

SOMICS Workshop on

‘Ostensive communication, social learning, and cultural transmission

in small-scale and large-scale societies’

15 October, Room 101

Program

9.00 Tanya Broesch – *‘Social learning in small-scale societies’*

Michelle Kline – *‘How to learn about teaching’*

10.30 coffee break

11.00 Mikołaj Hernik - *‘Infant-directed speech helps disambiguating the content of ostensive referential communication for human infants’*

Kata Oláh, Ildikó Király *‘Natural Pedagogy and the core processes of learning and acting in social groups’*

12.30 buffet lunch with Poster Session in room 102

14.00 Tara Callaghan – *‘Children acquiring the ways of their groups:*

*cultural developmental studies of imitation, pictorial symbols, pretense, and fairness’*

Philippe Rochat – *‘Possession psychology factoring culture and development’*

15.30 coffee break

16.00 Vlad Naumescu – *‘Pedagogies of prayer: Teaching orthodoxy in South India’*

Dan Sperber – *Closing remarks*

Abstracts

*Social Learning in Small-Scale Societies*

Tanya Broesch

Simon Fraser University, Burnaby, BC

Ethnographic reports of teaching and learning across the globe are in contrast with current theories of social learning – specifically Natural Pedagogy. Reports indicate that observation and imitation are the primary forms of learning across the globe, suggesting that direct teaching is specific to Western or urban societies where there is an emphasis on formal education. Current theories of social learning suggest that direct teaching in the form of ostensive cues (natural pedagogy) is critical/central to cumulative cultural evolution, facilitating the transmission of complex information across generations with high fidelity. Not only do ethnographic reports indicate that direct teaching is rare, they also suggest that the learner is responsible for learning in non-Western and small-scale societies with adults producing little to no face-to-face interaction with infants and little regard for an infant or young child as a person capable of learning. Lastly, there are strong cultural norms against adults modifying their behavior in child-like ways. These reports challenge existing theories of the universality of natural pedagogy and the use of ostensive cues to direct attention during a learning situation. I sought to investigate these reports with a multi-method, cross-cultural approach. Using natural and structured observations, interviews and experimental techniques, I examined parent-infant and parent-child interactions in traditional, small-scale villages in Tanna, Vanuatu and in urban Vancouver, Canada as well as a unique society in Tanna living in similar ways to traditional villages yet rejecting formal education and Westernization. I report commonalities across societies in parental behavior modification (acoustic modification, affect mirroring, ostensive cues), yet societal differences in the behavior form. I will present these findings as well as discuss ongoing and planned collaborations for a close systematic examination of natural observations across diverse human societies.

*How to Learn about Teaching*

Michelle Kline

School of Human Evolution and Social Change, Arizona State University

Despite a growing interest in the theoretical importance of pedagogy, or teaching, in human cultural learning and social development, the form and function of human teaching behaviors outside of Western classrooms is not well understood. In fact, cultural anthropologists continue to argue that teaching is rare outside the West, while researchers in child development and psychology assume that pedagogy is a human universal. The present study uses a novel typology of teaching behavior that includes both Western-style classroom teaching and more subtle, everyday teaching behaviors. These behaviors are united as “teaching” in that they all evolved as *behaviors that facilitate learning in others*, yet they differ in the specific learning problems they solve. The evidence I present shows that informal teaching is present and commonplace in these Fijian villages, and that the costs and benefits to teachers and pupils pattern teaching behaviors within and between relationships. This study lays the theoretical and methodological groundwork for future comparative studies of variation in teaching behaviors across human populations, social relationships, and the life course.

*Infant-directed Speech Helps Disambiguating the Content of*

*Ostensive Referential Communication for Human Infants*

Mikołaj Hernik & Gergely Csibra

Central European University, Budapest

I will present two recent series of studies investigating the role of infant-directed speech (IDS) in disambiguating the content of ostensive communication for human infants. First series shows that IDS alone enables 6-month-olds to extract directional information from highly ambiguous dynamic luminance-patterns that are typical of the human eye. These results suggest a critical role of IDS in very early sensitivity to the deictic referential gesture of gaze-shift, which allows for finding the referent of communication. Second series of studies with 13.5-month-olds shows that IDS facilitates encoding of newly demonstrated functions of novel tools as their enduring generic - rather then transient episodic - properties. These results suggest that IDS plays a role in disambiguating the scope of demonstrations and further in stabilizing cultural knowledge. Together the results are consistent with the view that human infants are well equipped to receive ostensive referential communication and that one function of IDS, among other ostensive signals, may be facilitating sensory-motor responses and cognitive processes that enable fixing the referent and encoding the communicated content as generic knowledge.

*Natural Pedagogy and The Core Processes of Learning and Acting*

*in Social Groups*

Kata Oláh, Ildikó Király

Eötvös Loránd University, Budapest

Extended research has supported the idea that the capacity to represent and think in social categories constitutes a fundamental characteristic of the human cognitive system; even human infants and young children are sensitive to the boundaries of certain social groups. However, the function this capacity serves is still debated. A novel proposal to explain this phenomenon is that during social categorization the human mind aims at mapping out social groups defined by a certain set of shared knowledge. Foremost, as a basic mechanism, ostensive communicative signals induce universal epistemic trust and openness in order to learn from social partners. However as the role of Natural Pedagogy is to transmit culturally relevant knowledge, we believe, children should become sensitive to the *cues of shared knowledge* to maximize the benefit of teaching situations. Thus we assume the categorization of potential ‘teachers’ has important *epistemic advantages* for humans, most prominently at the beginning of their life: the identification of reliable sources of information for the sake of cultural knowledge acquisition*.*

The presentation will focus on a set of empirical studies that are in line with the above proposal: these studies underline that children are ready to selectively trust and learn from in-group teachers when their demonstration involves culturally determined information’.

*Children Acquiring the Ways of their Groups: Cultural Developmental Studies of Imitation, Pictorial Symbols, Pretense, and Fairness*

Tara Callaghan

St. Francis Xavier University, NS, Canada

I will present selected findings from a decade of cultural developmental research investigating children’s early social cognitive abilities, symbolic functioning (pictorial, pretense), and prosociality. This work bridges fundamental questions of human communication and cooperation. An underlying theme of the talk will be how the research examines the foundational mechanisms underlying cultural transmission of these human behaviors, and where there are gaps in our understanding of the mechanisms.

*Possession Psychology Factoring Culture and Development*

Philippe Rochat

Emory University, Atlanta, GA

Moral concerns do arise primarily from issues around possession. Possession psychology is indeed central to morality.  Depending on culture, kids grow under various pressures to own and protect possession. However, universally, once one has invested his own personal effort into something, be it physical or purely psychological, this investment makes such something “his”. It gives rise to an irresistible sense of ownership and entitlement. In turn, such sense opens up the possibility of bartering, gifting, sharing, stealing, and in general, the possibility of social exchanges as well the negotiation of value and the construction of a consensus around the equivalence of increasingly disparate (hard to compare) things. It also gives rise, from the second year of life to social tallying: the possibility of social debt creation and tracking, reputation management which, I will propose, is a major trademark of our self-conscious species. I shall review empirical evidence both illustrating and supporting such general assertions.

*Pedagogies of Prayer: Teaching Orthodoxy in South India*

Vlad Naumescu

Central European University, Budapest

 This talk explores pedagogies of prayer among St. Thomas Christians in South India describing shifts in their epistemic stance and their effect on social learning. More than other religious traditions Orthodoxy is centered on 'mysteries' and the claim that meaning is beyond human grasp. Unlike ritual performance which remains opaque and prone to overimitation, Sunday school teaching is centered on explanation and text-based learning. Looking at the contexts and types of explanation it provides, I suggest that rather than inviting a form of Socratic learning this exegetical explanation is meant to reproduce the ‘mystery’ at the core of religious knowledge.