

Thinking with Things

Culture, Embodiment, Language and Action

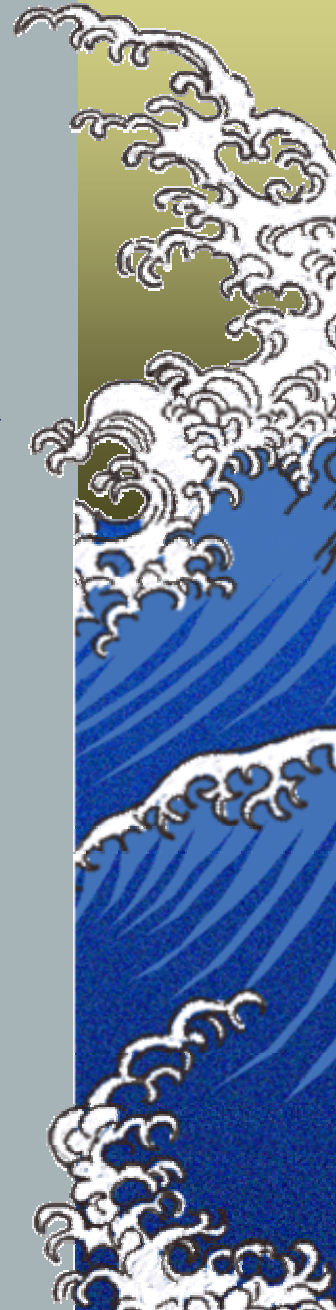
FICLA Symposium

Joensuu, 24-25 September 2004

Chris Sinha

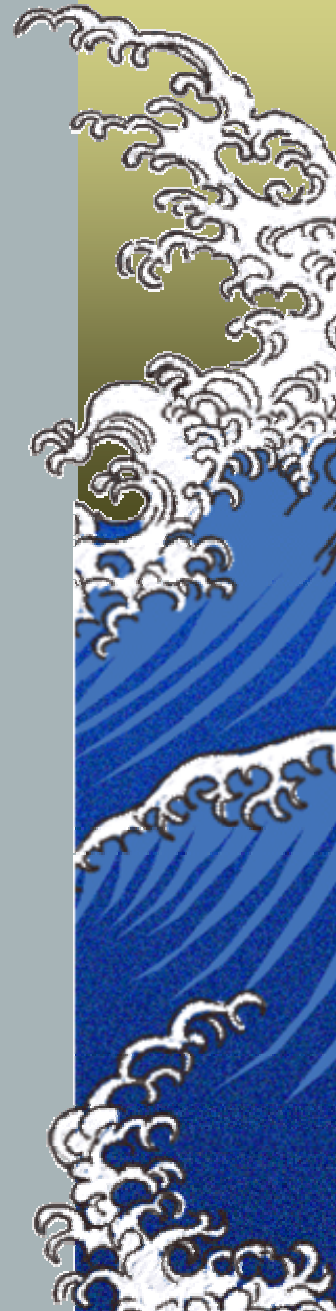
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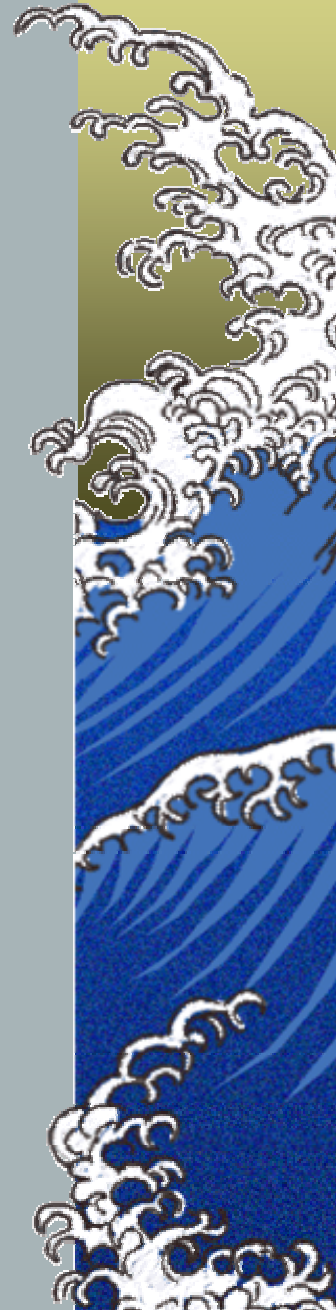
Theoretical inspiration

- ▶ *The integration of the Vygotskian cultural-historical (or socio-cultural) approach with CL's "embodied mind" and blending theory*
- ▶ Every function in the child's development appears twice: first on the social level, and later, on the individual level; first, between people (interpsychological), and then inside the child (intrapsychological) ... All the higher functions originate as actual relations between human individuals.
Lev Vygotsky, 1896-1934.



What is Culture? (biological perspective)

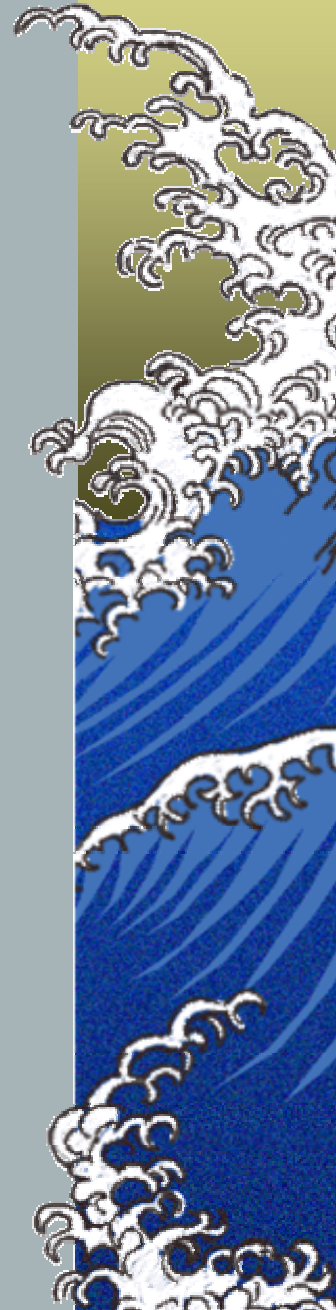
- ▶ *intra-species group differences in behavioural patterns and repertoires*
- ▶ *which are not directly determined by ecological circumstances (such as the availability of particular resources employed in the differing behavioural repertoires)*
- ▶ *which are learned and transmitted across generations*



What is Culture?

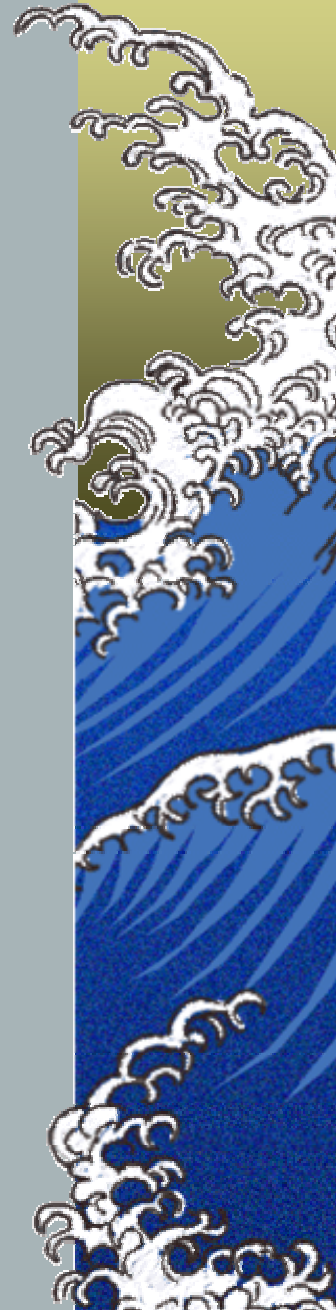
(human social perspective)

- ▶ *A pattern or patterns of meaning thematized by a stock of narratives and other “thematizers”, such as rituals, myths, icons, emblems.*
- ▶ *A symbolic order realized and reproduced in semiotic systems/vehicles (including language), and in enduring artefacts and institutions; and enacted and renewed in social and communicative practices.*
- ▶ *The binding of cognition and affect in specific space-time configurations which could be called (after Raymond Williams) “structures of feeling”.*
- ▶ *Not “as opposed to” Nature, but linked to and interfaced to nature by conventions which canalize and partially govern the reproduction-enaction of the cultural-symbolic order.*



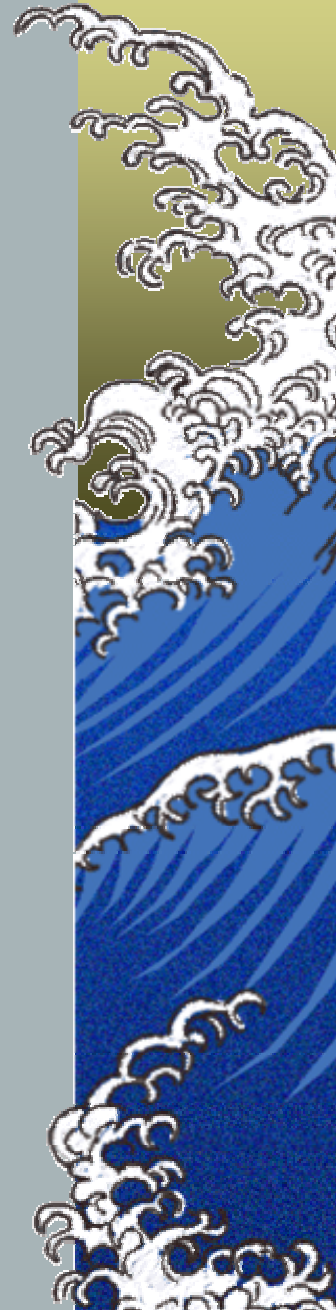
Representation: the standard (mentalist) view

- ▶ *Representation is primarily (foundationally) a relationship between mind and reality*
- ▶ *External representations such as language, pictures, signs and symbols derive their representational properties from mental representation*
- ▶ *Problem: how to evade the Cartesian trap in attempting to explain how physical systems come to have representational properties*



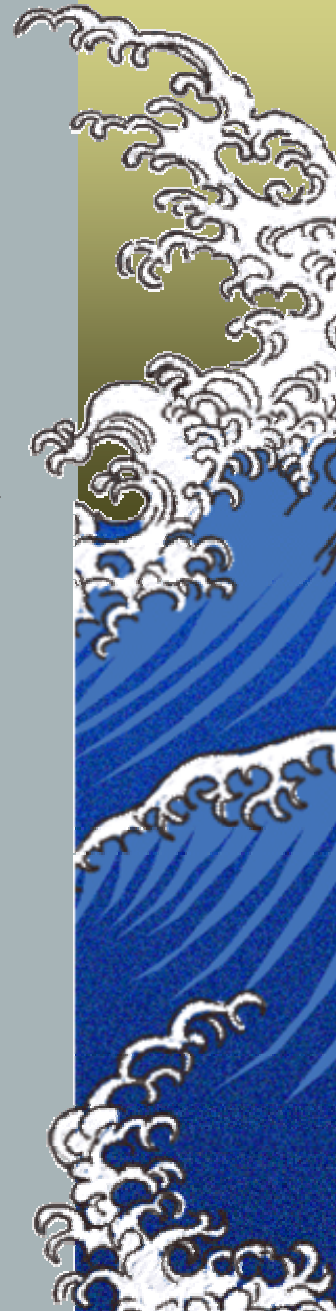
Representation: the alternative (situated, contextualist) view

- ▶ *Representation is a cognitive and semiotic relational category within, and constitutive of, human ecological reality*
- ▶ *Human ecology materially represents and sustains human practices, including communicative practices*
- ▶ *A communicative representation is such in virtue not of its intrinsic properties, but of normative conditions on communicative and significative practice*
- ▶ *Mental representations are uses of capacities of the mind, based in neural processes but referring to the world (including symbolic and fictive worlds)*



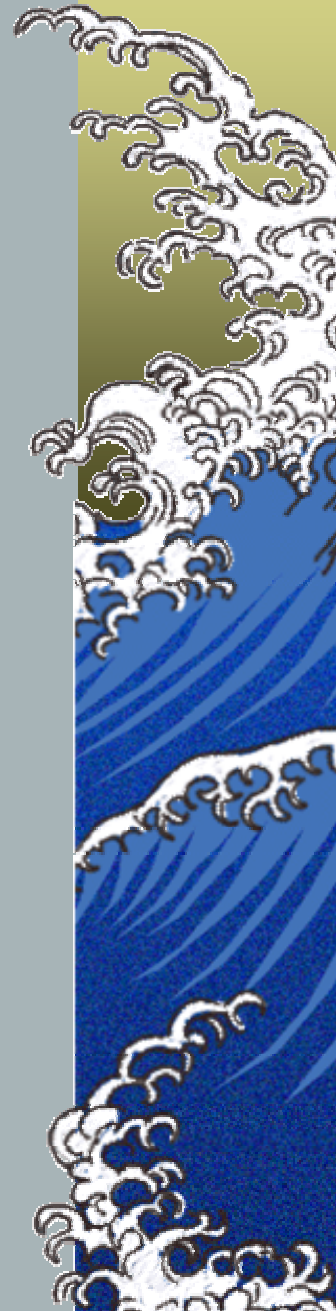
Artefacts

- ▶ *Artefacts (ranging from tools to notations and images) can be "read" but (unless they are textual artefacts) they are not texts*
- ▶ *Artefacts represent the practices they support, constrain and amplify. They can represent both non-representational and representational (e.g. symbolic) practices.*
- ▶ *The representational role in each case involves canons or conventions, but neither the meaning nor the convention need be identical between different practices, universes of discourse and communities (e.g. the symbolic values of status commodities)*
- ▶ *Situated Embodiment extends beyond the individual organism (the mind beyond the skin)*



Culture and environment in human development

- ▶ *The environment represents socio-cultural practices and norms in its material, symbolic and interactional structure*
- ▶ *The environment develops along with the learner (activity settings)*
- ▶ *The ecological world anchors material praxis, cognitive praxis and communicative praxis (universes of discourse)*
- ▶ *Naturalizing and developmentalizing cognition means socializing cognition*



CULTURE

Material Culture

Symbolic Culture

TOOL

Activity/Practice

SIGN

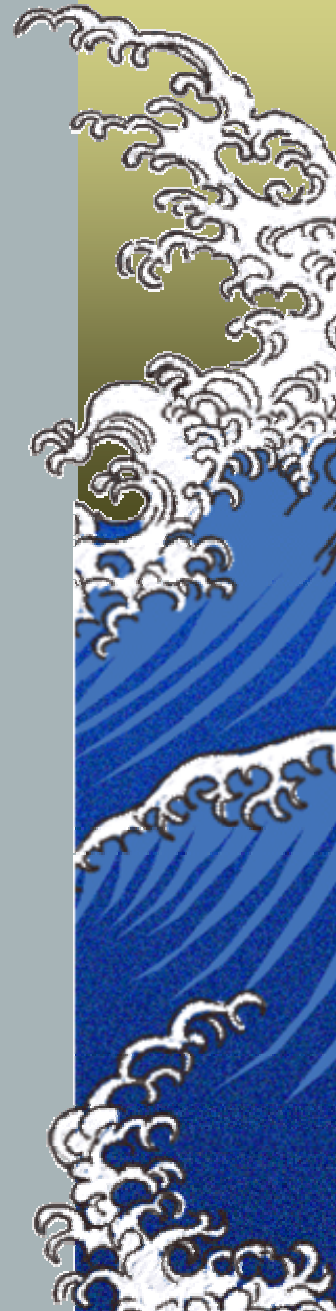
World-directed

Mind-directed

ARTEFACT

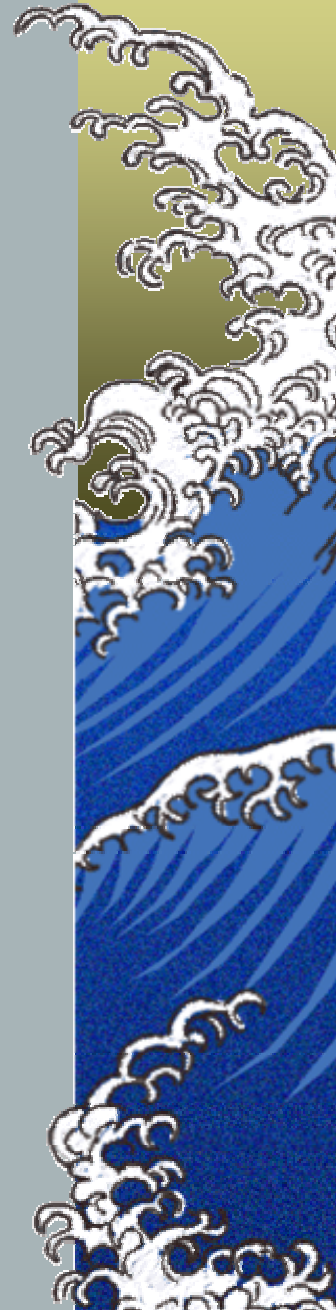
Levels of Learning

- ▶ *Learning 1: State Change*
 - ▶ *Mechanism*
 - ▶ *Reinforcement, Hebbian mechanisms etc*
- ▶ *Learning 2: Learning to learn*
 - ▶ *Organism*
 - ▶ *Set, Strategy, Generalization and Transfer, Microdevelopment*
- ▶ *Learning 3: Learning to be a learner*
 - ▶ *Person*
 - ▶ *Identity, Normativity, Narrativity*



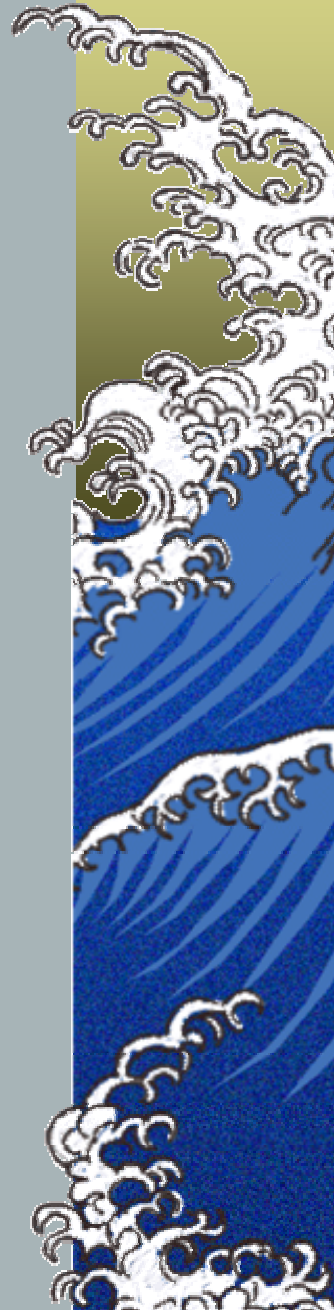
Meaning construction

- ▶ *The developmental process of meaning construction is contextualized by the significations carried by objects (artefacts)*
- ▶ *New meanings emerge through processes of conceptual integration (blending) in which material aspects of human ecology are integrated into symbolic acts and structures*
- ▶ *This process is inherently (initially) social and dialogic*
- ▶ *The capacity for Intra-personal meaning construction is based upon Inter-personal (intersubjective) negotiations of meaning*



Symbolic play

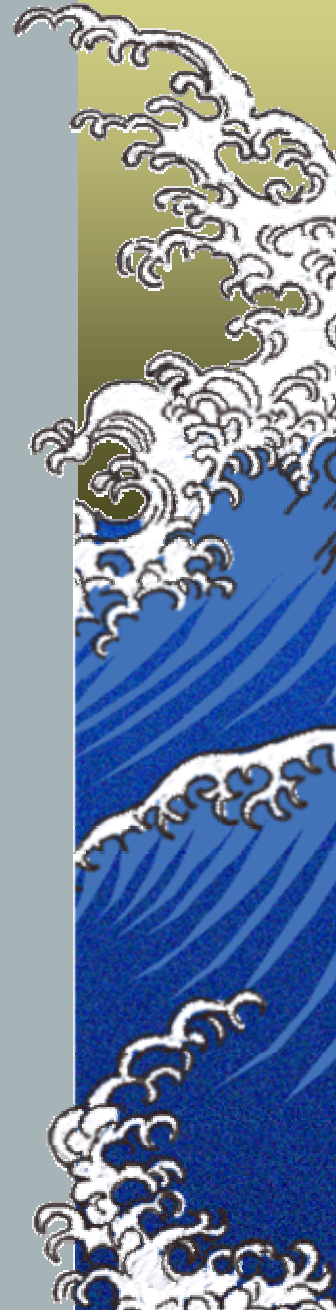
- ▶ *Symbolic play encompasses play with objects as well as socio-dramatic play*
- ▶ *Symbolic play with objects emerges around the second year of life, sociodramatic play around 4 years*
- ▶ *All symbolic play involves the projection of imaginary or fictive cognitive and/or symbolic value onto entities in the child's immediate environment*
- ▶ *Symbolic play is (as Piaget recognized) an instance of Hockett's "displacement", or of what we might call virtual cognition*



The cowboy, his hat and the girl

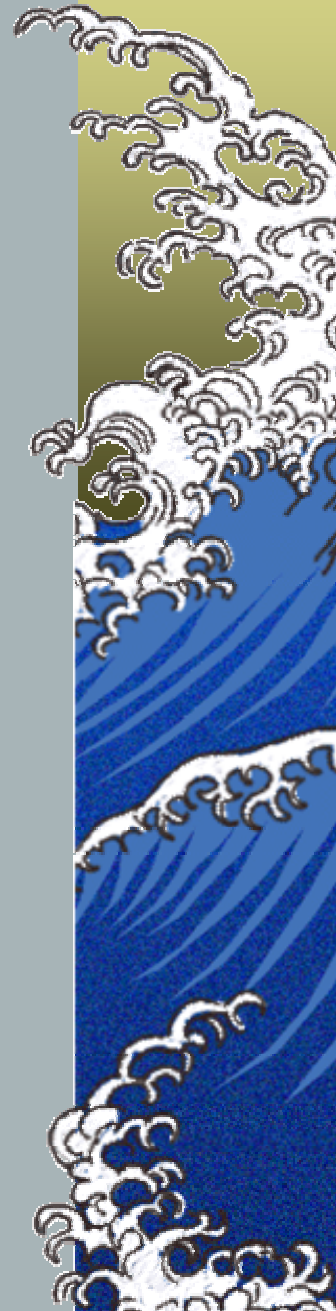
Smolka, ALB, De Gões, MCR & Pino, A.

1997 (In)determinacy and the semiotic constitution of subjectivity. In A. Fogel, M. Lyra & J. Vaalsiner (eds.) Dynamics and Indeterminism in Developmental and Social Processes. Mahwah, NJ: Lawrence Erlbaum Associates, pp. 153-164.



Background, Stage and Enactment

- ▶ *Background: Beto Carrero is the proprietor and cowboy hero of a popular Brazilian theme park called Beto Carrero World.*
- ▶ *Stage: the house corner of a primary school classroom, with props including a cowboy hat.*
- ▶ *Enactment: Sociodramatic play by Alcione, Thaís and Camila (5-6 yr old girls). Alcione is in the role of daughter of Thaís, Camila has no role yet assigned. Suddenly, the hat falls off a shelf. Alcione picks it up and puts it on.*
- ▶ *The world of Enactment is the play world.*

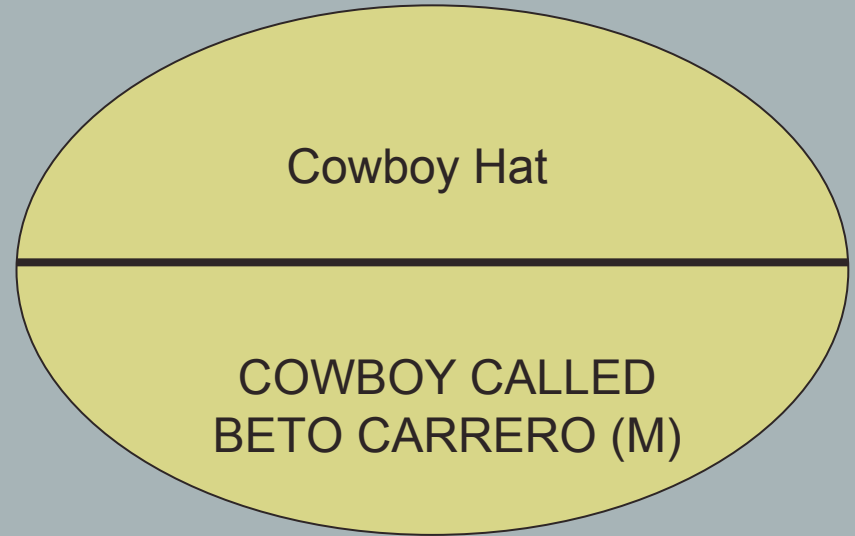
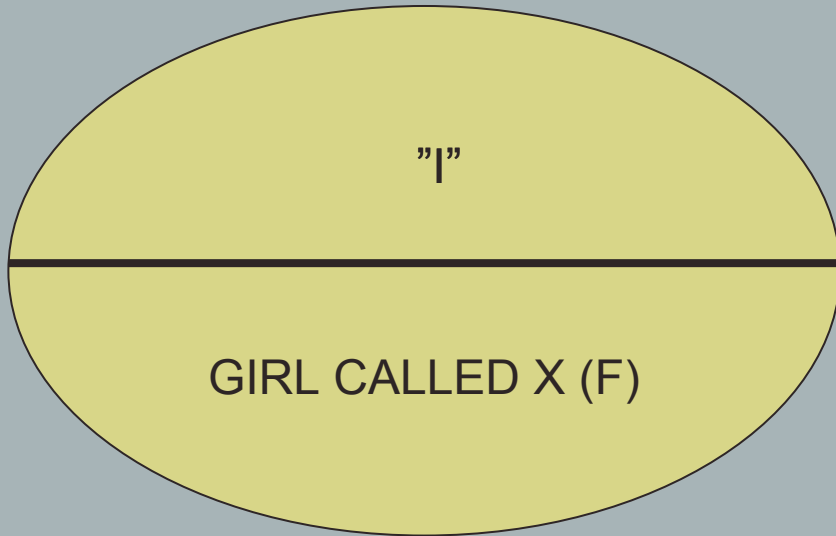




The play

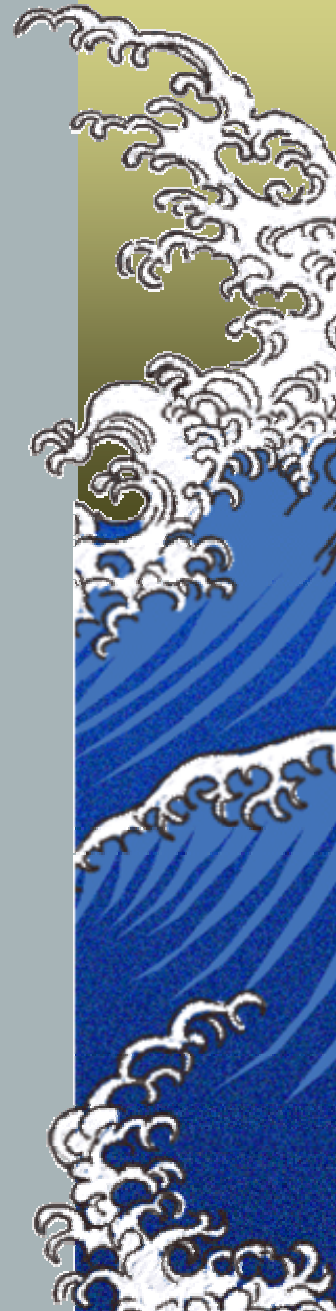
1. *Alc: You were, you were ... Do you want to play with this hat?*
Alc. puts hat on Thaís' head, who takes it off again and puts it aside
2. *Alc: Then give it to me, give it to me, Thaís!*
Alc. picks up the hat again
3. *Tha: Dear, mother doesn't like hats*
Alc. puts the hat on again and looks at Tha.
4. *Tha: You look pretty!*
Alc. laughs. Camila takes the hat from Alcione. Thaís is writing.
5. *Tha: Veronica* writing down the name she has given herself
6. *Tha: What's your name?* to Alc.
7. *Alc: My name is ... mine is Bete, Bete Carrera*
8. *Cam: Mine is Bete Carrera too.*
9. *Tha: Ahn... it can't be. Then I'm called ... Bete.*
10. *Alc: I'm called ... I'm called ...*
11. *Tha: I'm called Bete Carrera!*

BACKGROUND – UNIVERSE OF DISCOURSE
GENDER, IDENTITY,
BETO CARRERO WORLD



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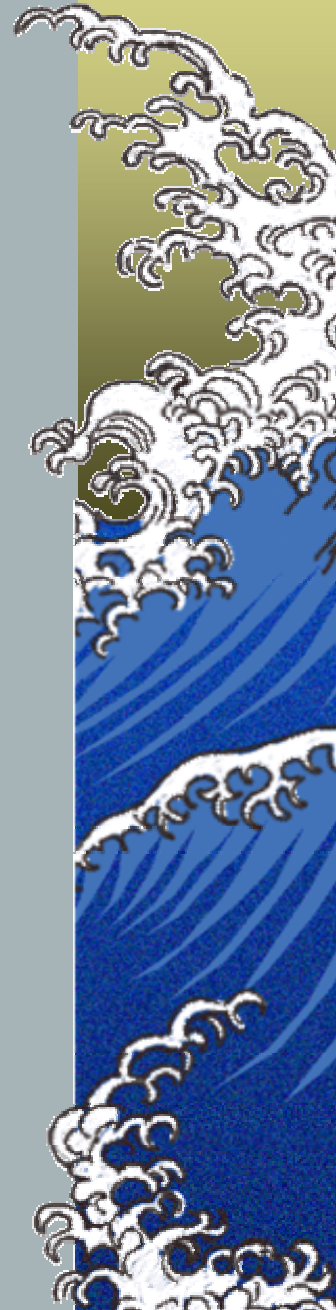
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ARTEFACT

Formalist and Functionalist views of language, communication and learning

- ★ *Language is a formal structure. Communication is transmission of ideas. Learning is the internalization of the system on the basis of linguistic input.*
- ★ *Language is a semiotic vehicle and a cognitive tool. Communication is signifying action in an intersubjective field. Learning is situated, embodied and socially scaffolded. Embodiment and mind extend beyond the skin.*



Paradigms and Perspectives

- ▶ *Language is a normative institution*
- ▶ *Institutions both support and constrain social and communicative practices*
- ▶ *Institutions can be viewed from both external ("objectivist") and internal ("situated") perspectives*
- ▶ *These perspectives are complementary and each represents a moment of dialectical inquiry*

