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sont, l'un et l'autre, professeurs de psychologie au Département de Sciences Cognitives de l'Université d'Europe Centrale (CEU) où ils co-dirigent également le Centre de Développement Cognitif.

Gergely Csibra a obtenu son Doctorat à Budapest, puis a travaillé à l'Unité de Développement Cognitif du MRC et à Birbeck College à Londres, avant de retourner à Budapest en 2008. Ses recherches portent sur différents aspects du développement cognitif du jeune enfant. Il étudie en particulier le traitement visuel chez le bébé depuis le niveau de l'attention spatiale et du contrôle des mouvements oculaires jusqu'au niveau de l'interprétation des actions observées en termes de buts et de la compréhension des signaux de communication, en passant par les niveaux intermédiaires de la perception des objets et des visages. Il s'intéresse également à la manière dont les processus cognitifs sont implémentés dans le cerveau humain et aux contributions que l'étude du développement cérébral peut apporter à la compréhension du développement cognitif dans la petite enfance.

György Gergely a fait ses études de psychologie à University College London et à l'Université de Columbia où il a obtenu un doctorat en psycholinguistique expérimentale. Il a également obtenu un second doctorat en psychologie clinique de l'enfant à l'Université HIETE de Budapest. Ses recherches portent principalement sur le développement social et cognitif et l'apprentissage culturel, la compréhension de l'action et le raisonnement téléologique dans la petite enfance, la théorie de l'esprit et la psychopathologie du développement. Il publie dans trois grands domaines: sciences cognitives, développement cognitif et socio-émotionnel et théorie développementale clinique et psychanalytique et psychopathologie du développement. Plusieurs prix internationaux ont récompensé ses travaux : Guggenheim Fellowship, 2004, Sylvia Brody Prize for Developmental Research, NYPA, 2004; Grady Prize for best book on clinical theory, 2003, NAAP, USA; APA's Beach Comparative Psychology Award, 2001, Resident Fellow, CASBS, Stanford, 2007-8; Charles Simonyi Research Prize, 2010.

Sélection bibliographique

2010 CSIBRA, G. & GERGELY, G. NATURAL PEDAGOGY AS EVOLUTIONARY ADAPTATION. *PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY B*, 366, 1149-1157.

2010 CSIBRA, G. RECOGNIZING COMMUNICATIVE INTENTIONS IN INFANCY. *MIND & LANGUAGE*, 25, 141-168.

2009 CSIBRA, G. & GERGELY, G. NATURAL PEDAGOGY. *TRENDS IN COGNITIVE SCIENCES*, 13, 148-153.

2009 GERGELY, G. KINDS OF AGENTS: THE ORIGINS OF UNDERSTANDING INSTRUMENTAL AND COMMUNICATIVE AGENCY. IN: U. GOSHWAMI, (ED.). *BLACKWELL HANDBOOK OF CHILDHOOD COGNITIVE DEVELOPMENT*. 2ND EDITION. OXFORD: BLACKWELL PUBLISHERS.

2006 CSIBRA, G. & GERGELY, G. SOCIAL LEARNING AND SOCIAL COGNITION: THE CASE FOR PEDAGOGY. IN Y. MUNAKATA & M. H. JOHNSON (EDS.), *PROCESSES OF CHANGE IN BRAIN AND COGNITIVE DEVELOPMENT, ATTENTION AND PERFORMANCE XXI* (PP. 249-274). OXFORD: OXFORD UNIVERSITY PRESS.

2006 GERGELY, G., & CSIBRA, G. SYLVIA'S RECIPE: THE ROLE OF IMITATION AND PEDAGOGY IN THE TRANSMISSION OF CULTURAL KNOWLEDGE. IN: S. LEVENSON & N. ENFIELD (EDS.) *ROOTS OF HUMAN SOCIALITY: CULTURE, COGNITION, AND HUMAN INTERACTION* (PP. 229-255). OXFORD: BERG PUBLISHERS.

2003 GERGELY, G., & CSIBRA, G. TELEOLOGICAL REASONING ABOUT ACTIONS: THE ONE-YEAR-OLD'S NAIVE THEORY OF RATIONAL ACTION. *TRENDS IN COGNITIVE SCIENCES*, 7, 287-292.

Conférences Jean-Nicod 2011

Natural Pedagogy

Conférence du 7 novembre
Non-Verbal Generics

Non-verbal demonstratives, like pointing to something or showing something up, pick out their referents as particular objects or sets of objects individuated by spatial means. Despite of this, we have repeatedly found in studies with human infants, children, and adults that, when such gestures are used ostensively and the context does not suggest otherwise, they are taken to refer to the object kind that the referent represents rather than to the particular object present in the context. This paradoxical phenomenon of non-verbal demonstrative reference to kinds parallels some core properties of generic linguistic expressions. In particular, generic constructions are unmarked, there is a 'default' bias towards generic interpretation of ambiguous sentences, and the predicates of generic expressions are expected to reflect essential, kind-relevant properties that are tolerant to counterexamples. We argue that non-verbal demonstrative reference shares these properties, which reflect fundamental design features of the cognitive mechanisms subserving human ostensive communication.

Conférence du 9 novembre
Opaque Knowledge

Instrumental actions performed by non-human primate species pursue a restricted range of goals that directly satisfy basic biological needs of the actor, and employ means that are transparently related to the physical properties of the goal object and the visible situational constraints on action. In contrast, several properties of human goal-directed actions and culturally transmitted instrumental skills render them causally or teleologically 'opaque' for a naive observational learner. Human actions may be teleologically opaque because they are directed to goals that are far detached from their immediate biological needs and because they involve multiple outcomes. Humans also frequently perform hierarchically organized sequences of goal-directed actions where local sub-goals can be identified only in terms of their relation to the final goal. Actions can also be causally opaque because the means they adopt or the manner in which they are performed leaves it unclear to the observer how (or whether) they are causally connected to the ends they achieve. The causal and teleological opacity of human instrumental actions represents a non-trivial learnability problem for purely observational social learning mechanisms. We propose that this learnability problem led to the evolutionary selection of a new type of social learning mechanism provided by communicative action demonstrations, which highlight and actively guide the learner's attention to the relevant aspects of the cognitively opaque instrumental actions to be acquired. We argue that both producing and interpreting such communicative knowledge demonstrations rely on specific adaptations. Evidence on observational learning of novel instrumental actions by human infants versus non-human primates supports our proposal for a human-specific system of cultural knowledge transfer based on ostensive communicative demonstrations.

Conférence du 14 novembre
Being Addressed

In order to learn from others by communication, human infants must interpret certain acts as communicative in nature. We propose that there are at least two ways by which infants are prepared to receive information from others. First, they possess a skeletal format for representing communicative intentions, which are understood as second-order intentions referring some further informative intentions. Setting up such representations is triggered by the reception of ostensive signals, such as eye contact and special intonation, and some of these signals are innately specified. Second, infants assume the referential nature of the signals coming from the source of ostension. Thus, while they have to learn how (verbal and non-verbal) signals refer, they do not have to discover that they do so. We present empirical evidence supporting both proposals.

Conférence du 16 novembre
Natural Pedagogy

Ostensive communication evolved as a species-unique form of epistemic cooperation in humans. Communication can induce epistemic gain both by means of ostensive reference to relevant episodic information about a particular referent (when the relevance applies to the 'here-and-now' only) or by manifesting relevant generic knowledge about referent kinds. In spite of this symmetry in functional use, we frequently find that non-verbal ostensive communication is assumed to make reference to, and manifest relevant knowledge about, kinds rather than particulars. We hypothesize that this built-in 'genericity bias' is a design feature of ostensive communication that is an evolutionary signature reflecting the specialized function that ostensive communication may have been selected for: the fast and direct (non-inductive) transfer of generic and socially shared knowledge about kinds. It is argued that this cognitive adaptation was crucial for making cognitively opaque cultural knowledge easily learnable and efficiently transferable across generations. We propose that by having evolved specific cognitive biases, human infants are prepared to be at the receptive side of communicative knowledge transfer, which, together with adults' inclination to pass on their knowledge to the next generation, constitute a system of 'natural pedagogy' in humans.

PÉDAGOGIE NATURELLE (NATURAL PEDAGOGY)

GERGELY CSIBRA AND GYÖRGY GERGELY

Lundi 7 novembre de 16h à 18h

NON-VERBAL GENERICS

École des hautes études en sciences sociales, Amphithéâtre
105 Boulevard Raspail, 75006 Paris

Remise du Prix Jean-Nicod et cocktail après la conférence.

Mercredi 9 novembre de 14h à 16h

OPAQUE KNOWLEDGE

École normale supérieure, Salle des Actes
45, rue d'Ulm, 75005 Paris

Lundi 14 novembre de 14h à 16h

BEING ADDRESSED

École normale supérieure, Salle des Actes
45, rue d'Ulm, 75005 Paris

Mercredi 16 novembre de 14h à 16h

NATURAL PEDAGOGY

École normale supérieure, Salle des Actes
45, rue d'Ulm, 75005 Paris

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philosophie cognitive

Conférences Jean-Nicod de

L'esprit humain, son organisation, sa nature, ses relations avec le corps et avec le monde sont depuis toujours parmi les thèmes centraux de la philosophie. La psychologie contemporaine elle-même a pris naissance au sein de la philosophie. Elle s'est émancipée, mais l'émergence des sciences cognitives consacre d'une certaine façon le retour de la philosophie dans ce champ de recherche. Les développements de l'informatique et des neurosciences, en jetant une nouvelle lumière sur les phénomènes mentaux, ont eu pour effet de relancer le débat philosophique. La « philosophie de l'esprit » est ainsi plus florissante que jamais. Ce retour n'a rien d'une régression, car la philosophie dont il est question est en phase avec la recherche scientifique, informée par elle et en constante interaction avec elle.

Les Conférences Jean-Nicod visent à promouvoir les recherches philosophiques se rapportant à la cognition et à faire connaître en France les travaux réalisés à l'étranger dans ce domaine. Le conférencier, sélectionné par le comité Jean-Nicod, présente ses recherches au cours d'un cycle de conférences qu'il rassemble ensuite en un livre.

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COLLECTION JEAN-NICOD

(MIT Press et CNRS Editions)

J. FODOR, THE EIM AND THE EXPERT : MENTALESE AND ITS SEMANTICS (1994) - F. DRETSKE, NATURALIZING THE MIND (1995) - J. ELSTER, STRONG FEELINGS : EMOTION, ADDICTION, AND HUMAN BEHAVIOR (1999) - J. PERRY, KNOWLEDGE, POSSIBILITY AND CONSCIOUSNESS (2001) - J. SEARLE, RATIONALITY IN ACTION (2001) - R. G. MILLIKAN, VARIETIES OF MEANING (2004) - D. DENNETT, SWEET DREAMS : PHILOSOPHICAL OBSTACLES TO A SCIENCE OF CONSCIOUSNESS (2005) - G. HARMAN AND S. KULKARNI, RELIABLE REASONING : INDUCTION AND STATISTICAL LEARNING THEORY (2007) - R. JACKENDOFF, LANGUAGE, CULTURE, CONSCIOUSNESS : ESSAYS ON MENTAL STRUCTURE (2007) - Z. W. PYLYSHYN, THINGS AND PLACES : HOW THE MIND CONNECTS WITH THE WORLD (2007) - M. TOMASELLO, ORIGINS OF HUMAN COMMUNICATION (2008).

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2011

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GYÖRGY GERGELY

NATURAL PEDAGOGY

