Parsing Lawrence Nicodemus' *Snchitsu'umshtsn* File Card Collection

John Lyon
University of British Columbia

This paper describes my analysis of a recently uncovered collection of file cards from the late Lawrence Nicodemus, one of the last fluent speakers of Snchitsu'umshtsn (Coeur d'Alene Salish). The inference is that these hand-written file cards were used during the compilation of what would become Nicodemus's 1975 Coeur d'Alene-English dictionary *Snchitsu'umshtsn*. I transcribe Coeur d'Alene material into Northwest (NW) orthography, complete a morphological analysis, and arrange entries by lexical root. Multiple transcriptions on the original cards, including strikethroughs, are retained in the new document. There are a total of 4986 cards in the collection, most of them with Coeur d'Alene material written on one side, and an English transcription on the other. 3843 (77%) of the cards have matches in the published dictionary. 1143 (23%) of the cards do not and many of these may be otherwise unattested.

1   Introduction

Snchitsu'umshtsn (Coeur d'Alene) is a Southern Interior Salish language, spoken in the panhandle area of Northern Idaho.

Lawrence Nicodemus, one of the last fluent speakers of the language, passed away in 2004. He worked with Gladys Reichard during the period leading up to her published grammar of the language (Reichard, 1938). Nicodemus developed many teaching materials for the Coeur d'Alene language, and it was his hope that the language would continue to be spoken. In 1975, he published a two-volume English-Coeur d'Alene and Coeur d'Alene-English dictionary, as well as a language primer with audio cassettes. A copy of these materials was given to every family in the tribe. Among his many other accomplishments, he wrote a history of tribal families, and a compendium of historical place names covering the original territory of the Snchitsu'umsh.

Dr. Raymond Brinkman, director of *Hnqwa'qwe'eln* (the Coeur d'Alene Language Program) in Plummer, Idaho, uncovered a collection of file cards in the house of the late Lawrence Nicodemus. Recognizing that these cards were rapidly deteriorating, he put the cards into a box for safekeeping, until such time as a proper analysis could be carried out. The cards likely served as the initial database of what would become Nicodemus's 1975 Coeur d'Alene-English dictionary *Snchitsu'umshtsn*.

There are a total of 4986 cards in the collection. Most of them have Coeur d'Alene material written on one side and an English transcription on the other (70.2%, n=3496), although some have both English and Coeur d'Alene transcriptions on the same side (29.8%, n=1490).

Perhaps the most interesting fact of this collecting is that while 3843 (77%) of the cards have matches in the published dictionary, 1143 (23%) of the cards do not. It is not entirely clear why Nicodemus left these cards out of his dictionary, but it is possible that many of the cards from this 23% contain material that does not occur elsewhere. It is important that this new material be made accessible.

Some examples of analyzed entries without matches in the dictionary are shown below, and will suffice to give the reader an idea of what kind of material is in the collection. Nicodemus's original card transcriptions are at the end of each example, in parentheses:

(1)   s+xʷúp+xʷup *a flying squirrel, lit. spread spread* (sxúpxup)
(2)   s+ʕin *catbird* (sRin)
(3)   s+gʷeš=úl'emxʷ *rake, combing the ground, harrowing; lit. comb-
        ground-what* (sgweshúl'emxw)

Nicodemus often includes morpheme-by-morpheme translations of the Coeur d'Alene material, as in (1) and (3). Although I have found no occurrence of either (1) or (3) in any other extant materials, the lexical roots in (1) and (3) (*xʷúp* 'spread' and *gweš* 'comb') are represented by other related entries in the dictionary. Total reduplication of the root *xʷúp* in (1) is not attested in the dictionary however, and neither are there entries in the dictionary which indicate that *gweš* may be suffixed by *=úl'emxʷ* 'ground'. (2) can be found in Reichard's 1939 Stem List, but not in Nicodemus's 1975 dictionary. I know of no other examples of the root *ʕin* in (2), and I am only assuming that the initial /s/ is a nominalizer.

Preliminaries aside, the major contributions which this collection makes to our understanding of Coeur d'Alene are:

1. How to derive more complex forms from roots and stems which are otherwise scantily represented in the 1975 dictionary.
2. How Nicodemus's orthographical practices evolved over time.

I now move onto a more detailed analysis of the collection.

2   Project Goals

The major goal of this project is to organize the information in the file cards into a format which is useful to linguists, anthropologists, and the language community. I analyze the Coeur d'Alene material from each card to the level of the morpheme, identify the lexical root of the entry, and group the entry with others sharing the same lexical root. The current document is a

dictionary, approximately 95 pages, which is similar in format to Lyon & Greene-Wood (2007).

   Secondary goals include analyzing discrepancies between file card transcriptions and transcriptions of the same lexical items in Nicodemus (1975). Discrepancies are highlighted in this document, so that the researcher may quickly ascertain what changes, if any, Nicodemus made during the course of his dictionary project. Another goal is to determine what the overlap is between the file card collection and the 1975 dictionary. Entries which were not included in any form in the 1975 dictionary are highlighted, because these entries would presumably be of higher interest to those scholars searching for data which may not be gleaned from other sources. My final goal is that no information be lost from the collection itself. This entails that all of Nicodemus' transcriptions be retained , even those with strike-throughs. Retaining multiple transcriptions, in a probable chronological order, helps to show how his thinking about written Coeur d'Alene changed over time.

3   Orthography

   To illustrate how retaining multiple transcriptions can help show how written Coeur d'Alene was changed over time, consider (4) which is taken from the final revised document:

(4)   hn+x^{w}él+x^{w}l+n *lifestyle, life, way of life, culture, electro-chemistry, vital capacity; lit. means of keeping alive* (henxwä̱lxwelen, ~~hnx^{w}élx^{w}ln~~,

~~hnk^{w}elk^{w}ln~~, hnkhwélkhweln, hnkhwelkhwln, hnkhwélkhwln)

This example is actually a composite of six different file cards with the same lexical form, but differing English and Coeur d'Alene transcriptions. Two of the six Coeur d'Alene transcriptions (in parentheses) are completely struck through in both the file cards and the new document, while one has only a vowel struck through. The reader can quickly see that the final transcription, identical to that found in the 1975 dictionary, differs only from the preceding one in having a stress mark. The fourth transcription differs only from the fifth in that the final {e}[1] vowel, also in the first transcription, is struck through because it is a schwa. Nicodemus decided not to write non-phonemic vowels in the dictionary. We can also see that at some point, Nicodemus decided to write velar fricative /x/ as digraph {kh}, departing from Reichard's more phonetic script, illustrated by the first transcription. In addition, phonemic vowel /ä/ becomes {e}. By assuming a gradual change in writing practices, with Reichard's orthography representing the initial point and Nicodemus (1975) the final point, it is possible to arrange transcriptions in a probable chronological order. But what sorts of generalizations can we make concerning the orthographical changes?

   In general Nicodemus was changing from the orthography used by Reichard to a less phonetic, more practical one. The idea is that students could

---

[1] Curly brackets indicate an orthographical representation.

rely on there knowledge of English character/sound correspondences to construct an internal representation of Coeur d'Alene character/sound correspondences, thereby facilitating the learning process.

Nicodemus may also have favored Latin characters over a phonetic script because they could more easily be typed on a typewriter. Supporting this hypothesis is the fact that all umlaut vowels are simplified (e.g. {ää} becomes {ee}), and velar and uvular fricatives become digraphs (e.g.{x} becomes {qh}). An exception to this tendency might be Nicodemus's preference in representing the lateral fricative as {ł} rather than the digraph {lh}. On second thought, however, {ł} may be produced on a typewriter by typing "l", then backing up and typing a back-slash "/" over the "l". While a student would have to learn the sound corresponding to {ł}, it may also have avoided possible confusion over whether {lh} is a sequence of sounds, or a single sound. Ease of typing may have also motivated Nicodemus to mark stress by means of an underscore, rather than an acute accent.

There is a unique card in the collection, which is a partial representation of his transcription algorithm. This is shown below as Figure 1.
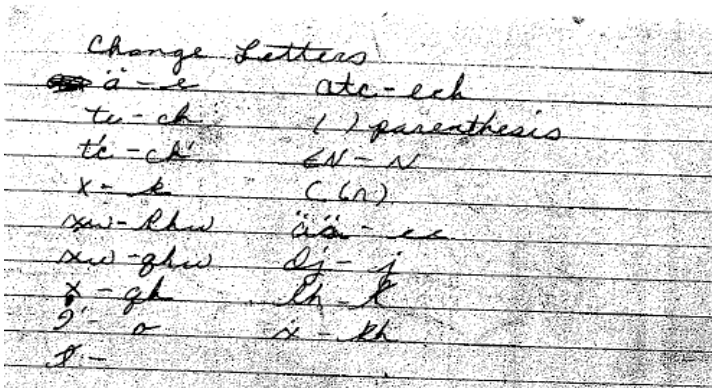

Fig 1. Nicodemus' Transcription Algorithm Card entitled "Change Letters". Reichard characters (on the left) are translated to Nicodemus 1975 characters (on the right).

Figure 1 does not represent all of the orthographical changes apparent from the collection, but is a relatively accurate picture of how the Reichard orthography (on the left in each column) was changed to Nicodemus's practical orthography (on the right).

Figure 1 glosses over various intermediate orthographical stages, such as in the third transcription of (4), which although struck through, indicates either that Nicodemus considered writing the velar fricative as a stop {k} at some point in time (and there are transcriptions in other entries which support this analysis), or else that he identified the entry as having the lexical root *k^wel,* rather than *x^wel.* There seems to be a mistake in Figure 1, however, since uvular fricative /xw/ is usually transcribed as {qhw}, not {khw}. There are more than a few entries, in both the dictionary and the file card collection, where it is not

clear whether a fricative or stop consonant is uvular or velar. While it is unlikely that these confusions may be traced directly to the card in Figure 1, it might indicate that Nicodemus was unsure how some forms should be represented orthographically.

As an example of cards containing characters from an 'intermediate' orthography, consider Figure 2 below. (The double-arrow indicates that both sides of one card are represented.)
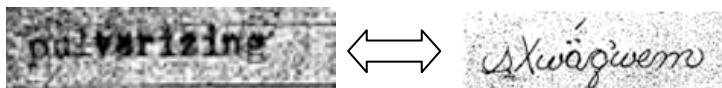

Fig 2. Typewritten (left)/Bitar's handwriting(?)(right).

The typewritten side of Figure 2, especially, exemplifies the deteriorating state of the cards. On the other side of the card, {X} is used to designate a uvular fricative. In other cases, {X} is used to designate /k/. {K}/{k}, and {X}/{x} are used somewhat ambiguously for both uvular and velar fricatives and stops. {K} and {X} seem to occur more frequently word initially, as if they are simply capitalized forms of the usual character. It seems unlikely that these cases of orthographic ambiguity are mistakes, since there are many instances and they are systematic in the sense that any given root with such an ambiguity usually has more than one entry with the same choice of character. For transcriptions which include characters like {X}, that can reliably be said to represent /x̣/ or /qh/ (as written by Reichard and Nicodemus respectively), I have assumed that {X} is intermediate in the sense that it was perhaps considered by Nicodemus as being a suitable character to represent a Coeur d'Alene sound, and was later rejected in favor of a digraph.

4   Methodology and Organization

The original cards were scanned and copied by Dr. Brinkman in Spokane and mailed to Vancouver where I began my work on the project. I entered all English and Coeur d'Alene material on the cards into separate columns in an MS Excel Spreadsheet. In a third column, I transcribed the Coeur d'Alene material into standard NW orthography. I then created a fourth column in which I entered corresponding dictionary transcriptions from Lyon & Green-Wood (2007), if available (77% of the cases), because the work of morphological parsing had already been done. This fourth column was left blank for those cards without corresponding entries in the dictionary (23% of cases). A flowchart representing how I arrived at a matching dictionary entry, and a morphological parsing, from a file card is shown below in Figure 3.
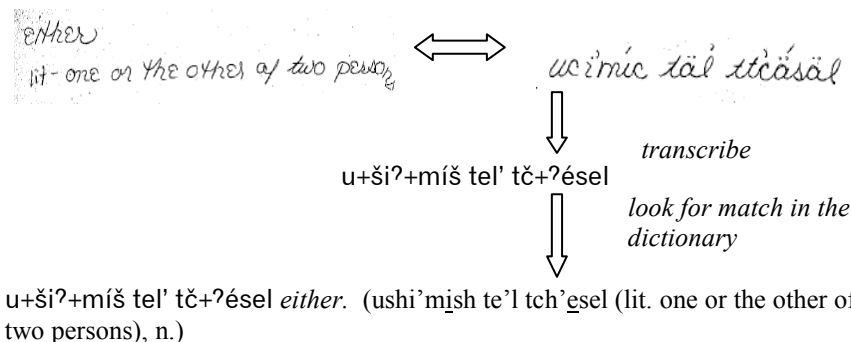
either
lit - one or the other of two persons ⟷ *uc'ímíc täl ttcäsäl*

⇓ *transcribe*

u+ši?+míš tel' tč+?ésel

⇓ *look for match in the dictionary*

u+ši?+míš tel' tč+?ésel *either.* (ushi'mish te'l tch'esel (lit. one or the other of two persons), n.)

Fig 3. A sample analysis (77% of cases proceeded in this manner)

A fifth column contained the root skeleton of the entry, or in other words, the consonants minus any vowels. Lyon & Green-Wood (2007) includes further information concerning the rationale behind using root skeletons as an organizing base.

For the remaining 23% of the cards which have no matches in the dictionary, I manually parsed my NW transcription, first isolating what I believed to be the lexical root, and then looking for semantic correspondences with similar entries in Lyon & Greene-wood (2007). If such correspondences were found, I then entered the root skeleton into the fifth column. All entries were later sorted by root skeleton and then the entire collection was exported to MS Word. Because I sorted by root skeleton, entries with matches in the dictionary (77%) were sorted alongside of entries with no matches (23%). I immediately rendered the latter group into bold type.

Starting at the beginning of the sorted list, I proceeded through the document, collapsing together lines with the same lexical form, retaining all Coeur d'Alene transcriptions in a probably chronological order, and grouping together multiple English glosses; all into one composite entry. Entries like (4) are a typical result. Different font styles highlight contrasts between the file card collection and Nicodemus's published dictionary. Bold type indicates file card entries (or extra characters) not found in the published dictionary, as in the entry for (1), shown below as (5) as it actually occurs in the document:

(5)   **s+xʷúp+xʷup** *a flying squirrel, lit. spread spread* **(sxúpxup);**

Roughly one quarter of the document is in bold type. Grey, highlighted type indicates material found in the dictionary, but not in the file card collection. In (6), for example, the card for 'whistle' has no English gloss in the file card collection, but only in the dictionary, therefore it occurs in grey highlighted type.

(6)   **xʷit** *whistle* (khwit);

Double underlines are used when individual characters do not correspond between file card and dictionary entries. These cases include velar/uvular consonant mismatches, stress discrepancies, and vowel changes. In (7), the dictionary entry shows stress marked on the final syllable, while the file card entry shows stress marked on the initial syllable. Both vowels are therefore doubly-underlined to alert the researcher to the discrepancy.

(7)   u+x̌ʷal'+á tax̌+táx̌ *all-spice; it is like pepper* (úkeletaqhtáqh)

As can be seen from examples (5-7), entries in the document are arranged in the following order, following Lyon & Greene-wood (2008):

  1. dictionary entry (or manual parsing) in NW orthography   p'ixʷ
  2. *English gloss*   *agleam*
  3. (file card transcription(s));   (pixʷ);

Composite entries with the same lexical root are grouped together under the same root header, as shown in Figure 4, which illustrates all the file card entries with the lexical root *p'ixʷ* 'agleam':

p'xʷ₂   p‖íxʷ *agleam* (pixʷ); u· p‖íxʷ *it is bright* (uᵘpíxʷ); ec+p‖íxʷ *brilliant, adj.; lit. it gives light* (ätspíxw); s+p'í?xʷ *brilliance* (spi'xw); p'xʷ+mín+n *candle, lamp, lit. lighter* (ṗ**ey**wmínn, ~~ṗkwmirń~~, ~~ṗukhwem~~, ṗukhwminn); s+p'éxʷ=enč **hog fennel root,** *yellow root* (spä̱xwänch); hn+p'í?+p'e?xʷ=us *bedazzle; lit. light got in his eyes* (hɛnṗí'pä'xus); hn+p'e?xʷ+t+l=íw'es *aglow- it was all aglow with light* (hɛnpä'xʷtɛlíẅäs); p[']íxʷ+m-stu-s *brighten, v.; lit. he made it bright* (píxumstus); elu+s+p‖í?xʷ *aphotic; lit. without light* (äluspí'xʷ); s+p'ú̱?xʷ e· níč=e̱t *son of light* (spík̓ʷ ee niche̱l't)

Fig 4. Example root header.

Within any given root header, 'simpler' forms are generally listed before more 'complex' forms. This means that intransitive forms occur before transitives, entries without lexical suffixes occur before entries with lexical suffixes, and entries with single roots occur before compound, multi-root entries.
        The same parsing conventions which I used in Lyon & Greene-Wood (2007) are used in this document: a "+" indicates a derivational morpheme boundary, a "-" an inflectional boundary, and a "=" a lexical suffix boundary. Square brackets are taken directly from Lyon & Greene-wood (2008), and indicate that we had made changes to the content of Nicodemus's 1975 transcription. It is interesting that in many cases, evidence from file cards supports these bracketed changes.

There are a few interesting points to note concerning Figure 4. For example, in /p'xʷ+mín+n/, the file card transcription most closely resembling the dictionary transcription was actually struck through. The final transcription for the form includes the vowel /u/, while another (what I'm considering an 'earlier' transcription) contains an anomalous sequence /ey/.

Interesting perhaps to ethnobotanists is the fact that for /s+p'éxʷ=enč/, the file card collection tells us that this form is known in English not only as 'yellow root', but also 'hog fennel root'.

Finally, the entry glossed as 'son of light' has multiple discrepancies, including quality of the root vowel, and glottalization of /l/. Also, the dictionary transcription for this entry includes a glottal stop infix in the root, while the file card does not. There is also a somewhat common stop/fricative mismatch. All of these points are of interest to the linguist, and while some may be mistakes or otherwise insignificant, others may warrant further investigation. As such it is worthwhile to keep track of all these discrepancies. The next section provides a closer look at a few specific file cards.

5   Example Card Entries

There are at least 3 distinct handwritings in the collection, including some typewritten cards. One handwriting has been identified by Brinkman (p.c.) as belonging to Nicodemus, and one may perhaps belong to Joe Bitar (see Figure 2), an assistant who worked with Nicodemus during the compilation of his dictionary. Another, more feminine, script has yet to be positively identified. Nicodemus's handwriting is most likely that shown below in Figure 5 (Brinkman, p.c.):
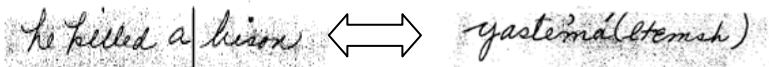

Fig 5. Nicodemus' handwriting.

Parentheses in the Cr transcription in Figure 5 indicate that the lexical suffix =ált 'offspring' may be truncated, and =mš 'tribe' is entirely optional in this form. (8) below shows how the form in Figure 5 appears in the final document.

(8)   ya+s+tˌm=ált=mš *he killed a bison, he killed the buffalo*
             (yastema'letensh), yasteḿá(ltɛmsh))

The Cr transcription in Figure 5 corresponds to the second transcription in (8). The first Cr transcription in (5) is taken from a different file card with the same lexical form. The initial consonant of the lexical root *t'em* occurs without glottalization both in Figure 5 as well as in the first transcription in (8), and so the glottalization in the dictionary transcription has been highlighted to alert the reader to the discrepancy. In the first Cr transcription in (5), /l/ in the suffix =*alt*

is written as being glottalized /l'/, and /m/ in the suffix =*mš* is written as an {n}. These are both rendered in bold type.

Strikethroughs are quite common, and we may infer a variety of reasons for these cases. One example is shown below as Figure 6.

Fig 6. Typewritten/Nicodemus' handwriting.

It is likely that the first transcription in Figure 6 was crossed out as a result of a misplaced glottalization mark. The intended glottalization mark indicates an inchoative infix. All such strikethroughs have been retained in the final document. (9) shows how Figure 6 appears in the final document:

(9)   **s+xʷi?t-s** *h/s is getting a scolding, h/s is getting a verbal lashing,*
         h/s is getting it (~~sxwit's~~*, sxwi't-s)*

Comparing (9) with Figure 6, we see that there were multiple file cards each with the same Cr transcription, but different English glosses. When lexical entries are represented by more than one card, each card sometimes differs only in the orthography used in the transcription, and sometimes in handwriting.

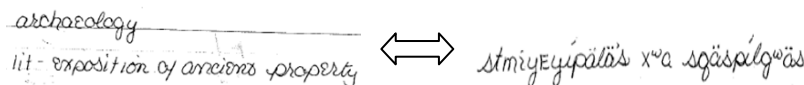Figure 7 illustrates a compound term meaning 'archaeology':

Fig 7. Feminine handwriting. Cr written in Reichard orthography.

The Cr transcription in Figure 7 is written entirely in the Reichard orthography.

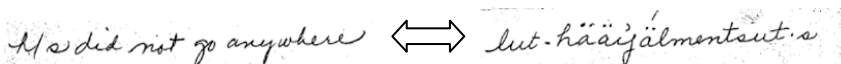Figure 8 below shows a compound entry, written in Nicodemus's handwriting:

Fig 8. Nicodemus' handwriting, Reichard orthography

Figure 9 below shows how extra grammatical information is sometimes included in the English gloss.
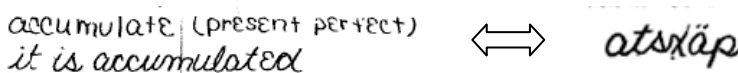

Fig 9. Feminine handwriting. Reichard's orthography.

6   Examples Not Found in dictionary

Of the 1143 cards (23%) without matches, 838 (16.8%) can be linked with certainty to existing roots in the dictionary. In these cases, what we end up with is a greater knowledge of what kinds of derivational processes these lexical roots can participate in. A case in point is (10) given below.

(10)   **Dictionary:**
√**tm₅**   tum *pump*, *suck (e.g. through a tube)*. (tum (stem), vt.)

File card entries with √tm₅ *not* in dictionary:
ii-túm-emsh   h/s is pumping
ii-túm=kwä'   h/s is pumping water

While we might expect continuative morphology (written above as *ii-*) to be able to attach to *any* given root, we can now say with certainty that for the lexical root *tum* 'pump, suck', this is in fact the case.   In other words, we know that a fluent speaker of the language actually produced these forms, and therefore we know a bit more about how to 'make words' out of these roots. The same holds for (11):

(11)   **Dictionary:**
√**tr₃**   tor–s *beckon (with the eye)*. (tor...s (stem), vt.)

File cards with √tr₃ *not* in dictionary:
tórsments   h/s beckoned h/h w/ the eye(s)

This example shows that the lexical stem *tor-s* 'beckon with the eye' may be transitivized.

The remaining 305 (6.2%) of the 1143 cards without matches may have either tenuous connections to roots represented in the dictionary, or else are unrelated to forms occurring in the dictionary. In this latter group belong entries such as (2) above which occur in Reichard's Stem List, but have no related forms. More examples of entries in the collection which also occur in Reichard's Stem List but not in the dictionary are listed in (12) below:

(12)   t+qem+íš *snowbird* (tqemísh)
s+q'ʷé+q'ʷ(=)alqʷ *prarie grouse, prarie chicken* (sq̓ǝ́q̓walqʷ)
t'qał=cn=alqʷ *white fir* (t̓qałtsnalqʷ)
s+t'íye?=łc'e? *caribou* (st̓íyä'lht̓sä')
wapato *potatoes that grow in Yakima & Nez Perce country* (wapato)
s+xʷa·y=ápa?=qn *red willow (?)* (sxwaayápa'qen);
cuxʷ+cuxʷ+s+xʷey=ípe? *rosehips* (tsuxwtsuxwsxweyípä')

I estimate that perhaps 150 (approximately 3%) of the collection may be found in Reichard's Stem List, but not in the dictionary. Finally, there are 28 forms which do not contain lexical roots as such, but are rather prefixes, suffixes, exclamatives, child's speak, or conjunctions. These are listed in an appendix.

A few more examples should suffice to show how much we stand to learn concerning derivational processes in certain roots. Consider Figure 10:

tn   ten *pull line (stem)* (tän); **u·+ten** *be tight (stem)* **((uu-)tän);** ten+**p** *become tight (as rawhide) (stem)* (tän(-p)); **tén+m+ncuɫ** *resist; lit. pull-cause; he pulled himself away; fish pulled on the line; lit. he (fish) caused himself to pull* (**tä̲nmentsut**); u+č+**ten=ceʔ** *he is wearing <u>skin-tight</u> clothes* (**uchtäntsä'**); **tén+m-stu-s** *h/s pulled it/him/her* (**tä̲nemstus**)

Fig 10. The file card collection adds much to our knowledge of how forms may be derived from these stems.

Some root headers in the dictionary have little more than a stem. In the dictionary, we have only the entries /ten/ and /ten+p/ representing *ten* 'pull line'. The file card collection gives us much more knowledge about word formation involving this particular root. Figure 11 is also enlightening in this respect:

xʷp₁   xʷep *flatten out blanket, spread (stem)* (xwäp); **u·xʷú·p** *h/s spread out, h/s stretched out* **(uuxú...p); s+xʷúp+xʷup** *a flying squirrel, lit. spread spread* (**sxúpxup**); **s+xʷup+xʷup+s+xʷiy=ípeʔ** *Unidentified animal-probably related to the flying squirrel* (**sxupxupsxwiyípä');** s+xʷép+m+šeš *development, n., lit. unfolding, unrolling* (sxwä̲pɛmcac); **xʷup+m=aʔx̌n+m** *h/s stretched out h/h arm* (**Xupma'Xenem);** xʷép+m-st-m *develop, v., lit. it was unfolded* (xwä̲pɛmstɛm)

Fig 11. The "flying squirrel" header

The 'flying squirrel' entries represent, I think, genuinely new material. Also of interest in Figure 11 is the glottal stop in the lexical suffix for "arm" in *h/s stretched out h/h arm,* which only occurs once in the dictionary for the entry *he bent his arms*. This could mark the inchoative, but would be unexpected since it usually occurs in roots instead of suffixes.

7   Challenges and Further Questions

There are a number of challenges which I faced in preparing this document. Some challenges relevant to this paper include questions of how to analyze entries such as those in (13).

(13)   **pes+pes+p+ól** *he is easily amazed, he is easily frightened* (**pespespól); pes+pes=nigʷ** *type of snake* (**pespesnígw); s+pes=áyeʔ** *folly, error* (**spesáyä'**)

The analysis of the entries glossed as 'type of snake' and 'folly, error' are elusive because it is not clear what the identity of the morphemes which come after the root are. Although =*nig^w* and =*áye7* are in an environment which might suggest that they are lexical suffixes, there are no other occurrences of these suffixes with which I may substantiate this claim. I am reasonably sure that the lexical root in both of these entries is *pes* 'amaze, surprise' in part because of the forms themselves, but also because one can easily imagine how snakes and errors may both be 'surprising'. These two reasons are not sufficient to prove that these entries have lexical roots which are unquestionably identical to that which I am assuming, and so I flag these in the document, since they require further research.

A major question which remains unanswered at this point is the following: Why were so many entries left out of the dictionary? We may never know the answer to this question, but for at least some of the 23% without matches in the dictionary, I can offer some conjecture. Alongside of the entry for 'bride' in (14) below, we have an entry glossed as 'he slapped his wife' which did not make it into the dictionary.

(14)   s+mí?yem *bride* (smíýäm); **t'uq^w+eł+s+mí?yam** *he slapped his wife* **(t'uqwäl̲hsmíýam)**

It takes no rocket scientist to imagine what moral misgivings Nicodemus may have had about including such an entry in a dictionary which was to become an important, often-consulted language resource for his people.

Example (15) shows a nearly complete inflectional paradigm having to do with skinning animals and scalping which were left out of the dictionary. Scalping has obvious negative historical connotations, but it is harder to see why any entries related to skinning animals might have been omitted.

(15)   **cek^w** *drag, pull* **(tsekw); i?‿t+cuk^w+cuk=ílx^w+m** *you(s) are skinning the animals* **(i'ttsukwtsukwílxum); i‿t+cuk^w=ílx^w+m-s** *he is skinning the animal* **(ittsukwílXums); s+t+cuk^w=ílx^w+m-s** *he is skinning the animal* **(sttsukwílXums); s+t+cák^w=qn** *scalp; lit. t-pull-head; that which is pulled off the surface of the head* **(sttsákwqen)**

The reasons I have put forth for the exclusion of (14) and (15) from the dictionary are very speculative, however, and for the vast majority of entries without dictionary matches, there seems to be no clear reason why one would want to leave them out. Did Nicodemus question their grammaticality? Were they omitted by mistake? Were there size constraints on the dictionary, or time constraints on the project? These are all questions which I have no answer for.

Another major question which arises from this work is whether Nicodemus really resolved all of the stress (16), vowel (17), and glottalization (18) discrepancies which are apparent from comparing file card and corresponding dictionary entries.

(16)   u+x̌ʷel'+é t+tm'íxʷ *bestial; lit. it is like an animal* (úx̱älä tɛtmíxʷ);
        hn+cun+cún'm'e?+n' *college; lit. school* (hntsúṅtsuṅm'e'ṅ);
        sya+dax̌+él'+s+či+če? *cattle driver; cowboy; lit lit. one whose*
                business is to drive cattle (syadaX̱äl'schíchä');
        gʷeč=qan=á?st *Wenatchee; lit. he saw over a rock, cliff, precipice*
                (gwéchqene'st, Gwéchqene'st)

(17)   cen+kʷínxʷ=cn-t-se-s *he answered me* (tsankwínxwtsɛntsäs);
        mįš *destitute, adj.; lit. he is w/o what he needs* (mɛc);
        p'asqʷ' *collapse, crumple (stem)* (ṗusq̇w);
        hn+q'a+q'm'=íy'e?+n *fishing place* (hnq̇eq̇míye'ṅ, hnq̇eq̇míye'ṅ)

(18)   tax̌+tax̌+q=iɫp *black birch* (taktakq̇iɫp);
        ye+c'óp *be suddenly tight (stem)* (yetsóp);
        hn+c'éxʷ+t *stream, creek, channel* (hntsékut, hntsékhut);
        c'lx̌ʷ+mín+n *claw; lit. m.o. scratching* (t'slkumin'n);

In other words, the issue that comes to mind concerning (16-18) is whether both
pronunciations are acceptable, or just one.
        There are also other complications related to vowel transcriptions.
According to the transcription key, Nicodemus changed all vowels written as
{ä} to {e} in the dictionary, and deleted all vowels written as {ɛ}. This was not
categorical however:

(19) a. hn+q'ʷ'l=úl'umxʷ+n *bakery; lit. place for baking (bread)*
                (hɛnq̇ʷɛlúl'ɛmxʷɛn, hnq̇welú'lemkhwn, hnq̇wlú'lumkhwn);
     b. sya+n+q'ʷ'l=úl'mxʷ *baker; lit. one whose occupation is to bake (bread)*
                in the ground (syanq̇ʷɛlúl'ɛmxʷ);
     c. hn+ɫen'=úlemxʷ *the opposite side of the _canyon_* (henḻhä'núlemxw);

In (19a), the suffix =*úl'umxʷ* 'ground' retains the same second /u/ vowel in both
the dictionary entry and the 'final' file card entry. In a related form with the
same suffix (19b) however, the suffix form is never transcribed with a second
/u/. Ivy Doak (p.c.) has indicated that Nicodemus replaced {ɛ} (schwa) with
{u} if they were near labials, otherwise {ɛ} was deleted, but this practice seems
not to have been consistent, as shown by (19b).
        One final orthographic change adopted by Nicodemus was his choice to
represent what Reichard (1938:529) wrote as superscript 'echo vowels', simply
as long vowels. In a minority of cases, the superscript vowel is written with a
different graph than the preceding, non-superscript vowel, as in (20). These
were nevertheless collapsed into one long vowel by Nicodemus. Is there a loss
of phonetic detail accompanying Nicodemus's transcription?

(20)   sye·+xʷúy *ambassador, delegate, n.; lit. one who goes to a place for other* (syeᵃkúy, syääxúy);

   On a related note, it would be interesting to try and address the question of whether or not Nicodemus's choice to change the orthography was at all related to phonetic change occurring in the language as the number of speakers decreased, or whether these changes were implemented solely for reasons of learnability.
   To conclude, I have often been asked why I chose a root based dictionary, rather than based on stems or other morphological units or lexical classes. My answer is that by organizing forms by non-compositional roots, it more clearly illlustrates the apparent regularities which derivational forms like lexical suffixes contribute to the meanings of roots during the process of stem formation. While a stem-based dictionary might also be useful, especially to the language community, such basic semantic connections as those shared at the root level would not be as transparent given such an organization. Also, in order to accurately show the overlap between Lyon & Greene-Wood (2007) and the present collection, it seemed appropriate to follow the same format.

References

Brinkman, Ray (2006). Personal communication.
Czaykowska-Higgins and Kinkade, M. Dale (1998). *Salish Languages and Linguistics: Theoretical and Descriptive Perspectives.* Berlin: Morton De Gruyter.
Doak, Ivy (1997). *Coeur d'Alene Grammatical Relations.* Doctoral dissertation, University of Texas.
Greene, Becky (2004). *An Edition of Snchitsu'umshtsn: Volume I: A Root Dictionary.* Masters thesis, University of Montana.
Kuipers, Aert (2002). *Salish Etymological Dictionary.* UMOPL 16.
Lyon, John (2005). *An Edition of Snchitsu'umshtsn: Volume II: A Root Dictionary.* Masters thesis, University of Montana.
Lyon, John & Greene-wood, Rebecca (2007). *An Edition of Lawrence Nicodemus's Coeur d'Alene Dictionary.* UMOPL 20.
Mattina, Anthony (2005). *Okanagan and Salishan Languages. Encyclopedia of Linguistics*. Ed.   Philipp Strazny. New York: Routledge. 2 Volumes.
Nicodemus, Lawrence (1960's and 1970's). Handwritten file cards.
Nicodemus, Lawrence (1975). *Snchitsu'umshtsn: Coeur d'Alene-English Dictionary: Volumes I and II*. Spokane: University Press.
Reichard, Gladys A. (1938). *Coeur d'Alene. Handbook of American Indian Languages vol 3*. Ed. Franz Boas. New York: J.J. Augustin.
Reichard, Gladys A. (1939). *Stem-list of the Coeur d'Alene language.* International Journal of American Linguistics.10(2,3):92-108.

John Lyon
johnlyon@interchange.ubc.ca