# A Case Study in Contact Linguistics: The Western Torres Strait Language and Meryam Mir

Senior Essay
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## Chapter 1: Introduction and Background Information

### 1.1. Overview of Essay

The Western Torres Strait language (WTS) and Meryam Mir are spoken on western and eastern islands, respectively, in the Torres Strait between Cape York, Australia and the island of New Guinea. The genetic affiliation of WTS and its degree of linguistic similarity to Meryam Mir, a Papuan language, have remained points of contention in literature on the subject. Some, including Capell (1956) and Dixon (2002), have argued that WTS is in fact a Papuan language influenced by Australian languages, while others, including Wurm (1970) and Dixon (1980), have argued that WTS is Australian. Based on Thomason (2001)'s third step for determining the presence of structural contact in a language, this essay looks for structural similarity between WTS and Meryam Mir in the areas of phonology, nouns and pronouns, modifiers, verbs, and deixis, and ultimately argues that the degree of structural similarity between the two languages has been overstated and is not borne out by a systematic comparison of features. A section in Chapter 2 is devoted to each of the areas listed above and includes a description of WTS, a description of Meryam Mir, and a comparative evaluation of the similarity between the two languages based on the preceding descriptions. Following the investigation of structural similarity, Chapter 3 is devoted to a brief investigation of lexical similarity between the two languages based on Ray's wordlists appearing in *Reports of the Cambridge Anthropological Expedition to Torres Straits* and results from National Science Foundation grant BCS-844550. In Chapter 4, the author will provide a summary of the findings of this essay and suggest an area of future study.

### 1.2. Theoretical Context

Contact linguistics is a subfield of linguistics which combines elements of both historical linguistics and sociolinguistics in order to study the "linguistic consequences" of interaction between two or more languages (Winford 2003: 9-10). Perhaps the most obvious result of contact between languages is the borrowing of lexical items, but borrowing of non-lexical,

structural features can also occur. According to Thomason (2001: 70)'s borrowing scale, the borrowing of content words occurs in situations of casual contact, but as the intensity of contact increases, more and more categories of lexical items can be borrowed and structural borrowing can also occur. Examples of borrowed structure include the repurposing of native syntactic structures for new functions at the first level of intensity above casual contact, the loss or addition of phonemes based on the inventory of the source language and a shift in stress placement at the second level above casual contact, and the "loss or addition of agreement patterns" and widespread changes in the language's typology at the most intense level of contact, a type of language change termed "metatypy" by Malcolm Ross. Preceded by both lexical borrowing and grammatical calquing, metatypy arises in a situation of bilingualism when a language's "morphosyntactic constructions" are "restructured" such that they imitate constructions modeled in the source language, resulting in a matching of constructions in "both meaning and morphosyntax" (Ross 2007: 124). As this contact effect is wholesale and causes a shift in the language's typology, it is more intensive than the possible restructuring of syntactic constructions included by Thomason at the first level of intensity above casual contact.

Though Thomason qualifies the borrowing scale as a list of violable guidelines rather than as perfect predictions of the results of language contact, King (2000: 44) criticizes the theoretical base of this description of borrowing altogether. King argues that structural borrowing between languages as conceived of by scholars like Thomason is not possible, taking particular issue with Thomason's characterization that "anything goes" at the most intense level of contact. Rather, she claims that all language contact-induced change is inherently lexical. Operating in a generative framework where information in the lexicon dictates syntax, King (2000: 53) believes that when a lexical item is borrowed from one language into another, the

syntactic information associated with the item in the lexicon causes internally motivated changes in the borrowing language. Work by Aikhenvald (2002: 23-24) on Amazonian languages, however, provides a counterexample to King's claim. In the Vaupés linguistic area, diffusion of structural features between Tariana, an Arawak language, and East Tucano languages cannot be said to be rooted in the borrowing of lexical items; in the multilingual Vaupés linguistic area, there is a strong culture prohibition on lexical borrowing. In light of this and other counterexamples to suggested limitations on structural borrowing, Thomason (2001: 65) states that "the burden of proof" is on those who propose the constraints.

Since this essay focuses on languages spoken in the Torres Strait off of Australia, it is important to consider language contact on the continent itself. Dixon (2002: 22-27) attributes many of the characteristics typical of Australian languages to a process of structural diffusion for languages "where a significant proportion of the speakers of one also have some competence in the other." "Phonetic and phonological" features, "grammatical categories, construction types and techniques," "grammatical forms" (such as pronouns), and lexical items can all diffuse. In contrast to the typical family tree model of language development, Dixon (2002: 31-35) proposes a punctuated equilibrium model, which involves long periods of stability amongst languages in contact and shorter periods of more radical change. These "punctuated" periods are due to evolving sociolinguistic situations, perhaps caused by environmental changes, technological innovation, or invasion. But even in equilibrium states, Dixon believes that languages are always in flux and that diffusion is occurring.

Thomason (2001: 93-94) provides five steps for determining the presence of structural contact in a receiving language. First, one must look at the language as a whole, rather than focusing on only one or two features as points of similarity. In this essay, the phonology, nouns

and pronouns, modifiers, verbal systems, and deixis of WTS and Meryam Mir are investigated and compared in an attempt to survey the complete language systems, rather than pointing out a few similar or dissimilar features arbitrarily. Secondly, a source language for the structural changes must be established. This step is somewhat moot in this essay, as its purpose is to compare WTS and Meryam Mir. This essay assumes WTS and Meryam Mir as the heart of its investigation; it is beyond its scope to look at different or additional languages, although data from Pama-Nyungan and Papuan languages is brought in as necessary and as it is available. Third, shared features must be found in both languages. The execution of step three, that is, the search for similarity, without the assumption that it will necessarily be found, constitutes the majority of this essay. The fourth and fifth steps involve, respectively, establishing that the shared features were not in the receiving language prior to contact, but were in the source language. These fourth and fifth steps will not be undertaken here, though, as mentioned in regard to step two, reference to Pama-Nyungan and Papuan languages is occasionally made. The purpose of this essay is to lay out systematically any similarities or dissimilarities in response to claims previously made about WTS and Meryam Mir in the literature, so that future work may be done to investigate the nature of the relationship between the languages.

### 1.3. Why WTS and Meryam Mir?

WTS is considered a member of the Pama-Nyungan language family of Australia and is spoken on the western islands in the Torres Strait, while Meryam Mir is classed as a Trans-Fly Papuan (non-Austronesian) language and is spoken on the eastern islands in the Strait. However, such classifications have not been made without controversy concerning the true genetic affiliation of WTS and the degree of similarity between it and Meryam Mir.

Capell (1956: 89) considers Meryam Mir to be a Papuan language, but classifies WTS and its dialects as "Australian-influence Papua" rather than as an Australian language, on the basis of a physical resemblances between Islanders and "Papuan easterners" and on facts about WTS's phonemic inventory, namely its voicing contrast in its stops and its possession of the fricatives /s/ and /z/, which he considers prototypically non-Australian. Dixon (2002: 130) agrees with Capell's assessment and also considers WTS to be "Australian-influenced Papuan" with an "Australian substratum." This is a marked reversal of Dixon (1980: 234)'s standpoint, in which he classified WTS as Australian, because "although it has some unusual characteristics, there are enough correspondences with mainland [Australian] languages to leave no doubt concerning the genetic connection." Here, Dixon notes that WTS and Meryam Mir share some similarity in terms of phonological inventory and shared lexical items, but have "few similarities at the grammatical level."

Wurm (1972: 151) classifies WTS dialects as Australian, but notes that they have "a largely un-Australian phonological system" and "have been lexically influenced by the neighboring Miriam language [Meryam Mir]," which he considers Papuan. Alpher et al. (2008) also consider WTS to be Pama-Nyungan, citing the research of Ray (1907) and Bani and Klokeid (1971), while tracing the history of WTS features in Proto-Pama-Nyungan. Alpher et al. (2008: 15) also note that WTS has often been thought to have "heavy linguistic influence from Meryam," but calls for a more serious investigation of the facts before such a claim is perpetuated:

> "Over the last hundred years, the literature has suggested several classifications of the WTS language: 'Papuan', 'Australian', 'Australo-Papuan' and 'Papuo-Australian'. Each of these classifications implies a different history for the language speakers, and

> each is in principle demonstrable or falsifiable through detailed linguistic comparison. To make claims of mixed language descent and substrate influence without the detailed work required, however, trivializes the notion of comparative linguistics."

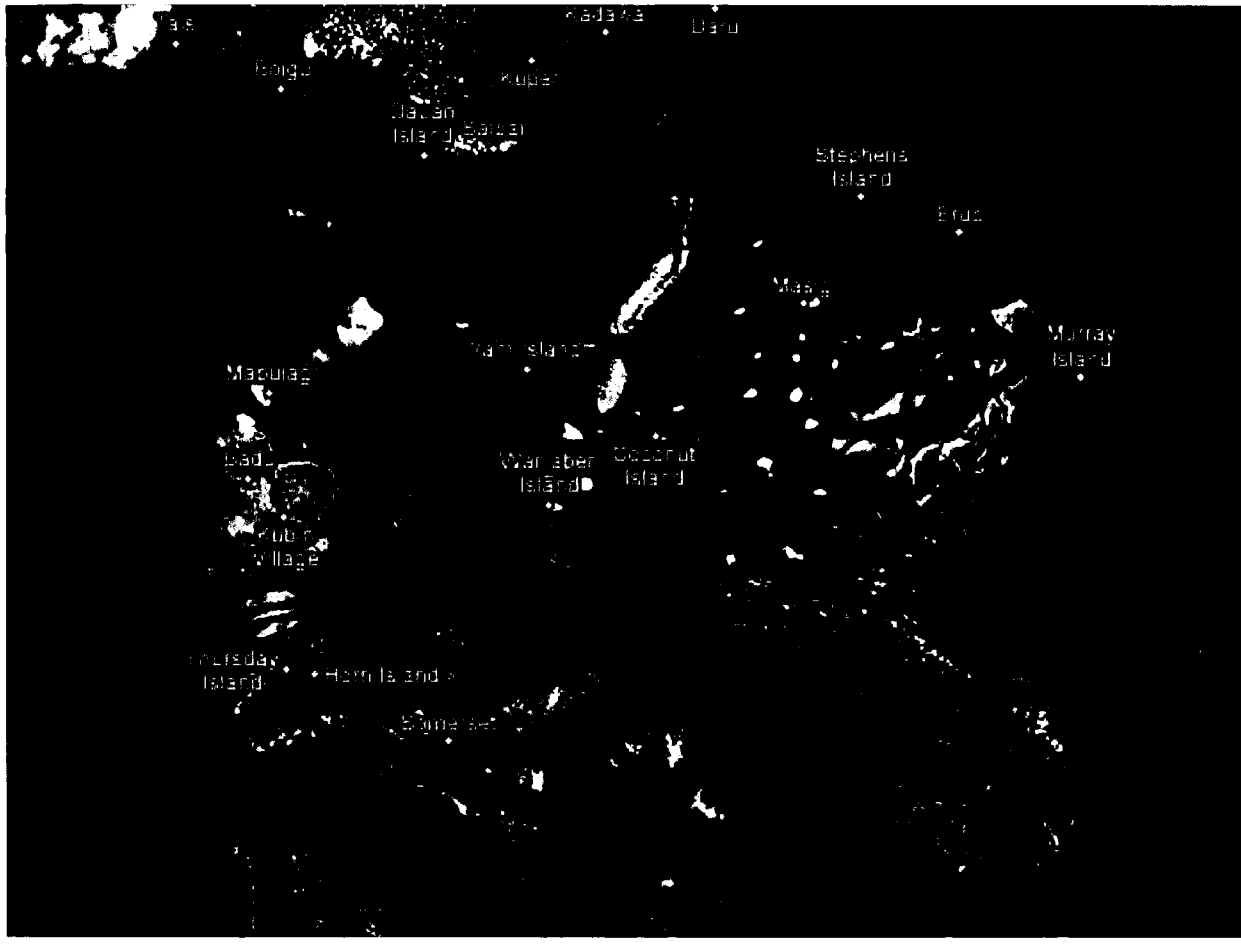
It is the purpose of this paper to provide such a "detailed linguistic comparison" of WTS and Meryam Mir, setting out any points of similarity or dissimilarity so that they may be used collectively as a stepping stone for future research into the histories of WTS and Meryam Mir.

**1.4. Torres Strait Sociolinguistic Situation**

WTS is spoken on the islands in the western portion of the Torres Strait, including Saibai Island, Mabuiag Island, and Thursday Island, as well as on mainland Australia in Bamaga on Cape York. WTS is a name that encompasses four dialects, including Kala Lagaw Ya (KLY) and Kalaw Kawaw Ya (KKY), meaning 'Western Island Language' or 'Back Island Language.' There are approximately 3500 – 4000 speakers of the language as cited by Ford and Ober (1991: 118).

Meryam Mir was traditionally spoken on the islands of Erub, Ugar, and Mer, in the eastern Torres Strait, although at the time that Piper (1989: 1) did her fieldwork on Meryam Mir in the 1980s, it "had been seriously impinged upon" by Torres Strait Creole. The language name means roughly 'language of Murray Island,' combining the Meryam Mir word for 'word, language,' *mir,* with the native place name *Mer* for Mer/Murray Island. In 1977, there were only 700 speakers of Meryam Mir, including speakers living on Cape York. Figure A, a Google Maps satellite image of the Torres Straits, shows the islands mentioned above in relation to Cape York, Australia, and the island of New Guinea. The Strait spans a distance of about 150 kilometers.

Figure A, Map of the Torres Strait:




In addition to WTS and Meryam Mir, two other languages are spoken in the Torres Strait. They are English, the language of education and administration, and, as mentioned above, Torres Strait Creole (TSC), an English-based creole which serves as the region's *lingua franca* (Piper 1989: 1, 5). From the time of James Cook, who arrived in the Strait in 1770, onward, there is British documentation of intermittent shipwrecks and interaction with Islanders, but permanent contact between Islanders and Europeans was not established until 1871 with the arrival of the London Missionary Society in the Strait (Ray 1907: 1-3). Writing in 1907 of his experiences with the Cambridge Anthropological Expedition of 1898, Sidney H. Ray, tasked with

documenting the structures of the WTS and Meryam Mir languages, noted that "nearly all of [the Islanders had] more or less acquaintance with English" (5).

TSC is a descendent of Pacific Pidgin English from the South Sea Islands, and came to be used as a common language of Strait as a result of conversion of Islanders to Christianity in the late 1800s, post-European contact intermarriage between people from the West and East, and a united Islander political identity against Commonwealth regulations between World Wars I and II (Shnukal 1988: 1, 6-7). Shnukal (1988: 8-10) writes that some older Islanders resent TSC because creoles are often considered 'inferior' versions of English, but it is clear that, as of twenty years ago, from when the sources used for this project date, TSC had firmly established itself in the region. In addition to being the area's *lingua franca*, it is, in some communities, the first language acquired by children and even a symbol of ethnic identity for younger Islanders. Bilingualism between the indigenous languages and TSC is not universal. Piper (1989: 5) found during her field work that "whilst all Meryam speakers on Mer can talk some Creole, it is not the case that all Creole speakers can talk Meryam" and that it was only speakers who were in their mid-thirties or older, now in their mid-fifties or older, who could speak Meryam Mir conversationally.

Historically, before contact with English-speaking Europeans and before the development of TSC, bilingualism between WTS and Meryam Mir was not widespread. Shnukal (1995: 123) paints a sociolinguistic picture in which Western Islanders and Eastern Islanders conceived of themselves as different groups and where contact "appears to have been quite circumscribed." According to her research, bilingualism was limited to a few select males from each group who were responsible for conducting "reciprocal exchange between the east and west." And, since

TSC now holds the status of common language of the area, it seems evident that bilingualism in WTS and Meryam Mir is not and was never ubiquitous throughout the region.

**1.5. Sources and Source Limitations**

The main sources used for this project are sketch grammars of WTS and Meryam Mir. For WTS, Ford and Ober's (1991) "A sketch of Kalaw Kawaw Ya" from *Language in Australia*, was the main source, with supplementation provided by Kennedy's (1985a, 1985b) "Clauses in Kala Lagaw Ya" and "Kalaw Kawaw Verbs" from *Aboriginal and Islander Grammars: Collected Papers*, Kennedy's (1981) "Phonology of Kala Lagaw Ya in Saibai dialect" from *Australian Phonologies: Collected Papers*, and Alpher et al.'s (2008) "Western Torres Strait Language Classification and Development." Ford and Ober and Kennedy's descriptions are all based on the Kalaw Kawaw Ya dialect of WTS, though I will use the term WTS throughout this essay.

For Meryam Mir, Piper's (1989) *A Sketch Grammar of Meryam Mir*, a master's thesis completed at the Australian National University, was used almost exclusively. Ray's (1907) "Linguistics," the third volume of Alfred C. Haddon's *Reports of the Cambridge Anthropological Expedition to Torres Straits* was referred to minimally for both Meryam Mir and WTS.

This essay was written from secondary sources with minimal examples rather than from annotated primary data. In the absence of a plethora of data from and papers devoted to WTS and Meryam Mir, the authors of the sources used had to be taken in good faith in their descriptions of the languages and their features. This dearth of sources also affected the completeness of the analysis possible in this paper; it is not possible to analyze topics not broached or broached only

minimally in the sources themselves. Specific problems encountered during the course of researching this project are noted below.

The Ford and Ober paper is, as its title implies, a sketch. It provides minimal description of the language and keeps examples and their interpretation to a minimum as well. Piper's master's thesis, though much longer than Ford and Ober (1991), comes with its own set of obstacles to researchers. The thesis contains many working hypotheses of the author concerning the structure of Meryam Mir and it is not always evident that her interpretations are correct. The Piper source is also written using a set of terminology somewhat different from that which the author of this essay is familiar. As mentioned above, the Ray source was not heavily relied upon, but its problems should still be noted. The data used by Ray in his description of the grammatical structure of WTS and Meryam Mir is now over 110 years old, and was collected 91 years before publication of Piper's master thesis, the only other Meryam Mir source available to for this essay, so it quite reasonable to suspect that the language may have changed in the years intervening between Ray and Piper's analyses. In addition, Ray was oriented towards classical languages and did not have the machinery necessary to describe non-European languages available at the time. For example, the concept of ergativity became codified only after the Cambridge Expedition, so while Ray noticed divergences from a nominative-accusative pattern in the languages of the Torres Straits, he lacked the framework with which to describe them.

Perhaps the biggest qualification to keep in mind is that none of these sources represent WTS and Meryam Mir as they are today. Published between 29 and 19 years ago, Kennedy, Piper, and Ford and Ober are describing these languages as they were, which is not necessarily how they are now in 2010. The sociolinguistics situation, including numbers of speakers and the

extent of bilingualism or multilingualism in any of the languages spoken in the Torres Strait, may also have changed in the intermediate years.

## Chapter 2: Descriptions and Comparisons of Languages

### 2.1 Phonology

#### 2.1.1 WTS Phonology

As seen in Figure B, the consonant inventory of WTS distinguishes stops at four points of articulation and exhibits a voicing contrast in its stops and fricatives. While WTS has three nasals, it does not have a nasal for every point of articulation that it distinguishes.

Figure B, WTS Consonant Inventory:

| | | Bilabial | Interdental | Alveolar | Alveo-palatal | Velar |
|---|---|---|---|---|---|---|
| Oral Stops | Voiceless | p | th | t | | k |
| | Voiced | b | dh | d | | g |
| Nasal | | m | | n | | ng |
| Fricatives | Voiceless | | | s | | |
| | voiced | | | z | | |
| Lateral | | | | l | | |
| Tap | | | | r | | |
| Glides | | w | | | y | |

As seen below in Figure C, WTS has a six-vowel system. Sources disagree about the character of the sixth vowel <œ>, with Ford and Ober (1991: 120) and Alpher et al. (2008: 23) recording it as <œ>, and Kennedy (1981: 105) as a high, central vowel, which he transcribes as schwa. According to Kennedy (1981: 109), the WTS dialect Kalaw Kawaw Ya (KKY) has noncontrastive vowel length, though Alpher et al. (2008: 23) cite a vowel length distinction in WTS and point out an ambiguity in Kennedy's analysis. In WTS, the first syllable of a word is given primary stress, with secondary stress falling on alternate syllables thereafter.

Figure C, WTS Vowel Inventory:

| | Front | Central | Back |
|---|---|---|---|
| High | i | | u |
| Mid | e | œ | o |
| Low | | a | |

WTS allows the following syllable structures, prohibiting clusters of any kind in its onsets as well clusters of two full consonants in its codas:

| | | |
|---|---|---|
| V | GV | CVGC |
| VG | CVC | CVGL |
| VC | CVG | CVLC |
| CV | CVL | |

WTS has three types of allowable clusters. The first is a glide plus an obstruent, nasal, or liquid. The second is a liquid plus an obstruent or nasal. The third type of cluster, which is allowable only word-medially, is a catchall category including the following clusters: <dm>, <dp>, <dz>, <mp>, <pk>, and <pm> (Kennedy 1981: 124).

### 2.1.2 Meryam Mir Phonology

As seen in Figure D, the consonant inventory of Meryam Mir distinguishes stops at three points of articulation and exhibits a voicing contrast in its stops and fricatives. The absence in Meryam Mir of phonemes found in WTS is marked with a dash.

Figure D, Meryam Mir Consonant Inventory:

| | | Bilabial | Interdental | Alveolar | Alveo-palatal | Velar |
|---|---|---|---|---|---|---|
| Oral Stops | Voiceless | p | - | t | | k |
| | Voiced | b | - | d | | g |
| Nasal Stops | | m | | n | | - |
| Fricatives | Voiceless | | | s | | |
| | voiced | | | z | | |
| Lateral | | | | l | | |
| Tap | | | | r | | |
| Glides | | w | | | y | |

Meryam Mir has a five-vowel system, shown in Figure E. Piper (1989: 14) found Meryam Mir vowels to have noncontrastive length, where certain stressed vowels are lengthened. In Meryam Mir, either the first or second syllable bears stress. If inflection adds syllables to the word through prefixation, stress is adjusted so that it occurs on the new first or second syllable.

Figure E, Meryam Mir Vowel Inventory:

| | Front | Central | Back |
|---|---|---|---|
| High | i | | u |
| Mid | e | | o |
| Low | | a | |

Meryam Mir has the following syllable structures, allowing clusters of a consonant (with the exception of /n/ and /l/) and a glide, but disallowing clusters of two full consonants in the onset or coda:

| | | |
|---|---|---|
| V | CVC | CGV |
| VC | CVG | CGVC |
| VG | GVC | CGVG |
| CV | GVG | GVGC |
| GV | VGC | |

Meryam Mir prohibits /r/ from occurring word-initially. Piper (1989: 20) claims that clusters occurring across syllable boundaries in a word are "not restricted" and that any appearance to the contrary in her thesis is probably the result of a lack of data available to her at the time.

### 2.1.3 Evaluation of Similarity – Phonology

Alpher et al. (2008: 23) suggests that WTS is "somewhat unusual for a Pama-Nyungan language" because it lacks retroflection and has a voicing contrast in its stops and fricatives. Taking this statement and knowledge of the Meryam Mir consonant inventory together, there is a strong initial impetus to attribute the "unusual" features of WTS to influence from Meryam Mir.

After all, Meryam Mir also lacks retroflection and contrasts voiced stops and fricatives with their voiceless counterparts. Austin (1988: 4) describes WTS as having "the best established voicing contrast and the widest range of contrasting environments of any Australian language," and goes on to write that it is "unclear" if these facts are due to influence from Papuan languages. Given that Australian languages are widely claimed to lack a voicing contrast, the fact that WTS has one is of particular interest to a comparative study of WTS and Meryam Mir.

But, as Austin (1988) shows, one must be wary of both placing too much weight on generalizations and of taking the same surface traits in these languages as signs of deeper similarity. In a survey of Australian languages, Austin (1988: 4-6, 21) concludes that "phonological voicing contrasts are well established in many Australian languages," and cites Mbiywom, Wik Muminh, and Umbuygamu, Paman languages on Cape York, as languages with voicing contrasts, though their distribution is not as complete as that of WTS. While a voicing contrast may be considered rare in the overall context of Australian languages, it is not rare in the context of Cape York languages, those in closest proximity to the Torres Strait and WTS.

Stepping back from the languages' voicing contrasts, WTS possesses three phonemes not found in Meryam Mir: the voiced interdental stop /dh/, the voiceless interdental stop /th/, and the velar nasal /ng/, which seem to be inherited from an earlier stage of Proto-Pama-Nyungan (Alpher et al. 2008: 25). Despite this demonstrable tie to Australia, several other features of the WTS consonant inventory are odd when considered in the context of other Australian languages: it lacks a nasal for every point of articulation that it has for its stops, it has only one lateral /l/ and one rhotic /r/, and it possesses the fricatives /s/ and /z/. Dixon (2001: 67) cites approximately 98% of Australian languages as having a nasal for every stop and approximately 85% as having

two rhotics. These facts set WTS apart from other Australian languages to some degree, but not in the context of Cape York.

In Hale's (1976) survey of ten northern Cape York languages, Luṯiɤ and Mpalitʸaṉ have only one rhotic, the liquid /r/. The other eight languages have both the liquid /r/ and the glide /R/, but closer inspection of Hale's descriptions reveal that in these languages /r/ is oftentimes restricted in its distribution. For example, in Ngkoṯ medial /r/ does not occur and word-final /r/ occurs only once in a "putative cognate" and, in Aritiṉŋiṯiɤ, "Paman *r is not attested," with its reflexes "occur[ing] in the vocabulary of at least one idiolect," where they "are recognised as borrowings and are used in competition with native Aritiṉŋiṯiɤ forms." Given the situation concerning rhotics on Cape York depicted by this data, the lack of more than one rhotic in WTS is not unusual. All of the ten languages in this survey have only one lateral /l/, showing that having only one lateral is an areal feature in the geographic region where WTS is spoken. Similarity, the WTS fricatives /s/ and /z/ are not the only instance of a fricative in an Australian language in the area. Hale (1997: 209) records a lamino-alveopalatal fricative with the phonetic realization [sʸ] in Linngithigh, a Northern Paman language spoken on Cape York.

WTS has a six-vowel system, while Meryam Mir's consists of five vowels. The sixth vowel in WTS, the mid central vowel <œ>, which Ford and Ober describe as the result of a process of umlaut from /a/, suggests that these two vowels were historically one vowel and that the sixth vowel of WTS arose from a five-vowel system. This would seem to bring the WTS vowel inventory closer to that of Meryam Mir, especially in light of the fact that Australian languages typically have a three-vowel system, consisting of /i/, /a/, and /u/. Dixon (2001: 67) gives the rate of three-vowel systems in Australia as about 67%. In a Cape York context,

however, WTS's vowel inventory is not that strange, since these languages are somewhat variable in their vowel systems. All ten Paman languages on Cape York looked at in Hale (1976) have vowel systems consisting of four or more vowels.

As seen in 2.1.1 and 2.1.2, WTS and Meryam Mir differ in allowable clusters. Whereas WTS allows clusters in the coda which contain no glides (CVLC), all clusters in Meryam Mir contain a glide. Meryam Mir allows consonant plus glide clusters in its onsets and glide plus consonants its codas, while WTS excludes clusters of any type from its onsets. Word-medially, Meryam Mir allows far more clusters than WTS. Of the clusters that WTS does allow, those consisting of a liquid plus an obstruent or nasal are unremarkable compared to other Australian languages and those consisting of a glide plus an obstruent, nasal, or liquid are not surprising in a Cape York context (Erich Round, p.c.). The remaining clusters allowed word-medially by WTS are strange in that they are contextually unexpected combinations and they are not formed on any discernable pattern, leaving odd gaps. These strange WTS clusters initially point towards Meryam Mir as a source for them in WTS, but such an intuition in not borne out by the data. Only some of the strange WTS clusters are attested in Piper's grammar of Meryam Mir, though she does acknowledge the potential dearth of her data in regards to allowable word-medial clusters (Piper 1989: 20).

## 2.2 Nouns and Pronouns

### 2.2.1 WTS Nouns and Pronouns

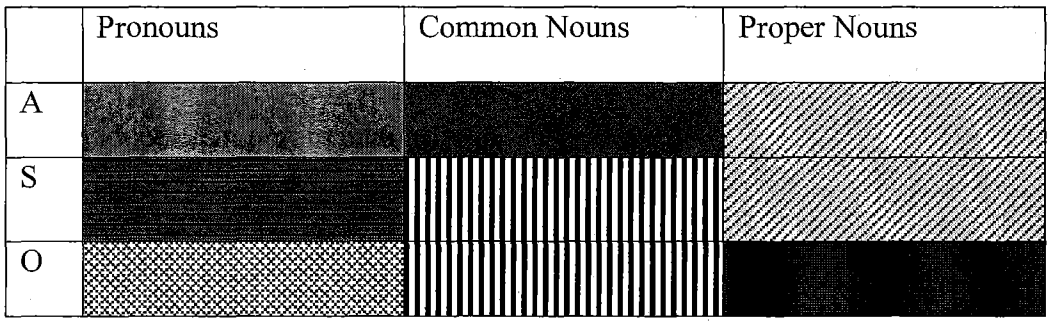
WTS nouns exhibit a split case coding system, where a distinction is made between the core cases applied to common nouns and to proper nouns. Proper nouns take nominative and accusative case, while common nouns take ergative and absolutive case. As for the oblique cases, Ford and Ober list a possessive, instrumental, dative, ablative, locative, and comitative

case, but they offer little interpretation, giving one example sentence for each case. This lack of analysis makes it difficult to get a true sense of each case's full semantic range. Interestingly, the suffix which marks the ergative core case and that which marks the instrumental oblique case are the same in WTS, a phenomenon that Dixon (2001: 68) cites in about 85% of Australian languages. Nouns distinguish between singular and plural number through the use of a plural suffix affixed to the singular form.

WTS pronouns take ergative, nominative, and accusative as their core cases and distinguish between singular, dual, and plural number. There is a gender distinction in third person pronouns with Ford and Ober (1991: 121-122) marking the distinction as masculine versus feminine and Alpher et al. (2008: 17) calling it feminine versus non-feminine. Gender is determined by sex in human and other animate referents, but is not predictable elsewhere.

Based on the core cases assigned to pronouns, common nouns, and proper nouns, it seems that WTS has a mixed case system, in which proper nouns follow a nominative-accusative pattern, common nouns follow an ergative-absolutive pattern, and pronouns mark three different cases for three different syntactic functions: the subject of a transitive verb, the object of a transitive verb, and the subject of an intransitive verb. Focusing on these three syntactic functions, referred to as A, O, and S respectively, rather than the names of the morphological case markings themselves allows for a clearer picture of the split case system in WTS. Figure F below shows whether the three syntactic functions A, O, and S, are marked by the different morphological case forms or show some syncretic combination in each nominal or pronominal category.

Figure F. Summary of Case Coding in WTS Pronouns and Nouns:



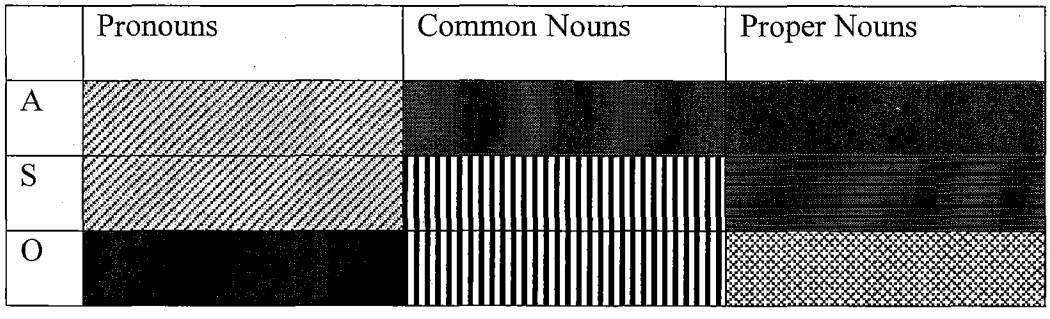

### 2.2.2 Meryam Mir Nouns and Pronouns

Meryam Mir also has a split case coding system between its common and proper nouns. Common nouns take ergative and absolutive case, while proper nouns take ergative, nominative, and accusative case. Piper (1989: 34-42) lists the oblique cases for Meryam Mir as locative, instrumental, allative, ablative, genitive, and associative. She describes the case functions as follows: the locative case marks the place of an event, the end point of a motion verb, specific points in time, or the physical or emotional state of an experiencer, and also has a secondary comitative meaning when used with animate nouns. The instrumental marks the nouns which are the means with which an action is performed. The allative marks most obviously the goal or place of a motion, but also can have a purposive meaning, and mark the as of yet unrealized end point of a state such as dying, or similarly, an unreached point in time. The ablative marks motion away from a place or point in time, and also has a causal meaning. The genitive marks beneficiaries of an action as well as the possessor or owner of something. The associative marks a person or an object associated with an event, but not a participant or instrument in the event. Number is marked on Meryam Mir verbs rather than its nouns, although dual number can be distinguished from paucal and plural number in complex noun phrases through suffixation on a noun phrase within a more complex noun phrase (Piper 1989: 44).

Meryam Mir personal pronouns take nominative and accusative core case. They feature a singular versus nonsingular number distinction, with the first person nonsingular further breaking down into a inclusive versus exclusive distinction. Each combination of number and person is marked by an independent pronominal form, while oblique cases are formed from a pronoun's accusative form through the use of suffixes.

Figure G below shows whether the three syntactic functions, subject of a transitive verb (A), object of a transitive verb (O), and subject of an intransitive verb (S), are marked by different morphological case forms or show some syncretic combination within the categories of pronouns, common nouns, and proper nouns in Meryam Mir.

Figure G, Summary of Case Coding in Meryam Mir Pronouns and Nouns:




### 2.2.3 Evaluation of Similarity – Nouns and Pronouns

Both WTS and Meryam Mir have a split case coding system between proper and common nouns, but this is not necessarily a sign of relatedness or contact between the two languages. Split case coding systems are not uncommon in Australian languages (Dixon 1980: 286-291) and the split between the cases assigned to pronouns, common nouns, and proper nouns is different in the two languages, as seen below in Figure H. WTS and Meryam Mir common nouns both take ergative and absolutive case, but WTS proper nouns distinguish between nominative and accusative case, while WTS proper nouns make a three-way core case distinction. Conversely,

WTS pronouns show tripartite marking, while Meryam Mir pronouns follow a nominative-accusative pattern.

Figure H, Summary of Case Coding in Pronouns, Common Nouns, and Proper Nouns:

| | Pronouns | Common Nouns | Proper Nouns |
|---|---|---|---|
| WTS | Tripartite | Erg/Abs | Nom/Acc |
| Meryam Mir | Nom/Acc | Erg/Abs | Tripartite |

Similarly, both languages have a split number coding system, where the number categories available to pronouns versus those available to nouns differ. But the way that the languages make the split is different, since WTS nouns have singular and plural number, while Meryam Mir nouns do not distinguish number, and WTS pronouns have singular, dual, and plural number, while Meryam Mir pronouns distinguish between singular and nonsingular, as well as nonsingular inclusive and exclusive in the first person.

The terms used for the oblique cases of WTS and Meryam Mir are not mirrors of each other. Since the information available on the functions of WTS cases is sparse, an attempt has been made to match them based on function with their equivalent cases in Meryam Mir in Figure I. It is not possible to discern based on the available data whether the additional functions of Meryam Mir oblique cases are expressed by WTS cases or not.

Figure I, Functions Fulfilled by Oblique Cases in WTS and Meryam Mir:

| Function | WTS | Meryam Mir |
|---|---|---|
| Possession | Possessive | Genitive (and Locative for a person's place where event occurs) |
| NP at which action is directed | Dative | Allative |
| Object used to complete an action | Instrumental | Instrumental |
| Motion towards | Dative | Allative |
| Motion from | Ablative | Ablative |
| Comitative nonparticipatory | ? | Associate |
| Comitative participatory | ? | Locative |
| Place or endpoint of action | Locative? | Locative |

It is difficult to define the function of the locative case in WTS on the basis of the data given by Ford and Ober (1991: 122-123), who give the following examples:

(1) **Umay mabayg-i-ya thoeydh-i-z**
dog ABS person LOC bite Pres Perf Sg
'The dog bit somebody.'

(2) **Ezoera midh mul-i-z kedha +nuy-dhng – n im-a-n Eleno-n-i-ya paru – nu siy - ayn**
Ezra NOM Q say Pres Perf thus he-ERG who ACC see Pres Perf Eleanor COM front LOC standing
'Who did Ezra say he saw standing in front of Eleanor?'

The second example also contains an instance of the WTS comitative case. In Meryam Mir, the associative case marks a person who was present at an event but did not participate in it or an object that was present during an action, but not used to carry out the action. On the basis of the above example sentence, it is difficult to tell whether the comitative case in WTS has a participatory or nonparticipatory meaning, or even whether such a distinction exists in WTS at all.

Finally, it is important to note that no evidence was found during the course of this comparison to suggest that the morphological forms of one case system or pronoun system have been borrowed into the other language. For example, Figure J shows the difference in singular pronoun forms, taken from Ford and Ober (1991: 138) and Piper (1989: 68).

Figure J, Difference in Singular Pronominal Forms in WTS and Meryam Mir:

| | | WTS | Meraym Mir |
|---|---|---|---|
| 1sg. | | ngay (intr.) | ka |
| | | ngath (tr.) | |
| 2sg. | | ngi (intr.) | ma |
| | | ngidh (tr.) | |
| 3sg. | 'she' | na (intr.) | e |
| | | nadh (tr.) | |
| | 'he' | nuy (intr.) | |
| | | nuydh (tr.) | |

Singular pronouns rather than full pronominal paradigms are shown here to avoid the confusion that would come with comparing in their entirety systems that differ in the number and gender distinguished by pronouns and in which core cases are marked. For WTS, the forms are given as they would appear as the subject of an intransitive (intr.) verb (S) and as the subject of a transitive (tr.) verb (A). In the third person singular, a further distinction is needed to account for gender. As Meryam Mir pronouns follow a nominative-accusative pattern and do not have grammatical gender, only one form is given.

## 2.3 Modifiers

### 2.3.1 WTS Modifiers

In WTS, Ford and Ober find "a large class" of adjectives. Adjectives can be used both attributively and predicatively, though there are some that can be used only as attributes. When used attributively, most WTS adjectives are invariable. When predicative, adjectives "may take on of two series of suffixes," each with a singular and plural form. The series are *–ngal/-mayl* and *–g/-gal*. Ford and Ober (1991: 124) state that there is not a "systemic [semantic] difference" between the series except in nonfinite relative clauses. In addition to the class of elements that are exclusively adjectives, adjectives can be derived by applying the participial suffix *–zi* to verbs.

WTS has a class of indeclinable adverbs that can modify any constituent, including the sentence itself. Adverbs can be derived by applying a vocalic suffix to nouns. Nouns in the locative case functional adverbially, but Ford and Ober (1991: 124-125) consider them still to be nominals. They give examples of both temporal and locational nouns being used to derive adverbs or used adverbially, including the adverb *dapara* 'in the sky' derived from *dapar* 'sky'

using the vocalic suffix and the locative form *goeyg-i-nu* 'during daylight' of the noun *goeyga* 'day.'

### 2.3.2 Meryam Mir Modifiers

There is no clear class of adjectives in Meryam Mir. At best, there is a general class of modifiers which includes number words, quantifiers, determiners, and four specific words, meaning 'big/old,' 'little/young,' 'good,' and 'bad,' which Piper tentatively calls adjectives. There is further difficulty in defining an adjective class, since Piper (1989: 75, 77) notes that these words can also serve as nouns and that "several items functioning as adjectives are homophonous in form with nouns" (it is unclear whether the latter is a reformulation or the former). They can be used attributively, in a position preceding the noun which they modify, and predicatively when they "precede the existential/locational verb." Meryam Mir 'adjectives' can also be used to intensify other adjectives; for example, the adjective *aw* 'big' coupled with the intensifier *kaka* modifying the adjective *kebi* 'little' means in totality 'very small'. Nominals can function as adjectives through means of reduplication. Piper also claims that adjectives can be derived from nouns through the use of *–kem*, a suffix homophonous with the Meryam Mir associative case.

Piper identifies two words which are solely adverbs: *nab* '(attempt) unsuccessfully' and *mirem* 'try.' She suggests that there maybe other elements that fit into this category of adverbs, since they serve only an adverbial function. Meryam Mir 'adverbs' are invariable and have no fixed position. As with adjectives, adverbially functioning elements can also be derived from nouns through reduplication. Reduplication may also serve a separate intensifying function.

### 2.3.3 Evaluation of Similarity – Modifiers

In WTS there is evidence for a class of adjectives and a class of adverbs, while in Meryam Mir, there are only a few words that can be said to be exclusively adjectives or exclusively adverbs. The process by which adjectives and adverbs are derived in these languages also differs. While WTS and Meryam Mir both derive adverbs from nouns, WTS does it through use of a suffix and Meryam Mir through reduplication. In the case of adjectives, WTS derives them from verbs by affixing a participial suffix and Meryam Mir uses reduplication or a suffix homophonous with the associative case to derive them from nouns. WTS also has singular and plural suffixes for its adjectives, while number is not marked on Meryam Mir adjectives, whose nouns also do not distinguish number. WTS and Meryam Mir modifiers differ in the degree to which they constitute distinct classes and in how they are derived.

## 2.4 Verbs

### 2.4.1 WTS Verbs

WTS verbs are divided into two conjugation classes based on transitivity. Following an ergative-absolutive pattern, transitive verbs take suffixes which agree in number with the verb's object, while intransitive verbs take number suffixes which agree with the subject. WTS verbs do not mark person.

The WTS tense and aspect system seems to be largely determined by discourse. The main distinction made by verbs is between completive and incompletive aspect, which make basic references to the past and to the present and future, respectively, "whenever the time of the action does not need to be indicated with great precision" (Kennedy 1985b: 84). In addition to the completive and incompletive aspect, WTS also has habitual, uninterrupted continuous, terminated continuous, and immediate striving aspects and today past, yesterday past, historical

past, and future tenses. Any use of these additional aspects or tenses over the completive or incompletive aspects puts special focus on the manner or time of an action. All three of the past tenses are marked on the verbs through the use of suffixes, while the future tense is marked with a verbal suffix and clitics which indicate whether the action will take place later that day or on a future day. Ford and Ober (1991: 123) call the future construction periphrastic because of the appearance of clitics in addition to the inflected verb, but Kennedy (1985b: 87) lists the words Ford and Ober term clitics as optional in the formation of the future tense. The additional aspects are also marked by verbal suffixes.

WTS has indicative and imperative moods. The imperative suffixes mark the number of the subject in the case of intransitive verbs and of both the subject and the object in the case of transitives.

### 2.4.2 Meryam Mir Verbs

The Meryam Mir verbal system organizes verbs into two types, which Piper terms "Atelic Stative" and "Telic Active", based on telicity, though the stative verbs are also all intransitive. The stative verbs take suffixes that distinguish between present and nonpresent tense, while the telic verbs distinguish between the present imperfective, nonpresent imperfective, and perfective. Future tense is marked by prefixes and can appear on either type of verb. There is also a remote past in Meryam Mir. The irrealis is also marked on both classes of Meryam Mir verbs and can be used to refer to both past events that might have, but did not, occur and events whose continuation into the future is uncertain (Piper 1989: 115, 119).

Number is marked in two ways on Meryam Mir verbs. While some verbal roots do not change based on number, there are also verbal roots that have suppletive or morphologically related forms for different numbers. According to Foley (1986: 128), marking number through

changes in the form of the verbal root is fairly widespread in Papuan languages. Additionally, Meryam Mir verbs also cross-reference number through the use of affixes. According to Piper (1989: 139), "it is the combination of markers and verb roots themselves which achieve specific number distinctions." Piper's description is complicated, but Meryam Mir cross-references the number of subject and object arguments on verbal stems through the use of both prefixes and suffixes according to both telicity and transitivity. Stative verbs cross-reference number and person on the verbal root by means of prefixes, while telic verbs may use both prefixes and suffixes.

The ordering of morphemes in a fully inflected verb in Meryam Mir is complex, but some points are worth noting. Tense and aspect morphemes are affixed to Meryam Mir verbs in multiple places, including the word-initial and word-final position of a fully inflected verb. The order of the future tense morpheme is dependent on the marker of intransitivity and plural subject of an intransitive. Deletion of the initial CV sequence in a Meryam Mir verbal root is possible under certain morphological conditions and infixes are also possible within the verbal root.

Intransitive verbs can be derived from transitives by prefixing the intransitizer *ba-* to verbal roots. The intransitizer is homophonous with a morpheme that cross references plural subjects of intransitive verbs on the verbal root. Piper (1989: 140) suggests that there is also a "transitiviser morpheme" *i-*, which is found word-initially in some transitive verb roots.

### 2.4.3 Evaluation of Similarity – Verbs

The verbal systems of WTS and Meryam Mir are radically different and show little to no evidence of similarity. WTS has an intransitive and a transitive conjugation class, while Meryam Mir splits its verbs into two categories, stative and telic, based on telicity. In WTS, intransitivity

or transitivity appears to be an inherited feature of verbs, while in Piper claims that intransitive and transitive verbs can be derived from each other using specific markers on the verbal root.

In general, the verbal morphology in Meryam Mir is much richer than that in WTS. WTS verbal roots are inflected only through the use of suffixes, while Meryam Mir can add prefixes, suffixes, and even infixes to its verbal root. This is markedly different from both WTS specifically and Australian languages broadly, since no Pama-Nyungan language is known to have infixes (Claire Bowern, p.c.). The verbal templates of WTS and Meryam Mir and examples of conjugated verbs are provided in Figures K and L and examples (3), (4) and (5) below and show the striking contrast between the languages. In Figure K, "number" is written in parentheses, since there appears to be some degree of fusion between the marking for number and tense/aspect in WTS, as in example (4). In Meryam Mir, person is also cross-referenced on the verbal root, where it is not in WTS. In Meryam Mir, number is marked by both the verbal root and inflection, while in WTS it is only marked through inflection on the verb.

Figure K, WTS Verbal Template:

**verb root-** _____- _____
(Number) Tense/Aspect

Examples from Kennedy (1985: 83-84), where 'TP' means today past and 'INC' incompletive:

(3) **Thana** **pathe-mi-nu**
They-PL embark-PL-TP
'They left by vehicle (earlier today)'

(4) **Nuy-dh** **wapi** **lumay-pa**
He-ERG fish search-INC
'He is searching/will search/searched for the fish.' (depending on the context)

Figure L, Meryam Mir Verbal Template (reproduced from Piper 1989: 89):

| 4. | 3. | 2. | 1. | | | |
|---|---|---|---|---|---|---|
| **wa-** | **ta-** | **na-** | **[(d)V-** | **na-** | **verb root-]** | _____ |
| Fut3 | Deictic | Fut1(Intr) | initial (C)V | 3Dual/PaucS | | tense/aspect |
| RemotePast | | | of verb root | 3 nonSg S/O | | number |
| Past Irrelais | | | -a- | | | A/S/(O) |
| | | | Fut1(tr) | | | |
| | | | ba- | | | |
| | | | Intrs | | | |
| | | | PlS(active) | | | |
| | | | na- | | | |
| | | | 1/2Sg/(Pl) | | | |
| | | | S(state) | | | |
| | | | 1/2Dual/Pauc | | | |
| | | | S(state) | | | |
| | | | 1/2n SgO | | | |
| | | | 3Gen | | | |

Example from Piper (1989: 89):

(5) **wi** **wa-** **ta-** **bakyamu-** **lam**
3*n*SgS Fut3 Deix Sg/DualS go- Fut2/3Dual
'They (2) will be coming.'

One similarity between the two languages is that both follow an ergative-absolutive pattern when marking number on their verbs, though through a combined effect with the number marked on their roots, Meryam Mir verbs can mark the number of a wider range of arguments than WTS. Meryam Mir also has exceptions to the ergative-absolutive pattern, but even without these caveats, this similarity is not particularly interesting as the dominant pattern cross-linguistically for number marking on verbs is to be sensitive to the subject of an intransitive verb or the object of a transitive (Claire Bowern, p.c).

In the absence of structural borrowing between the verbal systems of WTS and Meryam Mir, it is also important to note that there was no compelling evidence found during the course of

the comparison to suggest that morphological forms themselves have been borrowed from one language into the other.

## 2.5 Deixis

### 2.5.1 WTS Deixis

WTS has space deixis and distinguishes the following spatial locations in relation to the speaker: proximate, remote, 'over there,' 'up there,' 'down there,' 'up at the front,' and 'down at the back.' The proximate and remote locations break down further into 'in view,' 'not in view,' and 'locational' categories. 'Over there,' 'up there,' 'down there,' 'up at the front,' and 'down at the back' have both nominal and locational forms. All categories distinguish between singular, dual, and plural numbers, with the singular having both masculine and feminine forms. WTS deictic markers occur within the noun phrase. In the example (6), reproduced from Ford and Ober (1991: 137),

(6) **Ngath burum** **senawki** **waaydhin**
I-ERG pig-ABS deictic chase-remotepast
'I chased a pig there'

the remote, locational, masculine deictic marker *senawki*, occurs within the noun phrase of the direct object, agreeing in gender with the masculine noun 'pig.'

### 2.5.2 Meryam Mir Deixis

The Meryam Mir deictic system refers to both time and space. Piper's analysis is filled with qualification as to its accuracy and completeness, but she suggests that they are not independent words since they "nearly always" appear before a verb (Piper 1989: 146). The deictic markers, while certainly expressing spatial reference, seem to be primarily organized according to temporality since the temporal location of an event relative to time of utterance determines the choice of deictic marker. As given by Piper (1989: 148) deictics in Meryam Mir

refer to the categories of location, shared argument/consecutive/contiguous, goal, and source, relative to the following time points: remote past, past, present, future, punctual, and non-punctual. Piper (1989: 96) also cites a verbal deictic marker *ta-* and its allomorphs which is only spatial – it marks either an event "moving towards the speaker" or an event "happening away from the speaker." Example (7) reproduced from Piper (1989: 153) illustrates the use of *pe*, a deictic marker which refers to location and is used for an event happening at the present relative to the utterance.

(7) **ná-** **gerger** **pe** **irdi?**
Q clitic dayS Deix *n*PlS be (time, space)
'What day is it today?' (ie. What day is it now?)

### 2.5.3 Evaluation of Similarity – Deixis

The WTS and Meryam Mir deictic systems are quite different in that the WTS system expresses a spatial relation to the speaker's utterance while Meryam Mir can relate both a temporal and spatial relation. Piper (1989: 146) is equivocal on the status of deictic markers and about where they occur in a sentence, but she does note that they are "always in conjunction with a verb." Meryam Mir also has a verbal prefix *ta-* that fulfills a deictic function, while WTS does not mark deixis on the verb at all as its deictic markers occur solely within the noun phrase.

## Chapter 3: Lexical Comparisons

### 3.1 Results from Comparison of Ray's Wordlist

Having found little in the way of structural similarity between Meryam Mir and WTS, it is necessary to step back and look for lexical similarity between the two languages, particularly since Wurm (1972: 151) notes lexical influence from Meryam Mir in WTS. While the results of language contact are far from predictable, scholars have proposed borrowing scales, which list what features are likely to be borrowed according to intensity of language contact. According to

Thomason's (2001: 70-71) borrowing scale, it is the lexicon – specifically nominal content words – which will be borrowed under casual contact between languages. As the intensity of contact increases, more words, such as function words, are borrowed along with structural features. Thomason (2001: 69) clearly details the reason for such a prediction: content words from the lexicon can be easily be borrowed from a language and inserted into the structure of another, whereas, in order to borrow structure, a deeper familiarity with the source language is required.

Using Ray's "An English Index to the Mabuiag and Miriam Vocabularies" from the third volume of the publication on the Cambridge Expedition, which lists the WTS and Meryam Mir words "correspond[ing] in a general sense to the English" words given, a survey of the loans appearing in the two Island languages was conducted. Potentially shared items were counted and divided by the total number of words in the list. Due to gaps in Ray's data and the casual nature of the evaluation the lexical items, the number of shared vocabulary items found is approximate, but under 10%.

In the introduction to a WTS dictionary, Kennedy (draft: 2) offers the following breakdown of WTS vocabulary:

| | |
|---|---|
| Australian word stock | 30% |
| Austronesian word stock | 50% |
| Australian or Austronesian | 6% |
| Papuan word stock | 5% |
| Loans (from Indonesian/Meriam Mer/Papuan etc.) | 1% |

This breakdown suggests that the shared items found in Ray (1907) may not necessarily be loans as a result of contact between WTS and Meryam Mir, but that they arise in both languages due to contact and shared genetics with other languages. For example, if 5% of WTS's

vocabulary comes from Papuan, it would not be surprising that these words also appear in Meryam Mir, a Papuan language. Kennedy's data, however, is suspect, as shown by a comparison of WTS and Austronesian lexical items discussed below in Section 3.2.

**3.2 Results from Grant BCS-844550**

An additional analysis of WTS and Meryam Mir lexical items was conducted by Yale University professor Claire Bowern. This comparison was based on a 204 item wordlist from the database of the "Pama-Nyungan Reconstruction and the Prehistory of Australia" project, awarded to Claire Bowern and Yale University by the National Science Foundation as grant BCS-844550. The WTS list was missing 5 items, for a total of 199, and the Meryam Mir list was missing 2 items, for a total of 202. WTS was found to have 16 loans from Meryam Mir, a rate of 8.0%, and one from a Paman language, possibly Atampaya or Uradhi. Meryam Mir was found to have six loans, though only three can be said to be loans from WTS into Meryam Mir. The other three occur in both languages, but without any obvious indicator of directionality. The number of items shared by both WTS and Meryam Mir is 19, yielding a rate of 9.8%, a figure similar to that found by comparing Ray's wordlists in Section 3.1.

In addition to searching for probable or possible loans between WTS and Meryam Mir, items in the wordlist were also examined with an eye towards the language families to which these languages are related, Pama-Nyungan and Eastern Trans-Fly. For WTS, 43 items were found to have shared etymologies with items in the larger Pama-Nyungan grant database. Many of these items were also in Yidiny, Warrgamay, and languages south of the Paman languages on Cape York. Dixon (2002), operating under Capell (1956)'s assumption that WTS is "Australian-influenced Papuan," comes to a similar conclusion. While the issue is one of contact in Dixon (2002: 130) rather than one of inheritance, Dixon finds that, of the Australian forms in WTS,

some do not occur in Cape York languages, suggesting to him that WTS "was in contact with a different set of Australian languages from those which are now located to the south of it," and suggesting to the author of this essay that WTS is more closely genetically related to Australian languages other than those to which it is geographically closest. For Meryam Mir, it was possible to compare only 80 words from the 204 item wordlist to Eastern Trans Fly languages. 30 Meryam Mir words out of those 80, or 37.5%, can be reconstructed to the Papuan Eastern Trans Fly family. Given the small number of items available for comparison and the difficulty associated with identifying verbs from heavily inflected forms, 37.5% is most likely an underestimation.

Spurred by Kennedy's claim that 50% of WTS's word stock is Austronesian, the 204 item wordlist was also compared to Austronesian languages in the vicinity of the Torres Strait, including Motu, Vilirupu, Makassar, Mailu, Tarangan Barat, Mekeo, and to Proto-Oceanic reconstructions done by both Pawley and by Blust, but this comparison yield no evidence of loans from Austronesian languages into WTS, let alone a number as high as 50%. This essay does not offer a specific interpretation of the results of the analyses of lexical items conducted for this essay as they are preliminary, rather than comprehensive, but the figures are important as a reply to Kennedy's breakdown of the WTS lexicon, given in Section 3.1.

## Chapter 4: Summary and Conclusion

### 4.1 Summary

In this essay, I have investigated the similarity between structural features of WTS and Meryam Mir in an effort to contribute to the goal of substantiating or disproving the claims made in the literature as to the nature of shared genetic history or contact between the two languages. Following Thomason (2001: 93-94)'s guidelines for proving the existence of structural change in

a language due to contact, a broad survey of structural features was conducted. The first explored were those relating to the phonologies of WTS and Meryam Mir. At first blush, it seems that this section offers the best evidence for similarity between WTS and Meryam Mir, since WTS seems to be closer to Meryam Mir than it is to prototypical Australian languages in regards to voicing contrast, fricatives, and rhotics, nasals, and vowel system. In his argument for classifying WTS as Papuan, Capell (1956) points specifically to the phonemic inventory and the voicing contrasts present in both languages as evidence for his view. Wurm (1972) also points out the "un-Australian" nature of the WTS phonological system. While the facts highlighted by the literature are borne out by this essay, it cannot be assumed that these similarities are in fact significant, since Paman languages on Cape York paint an areal picture in which the features of WTS phonology are not particularly rare or unusual. Other features, such as allowable clusters, also differentiate WTS and Meryam Mir.

Section 2.2 focuses on nouns and pronouns, again showing little similarity. While both languages have a split case-coding system between common nouns and proper nouns, and also code their pronouns in a third way, the split does not match up in the two languages in terms of how the syntactic functions A, O, and S are marked. Number and number coding on pronouns and nouns also differ between the two languages. As seen in Figure I, there is not a one-to-one correspondence between the functions of the oblique cases in WTS and Meryam Mir, though the functions fulfilled by some case markings in WTS are unknown due to the lack of interpretation of examples provided in Ford and Ober (1991).

Next, modifiers were looked at in WTS and Meryam Mir. Adjectives and adverbs are very different in these languages, particularly in terms of whether or not they can be said to form discrete classes and in how they are derived.

Section 2.4 on the verbal systems of the two languages found striking differences. The verbal systems differ both in the divisions on which their conjugation classes are based and in their verbal templates, contrasted in Figures K and L. Tense and aspect also differ in the languages, with WTS being predominantly organized around completive and incompletive aspect, with other aspects and tenses implying special focus, while Meryam Mir applies tense and aspect differently to its two conjugation classes. One of the most obviously dissimilar features between the two systems was that of number-marking; both languages mark number using affixes, but Meryam Mir also marks number in its verbal roots.

Finally, a review of the deictic systems of the languages was undertaken. This comparison yielded no similarity, as Meryam Mir organizes its system along both space and time, while WTS makes references only to a spatial relation between the event and utterance. The languages also differ in the location of deixis within the sentence.

After little structural similarity was found, a comparison of the WTS and Meryam Mir lexicons was undertaken. Using Ray's "An English Index to the Mabuiag and Miriam Vocabularies", the number of shared items between WTS and Meryam Mir was calculated at less than 10%, while a comparison by Professor Claire Bowern using a wordlist from NSF Grant BCS-844550 yielded a figure of 9.8%. The WTS wordlist was compared to Pama-Nyungan and the Meryam Mir wordlist to Eastern Trans-Fly languages, and both WTS and Meryam Mir were found to have items with demonstrable etymological ties to their respective language family.

**4.2 Conclusion**

The research laid out in this essay shows that the similarity between WTS and Meryam Mir has, as Alpher et al. (2008: 28) previously suggested, "been overstated." A summary of the results of the systematic comparison of WTS and Meryam Mir phonology, nouns and pronouns,

modifiers, verbal systems, and deixis is provided in Section 4.1, along with a summary of wordlist comparisons. These results show the benefits of questioning and investigating the veracity of axiomatic claims made and accepted in the literature. Individual attempts in the literature to classify WTS have seemed quite confident in their assertions; reading just one of them might lead the reader to believe that WTS is Australian-influenced Papuan, for example, a claim proved false by Alpher et al.'s (2008) demonstration of WTS's ties to Pama-Nyungan. Surveying a wider number of claims made about the history of WTS leaves one with the impression, no matter where the sources might place WTS's genetic affiliation, that there is a large degree of significant similarity between WTS and Meryam Mir. By systematically comparing features of WTS and Meryam Mir, this essay has shown that this impression is a false one; there is little similarity between the two languages, and what appears to be surface similarity, such as that of the phonemic inventories, is not necessarily significant given the features of other Australian languages in the area.

This essay clearly demonstrates the value of systematic study for the work of contact linguists and linguists at large. Claims made by linguists in the past as to the nature of WTS and Meryam Mir's shared history relied on what turns out to be superficial or selective evidence for support. For example, as discussed in Section 1.4, Capell (1956) relies heavily on phonological evidence in his claim that WTS is in fact a Papuan language. Section 2.1.3, while acknowledging these same superficial similarities between WTS and Meryam Mir, redirects the focus of questions of their origins in WTS from contact with Meryam Mir to genetic affiliation with Australian languages. The fact that many WTS phonological features are areal features of Cape York and the Torres Strait shows the importance of considering context in the course of developing and supporting linguistic claims. Furthermore, this essay shows the value of

evaluating numerous language features, as suggested by Thomason's (2001: 93) first step for demonstrating structural changes in a receiving language due to contact. As a basis for demonstrating this type of contact, Thomason says that the whole language must be evaluated, "for no case for contact-induced structural change will be fully convincing if we cannot point to other instances of structural interference from the same source language." The bulk of Chapter 2 of this essay shows that there is little meaningful similarity between WTS and Meryam Mir across the areas of phonology, nouns and pronouns, modifiers, verbal systems, and deixis, thus avoiding the pitfalls of other works that have stopped only to consider the languages' phonemic inventories, their most promising points of similarity, while glossing over the mountain of differences across the rest of the languages.

**4.3 Areas for Future Research**

This essay was begun with the hope that, if WTS and Meryam Mir were similar, other researchers could take the similarities between WTS and Meryam Mir that had been pointed out in it and use them as a launching point for future investigation into the nature of the contact between the two languages. Such a hope assumed that instances of structural similarity would be found and has not been borne out by the actual facts. However, there is much work still to be done on WTS, Meryam Mir, and the Torres Strait linguistic area.

One possible project for future research would be an investigation into the degree of influence of WTS and Meryam Mir on Torres Strait Creole and vice versa. Shnukal (1988: 88) describes an eastern and a western dialect of Torres Strait Creole, each mutually intelligible but showing some variation from the other in intonation, phonemic inventory, and the source of 14% of the lexicon. For example, the two dialects of TSC maintain the differences between the

consonant inventories of WTS and Meryam Mir discussed in Section 2.1 – speakers of the western dialect of TSC use /th/, /dh/, and /ng/, phonemes not found in the eastern dialect.

TSC is the *lingua franca* of the Torres Strait region, first creolizing in the late 1890s, and is now the first language of a significant population of Islander children, and the second language of many more. With the frequency that TSC is spoken, a project similar in purpose and outlook to this one could be undertaken to show how the dialects of TSC influence each other or the traditional island languages of WTS and Meryam Mir. For example, Shnukal (1988: 45) notes that a modal verb of the western dialect of TSC whose origins lie in WTS "is increasingly being used by young Eastern Islanders who go to school on Thursday Island, where the dominant influence on Broken [TSC] is the western island language [WTS]." The extent of bilingualism between speakers of WTS and Meryam Mir appears to have been limited to a few men from each group historically (Shnukal 1995), whereas TSC is now the common language of both Western and Eastern Islanders. It is self-evident, then, if structural changes due to contact exist in the Torres Strait linguistics area, that they are more likely to occur in languages that are or have been extensively in contact with each other, rather than those whose contact has been restricted.

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