INDIVIDUALS AND POSSIBILITIES (3):
Notes on issues raised by Stone & Hardt (1997)

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- Two levels of prominence: For every type, need two tiers of discourse referents, central vs. peripheral.
- Two levels of abstractness: The concepts stored as discourse referents can be either static or dynamic

2. DYNAMIC PROMINENCE HIERARCHY OF REFERENTS IN DISCOURSE

(1) [a] Yesterday, Juuna went hunting by boat together with Kaali and [his son].
[b] It was great fun. [c] He steered the boat alone. [d] Suddenly the waves got high.
[e] But Kaali had confidence in him, so he stayed calm.
[e'] But he had confidence in Kaali, so he stayed calm.
[e''] But his friend had confidence in Kaali, so he stayed calm.

(*) In Eskimo, dref's are introduced as central or peripheral, and then promoted or demoted, by case and AGR:

- Intransitive array: NOM (OBL) V-MOOD-AGR
  [by default] [peripheral]
- Transitive array: ERG, NOM (OBL) V-MOOD-AGR
  [by default] [central] [peripheral]
- Two forms of AGR: i-form for central dref (= current center or just promoted)
a/u-form for peripheral dref (= current periphery or just demoted)

(1') [a] Ippassaq Juuna by boat together with Kaali and his son.
yesterday Kaali by boat together with Kaali
[pro-vb] [pro-vb] [pro-vb]
[boat] [boat] [boat]
[togogether] [togogether] [togogether]
[with] [with] [with]
[FCT-SG] [FCT-SG] [FCT-SG]
[3SG] [3SG] [3SG]

[b] nuami-qa-u-q.

[c] umiatsiak

[d] Tassamagaamuq malilir-pu-q.

[e] Kaali-p=li tatigi-mm-α-mi iqqissima-vu-q.

[e'] Kaali-p=li tatigi-mm-α-mi iqqissima-vu-q.

[e''] Kaali-p=li tatigi-mm-α-mi iqqissima-vu-q.

[ikimngum-β-mi=li Kaali tatigi-mm-α-gu.

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2. ‘SLOPPY IDENTITY’ = ANAPHORA TO DYNAMIC REFERENT + CENTER SHIFT

(2) C1′… [xp…[yp…]…]b … C2′…[xp…]b

(3) John spent [his. paycheck][3]. Bill saved [it]b.

(4) John would use slides [if he gave a talk][3]. Bill [would]b just use the chalkboard.

(5) if a dog bites you, I might [ _ shoot it][3]. But if a child bites you I won’tb.

(6) Suppose John left. Then I’d bet $5 on [the prediction that Sue would, have a breakdown][3].
But if John stayed, then I’d bet $100 on [this]b.

[Note: The formalization in Stone & Hardt 1997 seems unnecessarily complex. What follows is an attempt to simplify their formalism while preserving the intuitive idea of their explanation, and their empirical results.]

(3′) John spent [his. paycheck][3].

(4′) Bill saved it.[3]

(27) tests whether jb satisfies:

∀w(∃w′(w′ ∈ r′jw)) → spendb(ξb, j′b, j′b)

= ∀w′(w′ ∈ K → spendb(ξb, j′b, paycheckb(ξb, j′b)))

= ∀w′(w′ ∈ K → spendb(john, paycheckb(john)))

Bill saved it.

(37) tests whether j′b satisfies:

∀w(∃w′(w′ ∈ r′jw)) → saveb(ξb, j′b, j′b)

= ∀w′(w′ ∈ K → spendb(ξb, j′b, paycheckb(ξb, j′b)))

= ∀w′(w′ ∈ K → spendb(bill, paycheckb(bill)))
(4') $\text{John}^{\text{1st}} \quad \text{[VP would use slides [if he gave a talk]]}$

(1) $r, u_1, \xi_0, u_1 = \text{john, } \xi_0 = u_1$;  (2) $r, \omega_1, \{1 \text{ give-talk}_{\xi_0}\}$;  (27) $\{1 \text{ use-slides}_{\xi_0}\}$

(27) tests whether $j_2$ satisfies:

$$\forall w (\exists (w' \in \omega_{j_2,w}) \rightarrow use-slides_\omega(\xi_0, w'))$$

$$= \forall w (w \in K \rightarrow \forall w' (w' \in \min_\omega (\lambda w'' \cdotp give-talk_\omega(\xi_0, w''))) \rightarrow use-slides_\omega(\xi_0, w'))$$

$$= \forall w (w \in K \rightarrow \forall w' (w' \in \min_\omega (\lambda w'' \cdotp give-talk_\omega(\text{john})) \rightarrow use-slides_\omega(\text{john})))$$

Bill$^{\text{2nd}}$  

(3) $r, u_2, \xi_0, u_2 = \text{bill, } \xi_0 = u_2$;  (37) $\{1 \text{ use-chalkboard}_{\xi_0}\}$

(37) tests whether $j_3$ satisfies:

$$\forall w (\exists (w' \in \omega_{j_3,w}) \rightarrow use-slides_\omega(\xi_0, w'))$$

$$= \forall w (w \in K \rightarrow \forall w' (w' \in \min_\omega (\lambda w'' \cdotp give-talk_\omega(\xi_0, w''))) \rightarrow use-chalkboard_\omega(\xi_0, w'))$$

$$= \forall w (w \in K \rightarrow \forall w' (w' \in \min_\omega (\lambda w'' \cdotp give-talk_\omega(\text{bill})) \rightarrow use-chalkboard_\omega(\text{bill})))$$
(5')[ If a dog⁵ bites you⁵¹]

\[ (1) \text{if}(r, p_1, [p_2: u_1 \text{ dog}_0(u_1), \text{bite}_{p_1}(u_1, you)]) ; (2) [r; \xi_0, \omega_0, \xi_0 = u_1, \omega_0 = p_1]; \]

I might\(\text{shoot it}_0\)⁴

\[ (3) \text{if}(\omega_0, \omega_0, [1 \text{ shoot}_i(me, \xi_0)]); (5) [l \text{poss}_i, (\omega_0, \omega_0)] \]

Assuming (5) is said by John to Bill:

\[ i \quad j_1 \quad j_2 \quad j_3 \]
\begin{align*}
\text{me} & : \lambda w. john \rightarrow \rightarrow \rightarrow \\
\text{you} & : \lambda w. bill \rightarrow \rightarrow \rightarrow \\
\text{r} & : \lambda w \in K.K \rightarrow \rightarrow \rightarrow \\
 u_i & : \lambda w. u_i.j.w = \lambda w. d_{i} \wedge \\
 & \text{s.t. } (\text{dog}_i(u_i), \text{bite}_{p_i}(u_i, you))j_i \\
 u_2 & : ? \rightarrow \rightarrow \rightarrow \\
 p_1 & : \lambda w \in K.\text{min}_{j1,w} \text{ DB} \rightarrow \rightarrow \rightarrow \\
 p_2 & : ? \rightarrow \rightarrow \rightarrow \\
 \xi_0 & : ? \rightarrow \rightarrow \rightarrow \\
 \omega_0 & : ? \rightarrow \rightarrow \rightarrow \\
 \omega_1 & : ? \rightarrow \rightarrow \rightarrow \\
\end{align*}

(37) tests whether \(j_i\) satisfies the test for \(\text{poss}_i, (\omega_0, \omega_0)\), whether \(\omega_0.j_1\) is \(\rightarrow\) compatible with \(\omega_0.j_3\).

But \(\text{if a child}^{22} \text{ bites you}^{22}\)

\[ (4) \text{if}(r, p_2, [p_2: u_2 \text{ dog}_2(u_2), \text{bite}_{p_2}(u_2, you)]) ; (5) [r; \xi_0, \omega_0, \xi_0 = u_2, \omega_0 = p_2]; \]

I won’t\(\text{shoot}_0\)

\[ (57) [l \text{not}_i, (\omega_0, \omega_0)] \]

\[ j_3 \quad j_4 \quad j_5 \]
\begin{align*}
\text{me} & : \lambda w. john \rightarrow \rightarrow \rightarrow \\
\text{you} & : \lambda w. bill \rightarrow \rightarrow \rightarrow \\
\text{r} & : \lambda w \in K.K \rightarrow \rightarrow \rightarrow \\
 u_i & : \lambda w. u_i.j.w = \lambda w. d_{i} \wedge \\
 & \text{s.t. } (\text{dog}_i(u_i), \text{bite}_{p_i}(u_i, you))j_i \\
 u_2 & : ? \rightarrow \rightarrow \rightarrow \\
 p_1 & : \lambda w \in K.\text{min}_{j1,w} \text{ DB} \rightarrow \rightarrow \rightarrow \\
 p_2 & : ? \rightarrow \rightarrow \rightarrow \\
 \xi_0 & : ? \rightarrow \rightarrow \rightarrow \\
 \omega_0 & : \lambda h\lambda w. \in K.\text{min}_{j1,w} \text{ DB} \rightarrow \rightarrow \rightarrow \\
 \omega_1 & : \lambda h\lambda w. \in \cup_w \omega_j.hw. \rightarrow \rightarrow \rightarrow \\
\end{align*}

(57) tests whether \(j_3\) satisfies the test for \(\text{not}_i, (\omega_0, \omega_0)\) — i.e., whether \(\omega_0.j_3\) is \(\rightarrow\) inconsistent with \(\omega_0.j_5\).