Langage et enaction

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Initial questioning

The linguistic divergence

- Vocal speech = to pass an idea from a speaker to a hearer
- Non vocal speech (reflection, ideation) = to cause oneself to form an idea by means of a verbal process
- Reunifying the two dimensions: to speak is to cause one(self) to think = to elaborate an idea
- No matter who the intended or impacted target / orientee is, the same procedure is executed
- speaking does not require that intended meaning be determined in the first place; one will frequently become aware of something in the course of the verbal process
- to reduce this divergence the challenge is to elaborate a model of language dynamics which accounts for the emergence of meaning through the embodied speaking process without having to rely on pre-established or intended meaning

Experiencing speech (I)

- Speech is not an independent / autonomous activity: speech takes place during a respiratory half period, expiration
- To speak is to modify the acoustic quality of the expired air flow
- For the speaker this activity is perceivable directly by proprioception: nervous captors located in the various articulators (blade and apex of the tongue, hard and soft palate, cheeks, lips, glottis) record the coordinated activity of articulators in real time and reintroduce it into the structural loops of ensori-motor activity
- For both the speaker and the hearer this activity is perceivable indirectly through multimodal perception: hearing the sounds, seeing the other produce them
- In recorded experience the facets of multimodality are intertwined: each sensori-motor « item » is interconnected with al the others of its kin; hearing an /u/ will activate associations with the recorded experience of seeing a person rounding his lips or sensing oneself do so

Experiencing speech (II)

- In actual experience the interlocutors share analagous recorded experiences of sound production and perception which they apprehend differenciatially from their own stand points and dynamic experience but enact on the basis of shared knowledge: a common interpretation of one individual's vocal output is possible for all consciences perceiving differentiated inputs

- The motor control of the acoustic signal is the prerogative of one partner but all the other operations are distributed over all the partners involved

- Acoustic propagation has limits determined by the intensity of the signal (the power of the voice) and the environmental response (noise, echoes, harmonics, wind)

- These limits are overridden by technological artefacts (Bruner's amplifiers). They consist in extending the signal in space (telephone), recording it to make it repeatable in time (taping) and encode it using a motor-visual symbolic systems that will reflect perceivable luminous contrasts (writing). Modern technologies combine those features in varied and more or less complex ways (radio, television, internet: website pages, forums, chats, etc.).

Intimate speech

- Speech is also involved in thinking, reflection, meditation; « THOUGHTING »
- Inner discourse is qualitatively different from communicative discourse: more onirical, with a biased connection to « external reality », more chaotic (fewer entire sentences, more NPs, many subjectless predicates);
- however the basic bricks of inner speech are the same, only the orchestration is different
- Intimate speech retains some essential the sensori-motor properties of vocal speech
  - intonation, tone units, rhythm,intensity: one can think faster, louder, with a shrill voice; one can think oneself deaf and dumb
  - one may easily unwittingly start motorizing vocally the acoustic signal associated with the discourse;
- In my personal experience (although the data can hardly be checked or even mustered methodically) I know I tend to speak alone in attemps to help myself construct the meaning I am trying to bring into existence and conscious attention; whether somebody is witnessing the scene (my daughters) is of secondary importance
- INTIMATE SPEECH IS « PERCEIVABLE » and connected with motricity
- The experience of intimate, proto-vocal speech is very close to that of actual vocal discourse; it is tempting to envisage verbal thought as a partial anticipation of what the perception of actual vocal speech would be and sound like if it were actually voiced
- For this reason intimate speech has something in common with vocal speech: to speak is to make all consciences present « interpret » = construct meaning on the basis of the vocal procedure executed; to « think » is to do the same thing on the basis of the anticipated perception of the proto-vocal motor dynamics
- SPEAKING IS A DISTRIBUTED ORIENTING PROCESS that will affect differentially a collection of orientees

Experiencing language (III)

- Spoken language: an emitter originates an acoustic vibration perceivable by all recepters present in the spatial-temporal scene, technical amplifiers included: synchronous, concerted and distributed sense making

- Written language: an agent acts upon the environment in a way that will
  - leave a permanent visible trace (the alteration of a light-reflecting surface, detectable by visual perception in the form of contrasts)
  - affect his own self from the moment of the action onwards
  - affect other selves from the moment of perception onwards

- Written language is non-synchronous (diachronous) and social distribution relies exclusively on the writer's anticipations about the readership (acquired through experience: textual genres etc)

- Methodology: how does the status of conceptual units and « objects » (words) vary if one considers them as actions in synchronous co-construction of meaning (spoken language) or diachronous (written language)? The « word » is the abstracted paradigm of a collection of heterogenous actions / experiences in and upon selected environments (material and social) – a fact that is overlooked in Saussure's definition

2

Distributedness

Language and distribution

- Language is distributed in at least two senses:
  - concerning the individual, the construction of meaning stems from a dialogue between the different parts of the body. A word is a motor program correlated with the retrieval of a hybrid memory formed in the course of personal experience in society: « un mot est une puissante madeleine » (S. Robert)
  - concerning the interlocutive dyad, the construction of meaning is co-activated for all orientees involved by the leading orienter

- The interpretive process is both mechanistic (words do have core values after all) and probabilistic (the fine-tuning of values is parametered by contextual guidelines, including each orientee's psychological context, including emotion, knowledge, experience)

- As a result, interlocutive must be analyzed both in terms of cooperative concertation and differentiation, mismatch

Language and breath: respiratory distribution

- Speech can occur only during the expiratory half period of respiration, a pneumatic pendulum

- Speech is structurally constrained by this trivial feature

- The eligible intervals for phoning (expirations) are limited in duration, discontinuous and separated / distant; the uneligible intervals, inspirations, are experienced as segments that are not devoid of duration and which can be used by the hearers to resume their own turn of orienting control

- From a grammatical point a view the basic features of discourse happen to coincide with the physiological and metabolic constraints of phoning:
  - speech is fragmented in sentences, clauses, phrases, words, morphemes; even in superlatively agglutinative languages like Inuktitut (Baffin Island, West Greenland & Arctic Canada) fragmentation and discontinuity is inevitable

- Respiration is ONE of the bodily parametres forming the environment in which language and prosody emerge >>> the idea is NOT to make it an exclusive determination (reductionism) but (i) to admit it as a crucial element, (ii) to weigh out its role in the context of other parametres, (iii) to understand how developing language « spiralled its way » out of this initial constraint

- The human being is the only mammel to control its own breath = what connection with language? Has the pneumatic pendulum been subjugated by the vocal one?

Breath and language (II): prosody

- Prosody has strong links with the aforementioned constraints; several functions
- The format of utterances might well have coincided with pneumatic intervals (pneumatic determination): one expiration, one sentence. This is not the case: the connection between expiring intervals and syntactic groupings (in sentences, phrases, words) is language-specific, varies typologically and give rises to specific systems
- One function of prosody is to plan the connection between phases of semantic elaboration located in different breath units: announcing continuation, termination, reformulation, insertion
- As a result, another function of prosody is to handle « distributedness »: anticipating and staving off the hearer's possible attempts to take over the control of the orienting process
- Prosody is dependent on the rhythm and intensity of breathing and is strongly connected with the heartbeat and emotion: prosody operates at the interface between
  - uncontrollable emotions that will tend to disrupt the vocal dynamics of sense making
  - motor programmes (formes in experience) that will anticipate those possible disruptions that have been experienced, recorded, and are known to have this effect, both on sense-making and on the handling of distributedness (keeping control of the other's interventions)
- Prosody is both within language and between language and other functions (as an interface between speech and emotion); prosody is both autonomous (an independant channel shedding modal light on the worded « message ») and heteronomous (controlled by syntactic structures: tone units, or by words, tones in Chinese); prosody is both improvised and planned – an enactive « crosswords »
- Methodology: the experiencial facets of the prosodic experience, action, constraints and effects are to be taken into account together but not as a cluster of determinisms – how does language emerge in this environment and how does it involve into an increasingly autonomous ensemble of actions and effects?

3

Meaning :
the semantics of grammar

Distributedness in grammatical semantics

- Morphological systems may be examined in terms of distributedness: alternations tend to organize the coupling of orienting roles (orienter, orientee) with the actual participants in the dialogue along with those absent but construed
- Ex. 1: negation in Inuktitut
- Ex. 2: negation in Georgian
- Ex. 3: modality in English (*shall / will*, *may / can*)
- Ex. 4: tense in English (simple vs progressive)

Negation in Inuktitut

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- In the indicative a -*la*- morpheme is required before negative -*nngit*-
- The same morpheme (with the same phonetic and prosodic features) is used in other environments; modality « it seems that »; direct quotation; tenses: distant past and future (= disconnected from the speaker's personal experience);
- core value: -*la*- indicates the speaker is not commited to validating the semantic item affected, whose origin is delegated to another « voice » (in the sense of Ducrot)
- In the indicative -*la*- will mechanically re-assign the negated segment to a voice that is explicitely located as having different coordinates from the speaker's
- In the so-called « attributive mode » expressing general truths, rpinciples formed in collective experience and culture for which the speaker has no personal responsibility / commitment / involvement, -*la*- is not required in the presence of the negative: a voice different from the speaker's ca't be added if the original view was not the speaker's in the first place
- The use of -*la*- is a clear instance of how a grammatical alternation will analyze a semantic issue in the terms of the distributedness normally characterizing the whole of the exchange
- As a general rule one of the dynamic principles underlying the diversification and specialization of lexical and grammatical systems is the introduction in each part of discourse of a local discussion of some specific semantic issue in the terms of the features and configurations borrowed from the upper level.
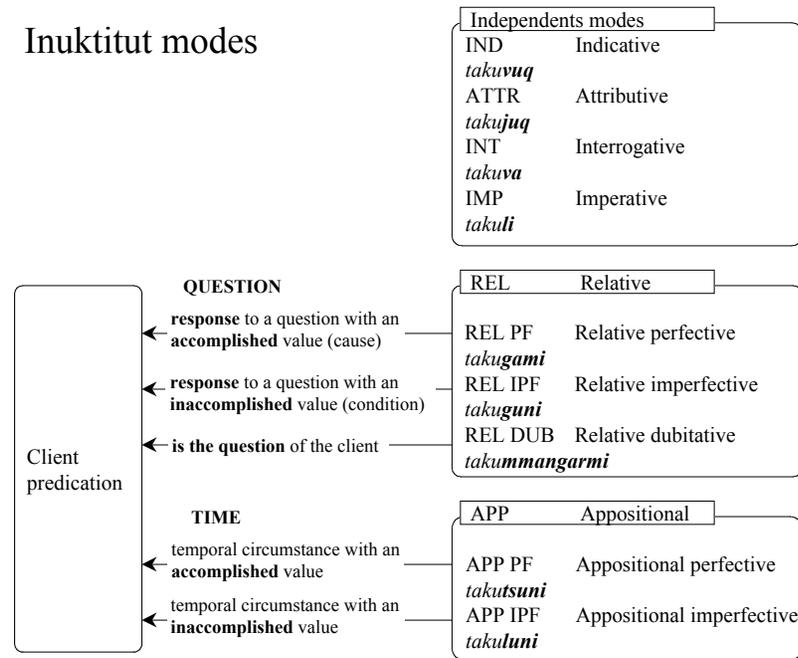
Negation in Inuktitut (EX)

- *qai-git! -la-vara*   I say to him: "come!"
  come-IMP 2S-**la**-IND 1S/3S

- *ataataala lirit*   say: "ataataak"! (say: "father!")
  father in the vocative case -**la**-IMP 2S

- *qaujijula vunga*
  qauji   *ju*   **la**   vunga
  -V VN   -V   VV
  to know   ATTR   DIFV IND-1S
  I wonder

Inuktitut modes

Inuktitut modes

Independents modes	
IND	Indicative
takuvuq	
ATTR	Attributive
takujuq	
INT	Interrogative
takuva	
IMP	Imperative
takuli	

QUESTION

response to a question with an **accomplished** value (cause)

response to a question with an **inaccomplished** value (condition)

is the question of the client

Client predication

TIME

temporal circumstance with an **accomplished** value

temporal circumstance with an **inaccomplished** value

REL	Relative
REL PF	Relative perfective
takugami	
REL IPF	Relative imperfective
takuguni	
REL DUB	Relative dubitative
takummangarmi	

APP	Appositional
APP PF	Appositional perfective
takutsuni	
APP IPF	Appositional imperfective
takuluni	

Negation and mode in Inuktitut

Paradigm code and name « *He sees (it)* »	POSITIVE	NEGATIVE (+ *not*)
IND MV **Indicative monovalent**	*taku-vuq*	*-nngi-__la__q*
IND BV **Indicative bivalent**	*taku-vaa*	*-nngi-__la__a*
ATTR MV **Attributive monovalent**	*taku-juq*	*-nngi-tuq*
ATTR BV **Attributive bivalent**	*taku-jara*	*-nngi-tara*

Gerogian: local conclusions

- *-la-* is a polymorphous operator
- Core value = orienting effect: introducing a voice other than the speaker's (Ducrot); theories of invariance (Guillaume: signifié de puissance, Culioli: forme schématique, Adamczewski: invariant métaopérationnel)
- Contextual coupling, re-profiling / fine-tuning: negation, modality, temporal and aspectual distance, etc; relativization of the omnipotence of invariance: Cadiot & Visetti 2001
- The core value is an illustration of distributedness: tackles the delegation of sense-making roles to multiple partners
- More generally, grammatical semantics tends to tackle this question by concentrating it into the semantic domain processed by the alternations (deixis, modality…)

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Negation in Georgian

- Negation is the linguistic counterpart of intersubjective action, struggle: a subject opposes another subject's intended action or hinders the completion of a project; similarly in language negation is a vetoing process in which a project assigned to a singular orienter is thwarted by another one. Ducrot calls « voices » the representations of those virtual agents enacted through grammatical systems in the interpretive process.
- The cognitive counterpart of the typological inventory of negative markers consists in modelling the nature of the vetoing process and the distribution of the agents involved
- Three negative markers in Georgian
- NU is allocutive: the source of the veto is intantiated by the speaker and the target is the hearer; NU = « you mustn't » / « you won't » (but the modal value stems from the negator, not from the verbal tense); NU emphasizes an intersubjective conflict between interlocutors
- AR is interlocutive: used when (according to the speaker) both the speaker and the hearer are to agree that something is false / won't happen etc; AR is used in case of concerted and assertive vetoing (source: interlocutors; target: to be determined in context – can be one of the interlocutors, or both, or none of them)
- VER is putative: is used when the agent issuing the veto is identified with neither interlocutor (but with something or somebody located in the world, in the « third person »; thus VER stand for impossibility: something other than ourselves will not have it.
- So the one criterion ruling the alternation is the inscription of zero, one or two of the interlocutors (enunciative roles) in the agentive role of the negation: the coupling of a specialized role (negation) with the general agents (orienter, orientee).

Negation in Georgian (EX)

- (1) ar -- ver -- nu

- (1a) (shen) ar caxval
-     you.SG NEG you.will.go
-     "You will not go"

- (1b) (shen) ver caxval
-     you.SG NEG you.will.go
-     "You will not be able go"

- (1c) (shen) nu caxval
-     you.SG NEG you.will.go
-     "Do not go"

Modal auxiliaries in English

- Similarly, English auxiliary split the assignment of modal standpoints between
  - a speaker who will NOT include the hearer: may, shall
  - a speaker is willing to admit that the hearer shares the same position: can, will

- Modality is deiontic when the raport de force is clearly staged with roles coupled with actual agents. When this link concerns the unmarked speaker and hearer the modality is shifted to the subject / predicate connection:

- « this must be true » / « you must believe me: this is true »

- HYPALLACTIC SHIFT: in the absence of the intersubjective partners concerned, the modal value is re-assigned to the process over which the interlocutors are disagreeing / negotiating

Modal auxiliaries in English (EX)

- *He may be rich but he is avaricious*

- *He can be a bore at times*

- *It shall happen in that day (Isaiah 7:18)*

- *My precious Black Widow shall rise (A. Cooper)*

- *He must sleep* « il faut qu'il dorme »

- *He must be sleeping* « il doit être en train de dormir »

Tenses in English

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- Simple tenses (present, past): orienting agent (responsible for the selection of the subject and the predicate) is identified with the speaker exclusively; the hearer is excluded from this role: the utterance is informative (generates knowledge)
« Platypuses hatch eggs and breastfeed their offspring »

- Progressive tenses (be + V-ing) scan stroboscopically the duration of a process witnessed by both interlocutors: the orienting role (the agent coupling S and P) is identified with both S and P so literally the sentence is NOT informative and the addressee is supposed to have already detected the event (Adamczewski: thematization and anaphora in metaoperational grammar). However the emphasis on objective duration entails subjective duration = the perceptual and psychological duration required to analyze the scene or event. The implicature is: « take your time to watch this and reflect, construe the presuppositions and implicatures that are to be extracted; in short take this picture as a symptom and establish the diagnosis »
« Daddy's reading the newspaper »: (mother to child – you've noticed this so please don't disturb him)

- Like many languages, English is « abstract » in that it obscures the intersubjective connection between interlocutors. As a result, aspectual and modal comments that are aimed at intersubjective negotiations are in fact morphologically applied to unconcealed, visible agents of sense making, in this case the subject and the predicate. More simply, the duration of the action symbolizes or is metaphorical of that of the intersubjective experience.

- I call this mismatch the HYPALLACTIC SHIFT. The universal cause is the obstruction of dialogic partners, and the universal effect is the diversion, the reassignment of values to available targets. And it does work as, as is shown by the enactive paradigm: interiority and exteriority, psychological and natural dynamics, are inseparable: language can process them in one stroke. Languages must have read Varela (= you must believe this) – see epistemic modality as a hypallactif shift of intersubjective deiontic modality.

- The manifestations of the hypallactic shift vary infinitely across languages. The connection between aspect and modality has long been investigated but current theories usually fail to detect the cause – the distributive grounding in dialogic intersubjectivity and interlocution and the invisibility of the corresponding agents; the dissociation of énonciation and énoncé.

Tenses in English (EX)

- *I see strange clouds* (Pocahontas, seeing the boat's sails move over the tree tops)
- *I am seeing pink elephants*
- *He's always telling lies.* (So beware of what he says)
- *The bride wore / was wearing a white silk wedding dress.*
- *When a twenty-year-old woman marries an eighty-year-old man, she is marrying his fortune.*

4

Meaning:
The semantics
of discourse

To mean

- To mean is to create semantic connections dynamically
  - to create knowledge if the connection had never been experienced before
  « Les cristaux liquides sont des liposomes »
  - to bring a semantic network to « someone's » consciousness so as to foster action (whether material / pragmatic, intellectual, emotional)
  « Suis-je en train de me faire avoir? »
  « Am I being cheated? »

Meaning

- To mean is to create new semantic connections in a given environment: « *tiens, il pleut* »

- Meaning is not necessary intended
  > the Scottish palm tree:
  « Mais qu'est-ce qu'il fout là, ce con? »

- Meaning is not unequivocal
  « Regarde, c'est de la neige, elle est blanche, c'est froid, ça colle, on peut en faire une boule et la jeter sur papa, regarde, poum! »

Semantic action

- Language enables semi-controlled, semi-probabilistic action upon the environment / selves coupling
- Intended meaning does normally not coincide with literal meaning
  « Daddy's reading the newspaper » (so please do not disturb him)
- Methodologically I'll start from the traditional distinction: literal meaning and pragmatic meaning. But this is to be corrected:
  - pragmatic meaning is partially planned by grammatical and lexical alternation
  - meaning is not fully intentional (illocution) and the effect (perlocution) cannot be reduced to a (mis)match between the project and the effect:
  J'ai horreur des chemises roses
  The effect of speech on oneself and others is not fully programmable, let alone fully controllable, and not even fully predictable
- Speech will catalyze action in the environment
  « mais qu'est-ce qu'il a à aboyer, ce chien? »
- *The train of thought is moving on:* speech will catalyze its own action
  « Ces chocolats? Ça fait Mathusalem qu'ils sont là! »
  « J'ai raté deux épisodes de plus belle la vie, demain je vais être larguée comme une merde »
- Meaning does not represent « external reality » but is usually obtained by matching a semantic construction against immediate experience (both verbal and non-verbal »
  « Tu la gares, ta bouse? »
  « Il peut pas te ramener, ton nain de jardin? »
  « Attendez, j'écarte les jambes » (on a train in Paris)

5
Lexical orienting

« Petit » 1

- « j'ai une acheté une petite robe »
- > the Adj does not qualify the visual property
- > the affective value of this Adj stems from motherese
- « on va mettre ses petites chaussures? »
- Hypallactic shift: the mother is speaking with her « petit » and shifts this quality of the interlocutive channel to the channel of interaction with the object that is common to both (cf. ON): « petit » gives verbal substance to the shared mother-child outlook on daily life objects
- From this value a more general use is derived = affectivity overruling a sense of guilt: petit minimizes the excess one indulges in (alcohol, undue expense…)
- *Je vous sers un petit apéro? – Non, un gros / Non, deux*
- *Je m'achèterais bien une petite Porsche*
- *This is a small Gaulish village / the little Gaulish village we know well*
- *Chiqu<u>ita</u>, chiqu<u>itita</u>, chiqu<u>itītita</u>; ahor<u>ita</u> vamos a cenar*
- <u>Oo</u>-hashi-de

« Petit » 2

- Subjects are totally unaware that in using « petit » the way they do they are actually shifting the emotional outlook from interpersonal connection onto the subject / object connection and tackling an « internal negotiation with oneself » (positive vs negative emotions): the use of « petit » does not express intended meaning, it is a verbal way to act upon the self

- Individual subjects are not in personal control of this hijacking of the adjective's « meaning » - it develops historically and collectively and both children and parents get into this habit in their own experience of language

- The operational value of the adjective seems to be incorporated by individuals and have an autonomous, distributed and social existence and « personal history » - develop and become autonomous / viable in an autopoietic way

- « petit » produces one's little negotiations with oneself on the social, collective stage

- Now in the light of this analysis, reconsider *grand* and *gros*, and realize how those words enable you to publicize those internal, emotional conflicts and handle them in the face of witnesses unwittingly, « à l'insu de votre plein gré »

Please echo my pulsions, I'm deaf

- The « lapsus », an authentic example:
- *Tu sais ce qu'il m'a sorti de bite en blanc, ce con? (3 times) Euh… de bite en blanc… c'est une expression, non? … Oh, mon Dieu!*
- Allegedly the lapsus is motivated by an autonomous instance of the self that will utilize similarities between intended phrases and lexical units connected with thwarted pulsions to smuggle the theme into the topic by means of minimal phonological substitutions
- Usually the lapsus remains undetected by the victim either because inhibition will not have it or because phrases like « de but en blanc » are interpreted and processed as unanalyzable whole and are not parsed
- But normally the addressee will detect the error (proving the parsing hypothesis wrong, and proving the inhibition hypothesis right, as the addressee is not supposed to undergo the same thwartings as the addresser), and react in a critical way (laugh, chuckles, silence, gaping eyes) – a taboo is being overridden – and the speaker will inevitably detect the incident, start reflecting upon its motive, or even talk about it, making it a topic; and eventually become aware of the semantic meddling
- My hypothesis is that if some autonomous agent belonging to the speaker's self does impulse the substitution, it does so in order to by-pass the same self's inhibitive defenses (other autonomous agents), submit the taboo to another, addressed self through language, have this other self react (for lack of inhibitive defense) in a way that will be detected by both, and promote the pulsion to a distributed and topical status, eventually affecting the initial « sender »: distributed operational closure; some internal sniggering gremlin manages to have itself noticed by a reactive witness
- The basic effect of the lapsus is to counter-act an individual enactive defense, a perceptual prejudice against words semantically connected with taboo pulsions; the trick is to spread the word, distribute the interpretive process to undefended perceiving consciousnesses, forming transitional coalitions / alliances

Words

- A word: an iterated action; sensori-motor coupling of articulations, multimodal perception, and distributed human attitudes in social contexts

- « Les mots sont de puissantes madeleines » (S. Robert 2003): what is a word reminiscent of, if anything? If the word is the madeleine, is « representation » the Piazza San Marco?

- The notion is a potential network of heterogenous « properties » / « features » = pieces of sensori-motor experiences

- The notion is federated by the very existence of a « label » to reactivate it; the galaxy of features may have no perceivable « objective centre » in the physical world and be abstract

- A concrete notion may have such an consensual centre but it still involves heterogenous experiences: CHIEN, DOG – something that one sees, feels, hears, smells, that will act in given ways and with which one may or must act in given ways

Phonaesthemes and ideophones

- In English some lexical fields incorporate consonant clusters that pinpoint a salient sensori-motor property of the notion: an access path into the network
  - SP: rotation, centrifugation, ejection, salience
  spin span spill speak spew speed spike
  - SPR: + agency (effort, control)
  spread sprawl spray sprinkle spear
  - SW: swim swap swoon switch
  - SK: (i) movement against a base / surface, (ii) section
  skin skull skid skate skip
  - SCR: + agency
  scrub scour screech scribble script scramble scrum Scrooge
  - ST: interruption, stability, fixity
  stand still stall state stoop stab stick stake stop stub
  - STR: + agency (force, tension, control)
  stretch string strive strike; stir, start, startle

- Consistent alternations:
  SW / SP (pendulum / rotation)
  SW / TW (dynamic pendulum / synthetic binarity) switch / twitch
- Connections with lexical classifiers in African languages and grammatical gender in IE languages
- Current theories are moving from traditional phonosymbolism and coming with models involving embodiment and sensori-motor experience (Philps, Bohas, Tobin, Toussaint, Lafont)
- The stakes: how semi-autonomous submorphological systems emerge in the lexicon, how they « spread » by analogy or metastasis to include a growing number of members in the club (by other processes than simple historical diversification of roots limited in number) – remotivation; how submorphemes orient access to networks through selected entries (this is far from referencial symbolism)
- Those submorphemes seem to orient a sensori-motor procedure for enacting a notion

Comparison & Metaphor (I)

- Metaphor lays the stress on how an object / event is (to be) experienced = enacted, with reference to analogous adventures, either explicitly (comparison) or by substitution (metaphor)

  *Tu me prends pour une **truffe** ?*
  = something to be eaten
  = a funny-sounding word: not serious

  *J'ai **grillé un neurone*** (a colleague)

  *J'me suis **<u>gauffer</u>** sur c'putain <u>d'escalator</u>* [sic]
  Cf. *Je m'suis gamellé dans l'escalier*

- Diverging features or normally incompatible

  *??? Elle a les **cannes** poilues*
  [personal experiment, perceived by hearers as a play on words]

Comparison & Metaphor (II)

- Experience is heterogenous and multimodal: the same notion may originate diverging trends of apprehension

  - *plonger en canard*: visual
  - *se faire tirer comme un canard*: agentive
  - *j'en ai marre de ce canard*: auditory

  - ***Je gamelle*** *presque tous les midis au bureau*
  - *J'me sui* ***gamellé*** *dans l'escalier*
  - *et puis je déballe, je déballe,* ***je gamelle****, mais je l'aurais ce paquet...*
  - *bon, qui* ***je gamelle*** *pour la prochaine couverture?*
  (= croquer, caricaturer)

- One specific sensori-motor angle may be used as a basis for lexical substitution so long as the experience enacted remains identifiable

  - *Et si les assiettes ne viennent pas à Framboise, Framboise* ***ira aux assiettes*** *!!*
  (= si je n'arrive pas à les commander par internet, je me déplacerai)

  Si ce tricard se fait alpaguer, il ***ira aux assiettes*** *!*
  Si cet interdit de séjour se fait arrêter, il passera en cour d'assises !
  DOUBLE MOTIVATION: assises > assiettes + se mettre à table > assiettes

Metaphorical operational closures

- Contextual encounters will foster renewed associations = autopoietic constructions:

Ouah la patate ! *En pleine lucarne !*

*- pour une place de parking certain sont pres a **se patater** pour une meuf certain serraient pres a se surriner je denonce toutes cette violence*

- En tout cas bon retour bienvenue parmi nous ! lol ! ***ça va bien se patater !*** *lol of lol-*

*- Pour la musique..euh.. j'aime pas du tout, ça **manque de patate**, **trop de miel** ! Sinon il ne faut pas qu'il fasse le festoche Emergenza.*

- BONSOIR GENTE DEMOISEAUX...COMMENT VA MON BATTEUR ADORÉ?
JE SUIS TON OMBRE, TA PEUR, TA MONOMANIE, TA PSYCHOSE!!!
GRRRRRR tremble sous ta pelure car un jour ou l'autre je te l'arracherais pour en déguster ta chair!!! ***Ta souris en manque de patate!!!***

Metaphorical orienting

- Metaphor will cause the orientee to enact sense in a way determined by the orienter; this plays a crucial role in intersubjectivity and interpersonal conflicts:

  - *Il peut pas te raccompagner, **ton nain de jardin** ?*

  - *Alors, pépé, tu la gares, **ta bouse***? (Sammy *Naceri,Taxi*)

  - *[Lettre ouverte à Renaud]*
  Cher Rono,
  *J'ai vaguement entendu **ta bouse** intitulée « Les Bobos » et en ton hommage <u>me suis fendu</u> d'un poème dont j'espère les rimes aussi <u>pourries</u> que les tiennes.*

- The metaphoric shift may be explicitly stated by the preposition *de*, indicating the path from the perceived object to the counter-perceptual judgment:

  - *Ça, c'est encore un coup de mon gland **de** mari* (+ LAPSUS)

- # 6

Syntactic orienting

Word order and syntax

- Syntax is a ritual chain of operations
- In language typology the orienting process that conveys sense making can be characterized by the *syntactic agenda*
- Lexical words have potential combinatory possibilities but utterances also have their own relatively autonomous patterns; as a result, to speak is to negotiate the coupling of lexical properties and clausal patterns

    - Ces chocolats? Ça fait Mathusalem qu'ils sont là!
    - Il y a le lino qui se décroche, je te méfie de ne pas trébucher dessus

Basque (I): NPs

- NP = [lexis] + [nexus]
  etxe + a   « house-the »
- LEXIS = the notional section
  - pronoun: ni « I »
  - semantic group [((Adv)) N (Adj)]:
  >>> oso etxe polit « very house nice »
  - non-finite clause
  - finite clause
- NEXUS = the functional section: determiners, number, case markers; an agglutinative chain of markers attached to the lexis's last lexical element, whatever its category
  - external links: a « the », k « plural »
  - internal links: syntactic connections with other arguments
  >>> simple: ergative –k, dative –i, inessive –n, connective –ko, allative -ra
  Bilbon « in Bilbao », *etxean* « in the house », etxera « to the house »
  >>> multiple: -ra-ko-a-n ALL + CONN + DET + INESS
  - *etxerakoan* « while going Back home »
- Both the lexis and the nexus will vary in complexity
  - *Lorrainetik ibiltzerakoan* « En passant par la Lorraine… »

Basque (II): ergativity in cases

- Cases in Basque are cumulative except three: the ergative –k, the dative –i and the absolutive -Ø
- Those cases associate the lexes with Gestaltian positions in a network to be understood in terms of force dynamics:
  - ABS = the base
  - ERG = a salient peak of instability (typically the agent, the source, the controller, the addresser)
  - DAT = a salient trough of stabilization (typically the goal, the recipient, the addressee, the affectee)
  The complete Gestaltian figure = a vector connecting a source to a goal through a base
- Only ABS is obligatory (the uninflected base), ERG and DAT are optional (the inflected saliences); in Inuktitut grammatical tradition the ergative is also called the relative case, and the inflection marks the link, the connection
- So four argumental configurations are observed: A, E+A, D+A, E+D+A
- A is semantically neutral and its interpretation depends (i) on the lexis (animate vs inanimate, etc) and (ii) the optional co-occurrence of obligatory A with optional E and/or D
  - A   sagua « the mouse »: agent, patient… anything
  - EA   katuak sagua « the cat, the mouse »: agent, patient
  - DA   niri, hau « to me, this »: experiencer, object / phenomenon
  - EDA senarrak, emazteari, loreak « the husband, to the wife, the flowers »: source, trajector, goal
  The Gestaltian figure is reprofiled in the coupling process with the lexes
- A LEXICAL ARGUMENT IS OBTAINED BY COUPLING A LEXIS WITH A NEXUS
  There forms a lexical matrix of arguments with a centre (A) and optional satellites (D & E) connected by an oriented trajectory

Basque (III): conjugations

- The Basque verb is normally final: it appears when all the lexical arguments are formed (lexis / nexus couplings)

- It has multiple agreement: the radical receives affixes equivalent to Romance pronouns; each of them retrieves one of the A, D and E previously obtained couplings
  - *ba**d**aramaki**ot*** « I bring it to him »

- If the verb's radical receives one of the three aspectual markers (equivalent to Romance infinitive and participles) the cluster of pronouns is relocated in a final cluster or « auxiliary » totally devoid of lexical stem
  - *erama**ten** **d**i**ot*** « I usually bring it to him) »

- Aspectual variation in the prefinal « participle » and valency variation in the final auxiliary are totally independant from each other = the « periphrastic conjugation is MODULAR (vs English, French)
  - *eraman dut* « I've brought it », eraman diot (+ to him)
  - *eramango dut* « I'll bring it », eramango diot (+ to him)

Basque (IV): agglutinative variation

- The verb (or auxiliary) receive two kinds of markers: arguments (bound pronouns) and parametres (tense, mood and allocutivity)
- Parametres are morphologically fixed and tend to be positionally fixed in the cluster:
  > Ø vs *–n*: tense (neutral vs past)
  - *eman nion* « I gave it to him »
  > Ø vs *-ke*: mood (neutral vs irrealis / hypothesis)
  - *eman nioke* « I could give it to him »
  > Ø vs *-ka* / na: allocutivity (zero vs aimed at a specified male or femaled addressee)
  - *eman zionan* « I have given it to him » (female addressee)
  - *eman niokenan* « I could have given it to him, female addressee)
- « Pronouns » vary both morphologically and positionally in the cluster
  > in relation to the co-occurrence of other arguments:
  - etorri da « he has arrived » (A3 = d)
  - etorri zait « he has come to me » (A3, D1: A3 = za-)
  > in relation to the presence of inflected parameters:
  - eman diot « I have given it to him » (E1 = -t)
  - eman nion « I gave it to him » (E1 + -n = n-)

Interpretation (I): the Basque verb

- In the orienting process, nominal arguments are obtained by lexis / nexus couplings in the frame of a Gestaltian network
- In the verb, the arguments are re-processed in a second network incorporating (i) the relations between arguments and (ii) coordinates of tense, mood and allocutivity
- The verbal cluster is not merely componential: it « perceives » external elements and incorporates them giving them a shape that varies with its own internal context: the verb enacts the nominal matrix in the context of its own parametres; morphology displays the enactive perception of a bottom-up input that encounters a top-down intentional prediction (modularity and autonomous agents)
- The Basque verb evidences a kind of high-resolution morphosyntactic « imagery » of coupling, enactive dynamics, but this is not imagery (forms are not symbolic): those vocal action control the orienting process affecting all perceiving orientees (hearer and speaker – cf section one « paradox »

Interpretation (II): the clause

- In the canonical order, when all lexical participants are explicit, the utterance evidences a chain of couplings: (i) forming the arguments (NPs) and (ii) merging the arguments (analysis, synthesis; dramatis personae / cast, action / plot)
  - *Senarrak emazteari loreak eman dizkiot*

- I skip non-canonical variation (implicit arguments, reorderings: thematizations, focalizations, the role of prosody)

Something « real » :
Harry Potter eta sorgin-harria

- **Biharamunean, 1Malfoyk> ezin zuen sinetsi 2Harry> eta 3Ron>, nekatuta-itxuraz baina poz-pozik, oraindik Hogwartsen zeudela. Izan ere, hurrengo goizean 4Harryk> eta 5Ronek> pentsatzen zuten 6[hiru buruko txakurrarekin izandako topaketa]> 7abentura> paregabean izan zela, eta 8[gogo handia]> zuten halako beste bat izateko. Bitartean, 9[Gringottsetik Hogwartsera eramandako fardelaren berri]> eman zion <Harryk10 <Roni11, eta 12[denbora asko]> eman zuten beren artean galdezka zer izan ote zitekeen 13[hain babes handia]> behar zuen <[gauza hura]14.**

  1Malfoy couldn't believe his eyes when he saw that 2Harry and 3Ron were still at Hogwarts next day, looking tired but perfectly cheerful. Indeed, by next morning 4Harry and 5Ron thought that 6meeting the three-headed dog had been an excellent 7adventure and they were 8quite keen to have another one. In the meantime, 10Harry filled 11Ron in 9about the package that seemed to have been moved from Gringotts to Hogwarts, and they spent a 12lot of time wondering 14what could possibly need 13such heavy protection.

7

Morphological orienting

Cognematics (I)

- In some languages morphemes are not opaque, they are clusters of phonological operators orienting specific process. In English:
- TH- / WH- : object = available / unavailable in working memory
- -S / -T: present / past notional identification
- I / A: speaker-centered / interlocutors-based
- THIS
  th-: retrieval of some experienced « item » available in common working memory (interlocutive scene) + speaker-based current notional identification
  This is Cathy; in this sample of Martian clay
- THAT
  th-: retrieval of some experienced « item » available in common working memory (interlocutive scene) + interlocutors-based acquired notional identification and concerted re-assessment
  Look at that! (= in a film: a man drinking milk from a cow's udder)
  >>> you know what I'm talking about, both the object and the notion; on this basis prosody, mimick, gestural kinetics etc orient your judgment (*crosswords*)
- Self-organised systems: the orienting properties of phonemes may have stemmed from their sensori-motor dynamics but (cf respiration and prosody)
  > (i) orienting dynamics have evolved into autonomous profiles (« arbitrariness ») and
  > (ii) sounds are not meaningful in isolation: phonological contrasts are relevant when forming pairs in closed, autonomous systems (this /that vs pin / pan, sick / sack) that can be detected as such in linguistic experience and language acquisition
  >>> those morphological autonomous systems are more densely represented in children's literature (Christmas Carols, nursery rhymes) than in general speech and can be easily detected in early experience (motherese) even if they become diluted in later experience

Cognematics (II)

- In English cognematics (grammatic « submorphological alternations » with specific orienting dynamics is represented by a paradigm of phonological contrasts
  - M : speaker-based
  (me, my, may, must; loom, seem)
  - N : negation (veto)
  - R / S / T: aspect (inchoation / effort, continuity, termination / interruption)
  - -LL: future (*will*, *shall*; *till*)

- Grammatical markers are complex orienting operators why in some cases involve more simple orienting sub-processes conveyed at submorphemic level

- This phenomenon is widely and diversely represented and emergent in natural languages that are not related spatially, temporally and typologically (IE languages, Japanese, Basque, Atlantic languages, Polynesian languages, Semitic languages)

- Probably not a trace of a mother tongue (cf. the refutation of Ruhlen's hypothesis); rather, a polygenetic trend: forming semi-autonomous orienting processes on the basis of vocal sensori-motor activity – a possible diversion, not a deterministic motive

Verbal « thoughting »

- Lexical semantics: coupling immediate experience with historically acquired, hybridized, amalgamated, hierarchized networks of associations = « notions », both individual and social (« conventional », cultural)
- Morphological semantics: linking processes connecting notions (internal links, prepositions, auxiliaries…) and non-linguistic elements (external links: deixis, modality…)
- Syntactic semantics: the agenda of morphological and lexical couplings (Basque vs other types)
- Prosodic semantics: syntactic planning and interface with distributed context (personal emotions and intersubjectivity)
- The study of language as a « thoughting process » must investigate the coordination and integration of the preceding features envisaged as semi-autonomous agencies and explore the « cognitive effect » of the verbal process: speech as a coordination of « immediate consciousness » and « experienced categories » leading to the formation of « ideas » that are distributed (individual / interlocutive / social); microgenesis

CONCLUSIONS

- Speaking is a distributed orienting process involving multiple structural loops and operational closures
- « enactics » can be applied to different spatial and temporal scales of agencies
- All the basic concepts are to be redefined in terms of action and enaction (word, morpheme, syntax, prosody, dialogue, interaction, sense and sense-making…)
- Linguistic typology can use those principles to propose models for sense-making in specific language. Only later and out of empirical data can a linguistic-cognitive typology emerge and shed new light on the question of universals, which remain a distant target
- All the basic concepts are to be reconsidered in the child of language forming at all scales of autopietic development: the growing infant, the tribes and communities, the « language »
- Language sheds specific light on the question of individuation of the person / of the group / of the species in the respective environments (micro-, meso-, macro-): linguistics revised in the context of an enactive outlook can in turn bring invaluable data and proposals in the field of « enactive sciences »
- Language has made it possible for mankind (i) to leave its ecological niche (where on earth can one live naked and dumb?), (ii) to alter global environment and itself for its own benefit (unless… ?); somehow language is the key element leading to the current context and should be at the core of our preoccupations.