔe:t} \quad \text{I want to be tattooed!} \]

The distribution of the allomorphs of the infinitive prefix could be handled by the following rule in Grammar BP.

(49) INF ⇒ ika-

\[ \begin{align*}
\text{ika-} & \quad \text{when the final stratum is intransitive.} \\
iʔa- & \quad \text{when the final stratum is transitive.}
\end{align*} \]

The following example has a downstairs clause with a ditransitive verb.

(50) kamiš kʔ ik-ʔaʔe:t \-χο:-mšo shirt the INF-PASS-give lsSUB-EMPH-want

\[ \text{I want to be given the shirt!} \]
This sentence would be diagrammed as in (51) in Grammar BP.

(51)

Since the final stratum of the complement clause does not contain a 2-arc, the allomorph /ika-/ occurs as predicted by rule (49).

Sentence (50) would be diagrammed as in (52) in Grammar MP.

(52)

Since according to Grammar MP the final stratum of the downstairs clause contains a 2-arc, rule (49) must be revised for that grammar.
(53) INF $\Rightarrow$ ika- when the (final) stratum is intransitive.

ika- when the (final) stratum is 'passive'.

i?a- elsewhere.

Again, Grammar MP cannot state the generalization that accounts for the occurrences of the intransitive prefix. The fact that this generalization is possible in Grammar BP is evidence in favor of the latter.

It should be noted that the evidence given here for the chomage of the initial 2 of clauses with 3-2 Advancement can also be used against an analysis involving 3-1 Advancement. If the initial 3 advanced directly to 1, the chomage of the initial 2 would be unexplained.

3.5. Conclusion. I have given two arguments for a bistratal analysis of passives over a monostratal analysis. The arguments for the bistratal theory have to do with the final intransitivity of clauses involving 3-2 Advancement and passive. Unlike a monostratal theory, the bistratal theory predicts that the final strata of the type of passive clauses under consideration will be intransitive. This prediction is supported by the allomorphy of two prefixes in Seri. These facts are therefore evidence in favor of the bistratal analysis.

4.0. Impersonal passives. At least two types of passive clauses have been discussed in the literature. The most well known is the personal passive in which one of the nominals bearing a grammatical relation in the initial stratum of the clause (or in some stratum of a complement clause) is the final 1. Another is the impersonal passive in which one of these nominals is not the final 1. Perlmutter and Postal (to appear) have proposed the following analysis for impersonal passives of transitive clauses.

(54)

Keenan (1975) and Comrie (1977) have proposed that impersonal passives should be analyzed as involving the 'spontaneous demotion [chomage]' of the initial 1 with no advancement to 1. This proposal would be illustrated by the following stratal diagram.
It should be noted that apart from any other consequences these proposals hold for proposed language universals such as the Motivated Chomage Law, they make different empirical claims and can therefore be tested. The unmotivated chomage analysis claims that the initial 2 is a final 2. The advancement analysis claims that the initial 2 is a final chomeur. In the following sections I will compare Grammar BP with Grammar UC (Unmotivated Chomage) which, although bistratal, incorporates the unmotivated chomage analysis of impersonal passives.

4.1. Plural nominals. There are sentences in Seri that are unexpectedly ungrammatical.

(56) a. *?a-y-a?-kašxox
   1pSUB-PAST-PASS-bite/PL
   We were bitten.

b. *ma-y-a?-kašxox
   2pSUB-
   You (pl.) were bitten.

c. *0-y-a?-kašxox
   3pSUB-
   They were bitten.

Either of the following constraints would be sufficient to block these sentences.

(57) a. Plural nominals cannot advance to 1.

b. Plural nominals cannot advance by Passive.

However, both of these constraints must be wrong because plural nominals can advance to 1 by Passive and be Equi victims, as shown in (58a), or relativize, as shown in (58b,c).

(58) a. ik-a?-\{kaška \} ?a-yo:-mkaxk
    INF-PASS-\{kašxox\} 1pSUB-PAST-want
    \{bite/SG\} \{bite/PL\}
    We want to be bitten.

b. ktamkw \{-a-kašxa \}
   \{-a-kašxox\}
   \{NOM-PASS-bite/SG\}
   \{NOM-PASS-bite/PL\}
   the men who were bitten
(Note also that the infinitive stem may be either singular or plural, and that in passive relative clauses the facts are even more complex. I have not fully investigated these particulars.)

The following modified constraints would also be sufficient to block the sentences in (56).

(59)  
\begin{enumerate}
\item Plural nominals that advance to 1 must undergo Equi or Relativization.
\item Plural nominals that advance to 1 by Passive must undergo Equi or Relativization.
\end{enumerate}

Perlmutter (1978a) has suggested that clauses with a certain type of predicate might universally have initial strata that are unaccusative--containing a 2-arc but have no 1-arc. When taken with other proposed universals such as the Final 1 Law, this hypothesis predicts that such clauses will always involve an advancement to 1. For simple clauses this might be as shown in (60).

(60)  
\[
\begin{array}{c}
\text{2} \\
\downarrow \\
1 \quad \text{1-arc}
\end{array}
\]

Predicates that have been suggested as typically having unaccusative initial strata are numerous; they include (among others) predicates expressing states of the mind, predicates of existing, and duratives. If we assume, or can eventually independently motivate, the unaccusative hypothesis in Seri, the following data suggest that (59a) is not correct since plural nominals have advanced to 1.

(61)  
\begin{enumerate}
\item 0-t-?amok ma-x ?ant k? it ?a-m-oi:  
\begin{tabular}{rll}
3sSUB-DP-night & SR-SUFF & place the on 1plSUB-PNF-be/PL \\
\end{tabular}

It being night, we stayed there.
\item psa:k ?a-t-o:xtat

hunger 1plSUB-DP-die/PL

We were hungry.
\end{enumerate}

In spite of this condition, however, utterances exist which correspond to the glosses given in (56).
We were bitten.

You were bitten

They were bitten.

We were bitten.

You were bitten.

They were bitten.

Four facts about these sentences should be noted. First, the initial 2s occur as object prefixes. Second, the verb has a third person subject prefix. Third, there is passive morphology. Fourth, the verb stem is the shape used when the verb agrees with a singular subject and the action is performed more than once.

I propose that these are impersonal passives. Impersonal passives in Seri are all based on transitive initial strata. Hence there are no impersonal passives comparable to the German Es wird hier getanzt. It is danced here. It is typologically interesting that Seri distinguishes between singular and plural nominals with regard to impersonal passives.

In Grammar BP these impersonal passives would be diagrammed as shown in (54). Dummy insertion would take place when the following two conditions would otherwise be violated in the same clause: one, the 1 of a final transitive stratum may not be unspecified: two, the advancement of plural nominals is restricted, as stated in (59b). That is, a dummy comes in only when a clause contains the following substructure.

As predicted by the conditions necessary for dummy insertion, impersonal passives with a singular nominal as initial 2 are ungrammatical.

I was bitten.

Since the initial 2s of (62a-b) are claimed to be final chomeurs in Grammar BP, the rule for the object prefixes must be revised. Perlmutter and Postal (to appear) have introduced the universal notion 'Acting Term' that proves to be helpful here. The definition is given informally below.
A nominal node is an acting term if and only if:

a. it heads an arc whose R-sign is term in a given stratum
b. it does not head an arc with a term R-sign other than term in a later stratum

Note that the initial 2 in (54) meets these conditions and is therefore an Acting 2. Rule (21) can be replaced by (66) in Grammar BP.

Pronominal Acting 2s occur as object prefixes.

As with personal passives, the passive morphology is the result of the 2 of a transitive stratum advancing to 1, but in the impersonal passives it is a dummy that advances. Person and number agreement is with the dummy, which I assume to be third person singular. Third person subject marking is clearly seen when the clause is a complement clause and the subjects are not coreferential. Such a clause is nominalized and the final 1 is represented by the appropriate possessive prefix, as shown in (67).

(67) a. ?i-ʔ-o:ktak i-ʔ-χo:-mšo
   1 POSS-NOM-look at 2s SUB-INT-want
   Do you want me to look at it?

b. mi-ʔ-m-ašiχ i-ʔ-χo:-mšo
   2 POSS-NOM-NEG-cut 1s SUB-EMPH-want
   I want you to cut it!

c. ?im i-ʔ-št i-ʔ-χo:-mšo
   1 sOBJ 3 POSS-NOM-tattoo 2s SUB-INT-want me?
   Do you want him to tattoo me?

d. im-y-aít i-ʔ-χo:-mšo
   2 POSS-NOM-dance 1s SUB-EMPH-want
   I want you to dance!

The third person possessive prefix is used when the complement clause is an impersonal passive.

(68) a. ?iši i-ʔ-p-ašitim i-ʔ-χo:-mšo
   1 lpl OBJ 3 POSS-NOM-PASS-tattoo/SG 0M-3s SUB-EMPH-want
   He wants us to be tattooed!

b. ?iši i-ʔ-a-kašxa i-ʔ-t-amšo
   1 lpl OBJ 3 POSS-NOM-PASS-bite/SG 2s SUB-INT-want
   Do you want us to be bitten?

In Grammar UC the impersonal passive clauses would be analyzed as shown in (55). The conditions preventing the advancement of the initial 2 to 1 will be discussed in section 4.4. Since the initial 2 is a final 2, there is no reason to revise the original rule for the occurrences of the object prefixes. The passive morphology that personal and impersonal passives share would be accounted for by the following rule.
(69) The demotion of 1 to chomeur is marked by the passive prefix.

Since Grammar BP and Grammar UC make different claims about the structure of these impersonal passive clauses, it may be possible to find evidence to choose between these grammars, as I will demonstrate below.

4.2. **Argument one: Third person subject marking.** The fact that the verb in an impersonal passive clause has third person subject agreement follows directly in the advancement analysis under the reasonable assumption that dummies are third person. A special statement is required in the unmotivated chomage analysis, however, since it claims that there is no final 1. This additional statement is required since it is not universally the case that verbs of impersonal passive clauses occur with third person morphology (Comrie (1977), Perlmutter and Postal (to appear)). This additional complexity for Grammar UC is evidence in favor of the advancement analysis.

4.3. **Argument two: Number agreement.** The fact that the verb stem in an impersonal passive clause shows singular and not plural agreement morphology follows directly in the advancement analysis, again under the assumption that dummies are singular. A special statement is required in Grammar UC since it claims that there is no final 1. Of course, it might be claimed that this is a universal of impersonal passive clauses and should therefore be incorporated into the framework and be available without "cost" to language-particular grammars. This is an empirical claim that is falsifiable. If this is indeed included as a universal, Grammar UC and Grammar BP are equivalent on this point. If this is not included as a universal, however, the additional complexity in Grammar UC is evidence in favor of the advancement theory.

4.4 **Argument three: The constraint on the advancement of plural nominals.** I gave evidence above for the following formulation of the constraint on the advancement of plural nominals.

(70) Plural nominals that advance to 1 by Passive must undergo Equi or Relativization.

How would the constraint be stated in Grammar UC? Comrie's claim (1977) is that the universal characterization of passivization is the chomage of the 1. He claims that it is language-specific whether the 2 advances to 1 or not. Personal passive clauses are therefore analyzed as shown in

(71)
The following condition (equivalent to (59a)) would be sufficient to prevent the advancement of the 2 when it is a plural nominal.

(72) Plural nominals that advance to 1 must undergo Equi or Relativization.

As we have already seen, however, this condition would also rule out the unaccusative advancement in simple clauses. Compare the following structures, one of which must be allowed, and the other not.

(73) a. *

b. We might revise (72) in order to allow (73b).

(74) Plural nominals that advance to 1 in a passive clause must undergo Equi or Relativization.

Although (74) apparently adequately describes the facts regarding these nominals, it is questionable whether this type of indirect condition should be allowed in a grammar. Since a direct and simple condition is possible in Grammar BP, the latter should be preferred on this point.

4.5. Conclusion. A grammar allowing the unmotivated chomage of an initial 1 and a grammar that defines passive as an advancement make different empirical claims about the final strata of impersonal passive clauses. I have given three arguments in favor of the advancement analysis. Two were based on the third person singular verb morphology, and the third was based on the form of the the condition on the advancement of plural nominals. It is possible that other arguments can be developed for one analysis or the other now that their claims have been made explicit with regard to Seri. The facts seem to support the universal characterization of passivization as an advancement.
5. Conclusions. In this paper I have argued that there are passive clauses in Seri, and that these clauses are best analyzed as having structures consonant with the universal characterization of passivization proposed in Perlmutter and Postal 1977. A monostratal theory of passivization was considered for the personal passives and was rejected as empirically inadequate. An analysis with unmotivated chomage of the initial 1 was considered for the impersonal passives and arguments were given to show that it is not to be preferred to the advancement analysis.

FOOTNOTES

1 Seri is a Hokan language spoken by approximately 450 people in northwestern Mexico. This study of passives in Seri was greatly facilitated by access to the field notes and unpublished manuscripts of Edward and Mary Moser, to whom I express my appreciation. Special thanks are also due David Perlmutter for his steady guidance and encouragement.

The following abbreviations are used: DETR = detransitivizer, DF = dependent future, DP = dependent past, INF = infinitive, INT = interrogative, ITER = iterative, NEG = negative, NOM = nominalizer, OBJ = object, OBL = oblique, OM = object marker, PASS = passive, pl/PL = plural, PNF = proximate nonfuture, POSS = possessive, s/SG = singular, SR = switch reference, SUB = subject, SUFF = suffix, UNSP = unspecified.

2 The passive prefix /-p-/ also ablauts the root-initial vowel if it is a nonlow vowel by lowering and shortening it.

3 Number agreement in infinitives is somewhat more complicated as will be shown in section 4.1.

4 The 1 of a final intransitive clause may be unspecified in some cases. The prefix /-ka-/ follows the tense prefix of such clauses. Three examples are given below.

(i) 0-p-asi-x  ?akx  0-s-ka-mi:?-a?a
    3sSUB-DF-drink-SUFF  somewhere 3sSUB-FUT-UNSP-die-SUFF
    If that is drunk, one will die.

(ii) ?e?e-an kom ano 0-t-k-i:?-tim ...
    plant-area the in 3sSUB-DP-UNSP-be-ITER
    When one is in the desert ...

(iii) ta-?ak ano 0-po-k-aa?it ...
    there in 3sSUB-DF-UNSP-fish
    If one fishes in that place ...
The transitive allomorph /l?a-/ also ablauts the root-initial vowel, if it is a nonlow vowel, by lowering and shortening it.

This notion is independently motivated in Seri since it is needed to account for the occurrences of the object marker /i-/ in finite clauses. This prefix not only occurs when all of the terms of a final transitive clause are third person, but it also occurs in sentences such as the following which we have already established as having intransitive final strata, with kamiš heading a final Cho-arc.

(iv) kamiš ʃo i-Ø-yo-p-e?e:-t1m
     shirt a OM-3sSUB-PAST-PASS-give/SG/ITER

They were given a shirt.

The Object Marking rule for finite verbs might be tentatively stated as (v).

(v) Object marking in finite verbs: A finite verb is prefixed if

1) all the final terms are third person.

2) there is a third person nominal that is an acting 2.

(This rule could also provide additional evidence against the monostratal theory of passives in Seri, but I have not checked the crucial forms.)

There is a constraint against having two object prefixes on the same verb. If there are two specified pronominal acting 2s in the same clause in Seri, one of them occurs in a special full nominal form. In the following sentence the final 2 occurs as the object prefix.

(vi) ?ipi ʃ-isox ʃip-kop ʃl-ta ma-it-e:
     self 1POSS-being this 1POSS-mother 2sOBJ-3sSUB-INT-give

Did my mother give me to you?
REFERENCES


---------------. Unpublished field notes.


