Lexical and syntactic marking of information structure in Siouan languages

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This talk will demand familiarity with three very broad information-structural types, which can fairly be said to exhaustively categorize sentential content. I will define them here and move on:

- **Focus.**
  - Every sentence has one. Complex sentences may have more than one.
  - As used by Birner and Ward (2006), “Focus” refers to the instantiation of the variable in an open proposition – a question or thought that the speaker assumes is salient, important and interesting to her interlocutor.

- **Topic.**
  - Most generally, “Topic” refers to the content of the OP itself. Topics tend to persist in discourse because, as part of a salient OP, they are highly accessible.
  - **Topic Shift** (cf. Féry's (2007) aboutness and frame-setting topics) is the content which is added to the OP within the sentence and (usually) before the Focus.
  - **Topic Restatement** (cf. Féry's familiarity topic) is the content which is already in the OP, and therefore doesn't need to be explicitly said, but is said anyway.

A: Who's that with the scarf? B: Well, that one with the shawl is Bryan.
A: I need a wrench. B: Here comes Tamar with a wrench.
Milah is driving to Milwaukee for vacation. It's expensive to fly to Europe.
Milah wants to fly to Europe. And fly to Europe she will.
Scope

- I will limit myself to languages I have corpora or texts for.
  - Umóⁿhoⁿ and Pánka (Omaha and Ponca)
  - Nakʰón’i’api (Assiniboine)
  - Hóocąk
  - Báxoje and Jíwere-Ñút^achi (Ioway and Otoe-Missouria)
  - Hiraacá (Hidatsa)
  - Apsáalooke (Crow)
  - I would like to expand this sample, particularly into Ohio Valley. Information-structure marking cannot be assumed to be similar in genetically close languages.

- I will not discuss things which have been extensively discussed by others or myself:
  - Switch-reference
  - Lakhota topic articles
  - Postverbal elements in Umóⁿhoⁿ and Pánka
  - I will only discuss proximacy/obviation briefly, not raising all the hypotheses.
  - Clearly, these things will be included in a future CSG volume.
Stressed Pronouns

- A single pronoun serves both for general reference/resumption and for Focus.

Hóocāk (Horses 1)
- Taǧirįkra ’éesge Bill O'Brien and nee Chloris Lowega wahanąkš’ąną.
  German.the that.because I .PROP we.talk.DEM.DECL
  Germans, that's why Bill O'Brien and me, Chloris Lowe, are gonna talk.

Apsáalooke (Bitaalasshia)
- Hisshishtawia kon dappeém ehkaáhik.
  red.eye.woman that.kill.that know.PUNCT.DECL
  He realised that it was Red Eye Woman that had killed her.

Omaha (38:10) This example contains both uses of é:
- Zhiŋá amá edádaŋ ?íthai tʰédi é thashtánbàzhí young the something about.talk.they EVID.at that by.mouth.stop.they.not égan é uhé-hnáŋi.
  thus that win-ITER.they
  Younger ones don't stop talking about whatever they talk about, so they are the ones who get what they want.
Stressed Pronouns

- Ioway and Otoe-Missouria differ in having a general non-Focus resumptive i-/e- and a Focus-specific form éwa. The non-Focus forms such as ida there, eda then, etawe their/his/her, igi here/now are Focussed using aré-clefts (a later slide).

- Otoe (Wórage Hiⁿkúňi 7)
  - Aré mató xáⁿje éwa gigúⁿdhàshguⁿ. it.is grizzly big that to.her.teach.it.seems
    [Puffing tobacco] it was the big grizzly that had taught it to her.
  
  - Aré hiⁿkúňi mitáwe mató xáⁿje máyaⁿ tandá nahéda aré it.is grandmother my grizzly big land where be.at it.is ida inú nahé iháre ki. it.at with be I.think DECL
    [Remembering her], my grandmother is wherever the big grizzly's country is, with him, I think.
Topic and Focus Markers

Morphemes specifically marking Topic/Focus are identifiable in Hóocąk and Hidatsa (also Lakhota, Omaha and Mandan, cf. Curl 1999; Ingham 2003; Koontz 2003 Wolvengrey 1990). The Hidatsa marker -ri is primarily for Topic Shift, which is largely accomplished by determiners and positional verbs in the Dhegiha and Jíwere subfamilies:

Hidatsa (First Worker Intrudes on Sun's Realm 67-68)
- Šiʔawirúkʰi šeʔerú wahkúwareec. Harúk Waahkuwiríš šeʔerí kikíriwareec.

Some time later, [Day Sun] was still there. And the Moon was seeking him.

Hidatsa marker can introduce a local Topic without changing the larger one:

Hidatsa (The Story of a Girl Who Became a Bear 22-23)
- Heʔešaak atʰéerahta ráak ruxpáaka éecakaati phée wareec. Wacéeri waaʔitáhta úuʔarušʰa arutéekreší wareec.

Then going in among the houses, she ate up every one of the people. Even when the men shot with arrows, she was never dying.

The primary purpose of the Hóocąk Topic marker -gi(ži) appears to be the Topicalisation of entire clauses. We may suppose its use on arguments is a special case of this, as it only occurs in such cases as this, and never on determined DP's:

Hóocąk (Picture Description 10)
- Tee hižą hožukjanegi reexharuporoknągre že’e hi’urança ... DEM one in.put.FUT.TOP drum.DEM DEM with.do.and

This one [team] that is going to load [the moccasin] will use the drum and ...
Topic and Focus Markers

- Despite being primarily Topic markers, both of these sometimes mark Focus:
  - Hidatsa (First Worker Captures Prairie Dogs but ... 54)
    - Hiró **waaruwišíaš** šeʔerihički.
      Here IND.some.bad.the DEM.TOP.EVID
      Here has been some bad fellow, the one from before.
  - Hóocąk (Ceexjį 7)
    - ‘Eeja wooğe xete hiiregi jaagu nyuŋiwakirekjaneği ’eesge hąake wičiija wawi’ųjįnįšųnu.
      If they made a lot of noise, they'd run, that's why they wouldn't use the guns.
  - Additionally, both languages abound with Topic Shifts without Topic markers.
  - Hidatsa (First Worker Intrudes on Sun's Realm 25)
    - Heʔeš̌arúk **Waapiwiríš** atáʔkuuwareec.
      and.DS day.sun.the appear.CONT.come.back.NE
      Then Day Sun coming over the horizon appeared.
Bracketing

- In a recent study of determiners in Omaha and Ioway/Otoe-Missouria (Gordon 2009), I have identified “bracketing” of information – separation of thought chunks and topics – as the primary pragmatic purpose not only of established articles, but of related items as well. Alongside the more general bracketing positional verbs náŋe, háŋe, gráŋe and the article nahá, Ioway/Otoe-Missouria ^šuⁿ anyway and gašúⁿ enough/now often bracket Topic Shifts, with the final instance occurring just before the sentence Focus.

- Otoe (Wékaⁿ Béñeŋe ¶7)
  - Aré másugràŋe nahé^suⁿ táha-wónayiⁿ nahé^suⁿ táhagùta nahé^suⁿ agúje nahé^suⁿ dagúre bróge wóhià-a.
    So war bonnets, deerskin shirts, deerskin leggings, moccasins, he won all these things.

- Ioway/Otoe (Udwáⁿge Mishjíŋe 7; 16)
  - Udwáⁿge rixóge^shuⁿ akírage skúñewi re.
    Muskrat P.you.reprimand.anyway challenge not.PL IMP
    Though Muskrat reprimand you, do not challenge him.
  - Itámi gasuⁿ bé, áñe ki.
    His.wife now leave say.they DECL
    His wife, he left, they say.
Proximacy/Obviation

- To add to the set of hypotheses, both of whose principal contributors (Koontz 1989 and Bad Moccasin 2005) are here right now, regarding the distinction between the Dhegiha “proximate” and “obviative” animate articles (respectively, $ak^h^a/ama$ and $th^n/th^a/khe/th^nk^h^e/th^nk^h^a/m$), I coded 50 instances of each set from Dorsey texts with Ponca sources (25 each from both stories and letters) and found Topic persistence to be highly predictive:
  - 42/50 obviative articles were non-persistent Foci.
  - 4/50 obviative articles were Presentations.
    - 4 persisted as objects, 0 as subjects.
  - 4/50 obviative articles was a Topic Restatement (1 unaccusative subj, 3 obj)
  - 22/50 proximate articles marked Topic Shifts.
    - 16 persisted as subjects, 2 as objects, 4 as both.
  - 10/50 proximate articles were Presentations.
    - 9 persisted as subjects, 1 as both subject and object.
  - 18/50 proximate articles were Topic Restatements (all of them subjects).
- Although this makes a compelling case, the prevalence of subjects among the proximate Topic Restatements and of objects among the obviative Topic Restatements indicates that Case cannot be entirely ruled out here. The only categorical statement that emerges here is that none of the obviative articles marked a referent which later trigged subject-verb agreement.
- Unlike switch-reference in Missouri Valley, or topic-shift articles in Lakhota, obviation is associated with future, as opposed to already obtaining, non-persistence.
Clefts

- The Jíwere branch having a genuine copula, aré, it is the only part of Siouan which can be said to have true clefts.

- Ioway/Otoe (Udwáⁿge Mishjíže 11)
    “Muskrat, what will you be?” he asked. “It's an eagle I'll be,” he said.

- Otoe (Wórage Hiⁿkúñi 4)
  - Járe éwa ch^émi hñe ga. It is this one who will surely kill me.

- Ioway (Twin Holy Boys 3)
  - Hiⁿaghetti wáⁿge grátogre aré chibóthraje úmíⁿnaⁿ wasguⁿ.
    It was a woman with her husband living in the tipi, it seems.

- Aré takes what precedes it as a Focus, and can also be used as a discourse continuity device to introduce prior Focus into the background of a new sentence:

- Otoe (Wórage Hiⁿkúñi 4)
  - Aré rîre rigráwaⁿ ke. It was you I was calling for (when I called before).
Clefts

- There is a distinction between discourse markers with a quasi-referential aré such as those above, and clefts, some of which have a double-aré. Such collocations focus on what comes before aré, rather than just using it as a pivot.

- Otoe (Wórage Hiⁿkúñi 5)
  - Arédare inúⁿ máñi gráshguⁿ ^a. It was right then that she headed back home walking with him.

- Another distinction is that between aré-connectors and subordination. The information-structural distinction is whether the two halves are to be interpreted as separate assertions with their own merit. Contrast:

- Ioway/Otoe (Udwáⁿge Mishjíⁿe 11; 15)
  - Náhje egráñi skúñe, aréchi chêha skúñe ke. He doesn't have his heart, so therefore I won't kill him.
    - (In this case, these are two separate assertions, each one the discourse equivalent of a Focus.)
  - Udwáⁿge rixóge daⁿna ke, gasúⁿgi itámi inú yán iwáhuñechi^àsguⁿ. Muskrat was very angry, because he finally knew that [Rabbit] had slept with his wife, it seems.
    - (In this case, we have already known the subordinate content for a long while: it is the discourse equivalent of a late Topic.)
Incorporation

- Noun incorporation in Missouri Valley Siouan appears to respect IS-distinctions in much the same way as “bracketing” in Mississippi Valley. The nouns and verbs that make up a large compound do not differ in information status.

- Hidatsa (EL 10:48) Topic Shift – Focus:
  - Maapúkšaruwácahtahš iitáruupawarec.
    snake.one.only.the face.two.NE
    The snake being only one, still it had two faces.

- Of course not everything within a given IS-status must be smashed into a single word: in this Crow sentence, the Focus and Topic Shift both contain an incorporation, while the Topic Shift also has an instrumental phrase:
  - Crow (Bitaalasshia) Topic Shift – Focus
    - Hehtáa baattáche aák biíttaashteltdialaalak bulutchíwasshiihkaatbiik.
      but rawhide with me.shirt.so.make.you.if l.get.l.think.about.so.l.will.DECL
      But if you make me a shirt from rawhide, I'll figure out a way to get him.
Pitch Prosody

- The pitch peaks and troughs of which pitch prosody consists do not just equally fall and rise; nor are they haphazard.
I propose the following means of retrieving information about Topic Shift, Focus and Topic Restatement from prosody based on Rudin's Omaha field tapes:

- an identifiable highest pitch peak within Focus and also Topic Shift if present;
- a pitch boundary (red horizontal line) which is more or less a lower bound prior to Focus and an upper bound afterward;
- steeper slope and earlier onset for the pitch decline immediately following final Focal peak, as opposed to earlier pitch peaks;
- flattening – that is, lower slope – of both peaks and troughs after Focus.
Pitch Prosody

- Omaha (Blackbird Hill – Clifford and Bertha Wolfe) Topic Shift has peaks and relatively flat troughs; the final Focus peak is followed by a steady decline in pitch.

- Day

- this

- day

- third

- man

- the

- mind

- good

- PROX.not
Pitch Prosody

- Here we see the low-pitch section after Focus, followed by a new Focus:

- Night this-the woman a cry hear-ITER that.far-the
- Here we see a pitch peak within the low-pitch Topic-Restatement section.

- That-the story long.ago stand-PROX-REPT
Pitch Prosody

- Here we can note both of the features from the previous slide: a new clause with its own Topic Shift – Focus structure after the second red line, and between the two red lines a low-pitch section with a peak on íutha.
Recursive IS

- Information structure recurs at many levels besides the sentential level I have considered here, with propositions, subpropositions, arguments and discourse sequences often having structures of their own. Individual sentences may have multiply layered Topics and Foci, sometimes producing configurations with Focus before Topic Shift, as in the Hidatsa example below:

  - **Hidatsa** (The Story of a Girl Who Became a Bear 30)
    - *Warúuš šeʔeríwa atiʔahúwa réečʰaak ...*
    - older.sister.the DEM.TOP.IND house.much.IND not.be.cause.SS
    - My older sister [is who] destroyed so many houses [the whole village].
Recursive IS

- In this Otoe example are two separate assertions: *she had passed through the land* and *regarding the land she had passed through, it was difficult*. The former is new information, albeit plausibly inferrable information, which has not yet been invoked. But the former is clearly more important, so we get an aré-cleft. Note the diversity of possible IS-representations of the English translation.

  - Otoe (Wóragé Hiⁿkúñi 4)

    - **Máyaⁿ wochéxi aré uwáshguⁿ.**
      - land difficult it.is in.go.it.seems
    
    - *The land, it was difficult, that she had passed through.*
    - *The land was difficult that she had passed through.*
    - *It was a difficult land she had passed through.*
    - *The land she had passed through was difficult.*

- Likewise, this Hidatsa sentence contains two assertions: *they came to our land* and *they came to our land only once*. The speaker has chosen to construct the sentence as if the former were already presupposed, a Topic Restatement:

  - Hidatsa (EL 18:4)

    - **Nuwahcáahta úʔšiiʔwarec mata-awáʔheeru.**
      - once.only arrive.here.NE our-land.among
    
    - *Only once did they come here to our lands.*
Discontinuity

- Syntax is never completely malleable. Sometimes you can't group things together by information structure alone, viz., the famously mobile focussing adverbs in Germanic languages. In this Hidatsa relative clause the Topic-Restatement object is pre-Focal because it apparently does not want to escape its relative clause. In the subsequent causative construction it is post-Focal:
  - (Underlined are the V and O; in white are the Foci.)
- Hidatsa (The Water Buster Account 13j-k)
  - Waaʔaahtúʔaš ookúreʔe īškaak. Wiháarak Wiriiʔiikiráawatuš kuré?ehkaak waaʔaahtúuʔaš. **They selected an owner for the skulls. When we finished, they made Getting-Married-by-Water own the skulls.**

- But on the other hand, highly marked word order may be invoked to preserve information-grouping, as in this Hidatsa example with possessee-possessor order, where the girl is a Topic Restatement and “say name” is the Focus:
- Hidatsa (EL 27:39)
  - Céešawíaš héewarec náaši wíakaašaš. wolf.woman.the say.NE name woman.young.the **Wolf Woman was the young girl's name.**
Hidatsa (EL 3:14).

There's this big snake that our relatives keep getting eaten by. (EL 3:14)

Assiniboine (Įktomi and Fox 33)
- ... tʰanó žé iyúha tʰemyápi.

... then that meat, all of them ate it up.

Hóocąk (Ceexji 1)
- ... ceexjinąagrešge Hoocąkrašge woonį hahirešųŋų.

... these buffalo, the Hóocąks used to go hunting them.

Ioway/Otoe (Udwáⁿge Mishjíŋe 5)
- Shigé mawódada máha ródada nahé^shuⁿ máyaⁿda na máwoda

And all the vegetables growing inside the earth and on the trees above the land, Muskrat had them for his own and guarded over them.
OSV

• Further questions
• Do all languages have OSV? None yet for Apsáalooke, but limited data.
• Does all Siouan OSV have the same functions?
  – Topic-Shift O, Focus S(V).
  – Focus O, Topic-Restatement SV.
• Are there identifiable functions for which OSV is obligatory? If it is optional, what other means mark the appropriate IS-contexts? Prosody? Topic or Focus markers?
• Cumberland (2005:373) argues for Assiniboine that OSV is only possible when S is inanimate. Is this true, or an epiphenomenon of other constraints? Is it true of other languages?
Focussing adverbs

- Of 36 permutations of Focus, Topic Shift and Topic Restatement among subjects, objects and verbs in one- and two-argument clauses, fully 16 are not predicted to license non-canonical word order, and among these 16 are some of the most frequently occurring permutations. How is information structure conveyed within SOV?

- Focus is most often demarcated from Topic Restatement by adverbs and suffixes:
  - Ponca (709:3)
    - Wanáshe táŋga enáxci áthixùde ha.
      Policeman big that.only.very unclear DECL
      Only the matter with the aforementioned big policeman is unclear.
  - Hidatsa (EL 17:83)
    - ... maapáheeruhša Apúhkawikáʔš háʔahkuac
      day.on.to.even cap.low.PL.the say.continue.they.DECL
      ... even today they are still called the Low Caps.
VX: topic restatement

- Hidatsa (EL 11:50).
  - Šéʔruhaak maa-arucakáaka éecʰiri úʔšiak núutaaʔwarec maapúkšaš.
  - Then all the birds came and ate the snake.

- Assiniboine (Big Snake 3)
  - Wàmnáka miní žé.
  - I saw that lake.

- Hóocąk (Ceexji 11): no cases of VO, only VS (same for Apsáalooke)
  - ... wanį roogųįňeanągašge wąąkšik hijąhįńąąka.
  - ... and those other Indians wanted the meat too.

- Ioway (Twin Holy Boys 146)
  - Ídare wáñiⁿgriwàsguⁿ ihdóge pahíⁿ.
  - Right then it seems they got back carrying the sharp elbows.
For Ponca and Omaha, I have argued that postverbal position for topic restatement is obligatory (Gordon 2008, see also ). But its use is rare in Hóocąk, Crow and Dakoton, and even Hidatsa and Ioway/Otoe-Missouria have preverbal Topic Restatements.

Hidatsa (Lowie 55:13h-l).
- Éecʰiri íkakoowihaak waaʔaahtúuʔaš kuraʔahkataarakan, ráahak, waaʔaahtúuʔaš ookúreʔe íškaak, wiháarak Wiriiʔiikiráawatuš kuréʔehkaak waaʔaahtúuʔaš, šeʔerúhaak waaʔaahtúuʔaš Wiriiʔiikiráawatuš aatíkua kirušáʔac.

When everyone was done looking at them, they took the skulls back, left, selected an owner for the skulls; when we finished, they made Getting-Married-by-the-Water the owner of the skulls, then they put the skulls away at Getting-Married-by-the-Water's house.

Ioway/Otoe (Udwáⁿge Mishjíŋe 10)

[Muskrat] said, “Big bad Turtle. You are to blame. I'll kill you.” And striking Turtle's head, he broke his skull in. The brains spilled out. That's why Turtle has no brains, they say.
VX: presentation

- Postverbal Presentation only in Assiniboine (also in Omaha and Ponca for locatives and story openers, absent in all other languages).

- Assiniboine (Big Snake 15)
  - Ḥįįk žé owá zéčʰa oyákapi káya wįcʰášta. and DEM all thus tell.they they.say man
  
  And they told a man how it all happened.

- Omaha story-opener (Udwáⁿge Mishjíŋe 13)
  - Pahóⁿga thédi athábi-amá Mashcíⁿge amá. Prior the.at go.PROX-CONT Rabbit DET
  
  Once, Rabbit was going along.
VX: further questions

- Clearly the use of VS is more widespread than that of VO. There are ample syntactic explanations for this, but what are the historical reasons?
- Word-order variation has only abstract implications for the acoustic stream. That is, no word-order variant has a particular form-function bundle – viz., a “word” – to stabilise it historically. Thus, these variations are not as easy to subject to the comparative method as, say, grammatical morphemes are. Nonetheless, we can look at grammaticisation processes that rely on word order and find mutual information between word order and the form of morphemes.
- If word-order variation is so unstable, it should diffuse quickly. Why, then, are Hidatsa and Apsáalooke so different? Is word order a salient group-identity marker?
- Are form-function correlations themselves stable enough to look at comparatively?
- Non-Dhegiha languages do not appear to use either VS or VO as often as Dhegiha languages do for Topic Restatement; but they appear to allow more presentational use of this word order. Is there a reason for this?
  - Avoid resorting to a binary here! Jíwere and Hidatsa are obvious intermediate cases.
References

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