

La comprensione delle intenzioni

La “Teoria della mente” viene definita come la capacità di attribuire agli altri stati mentali quali credenze, desideri e intenzioni

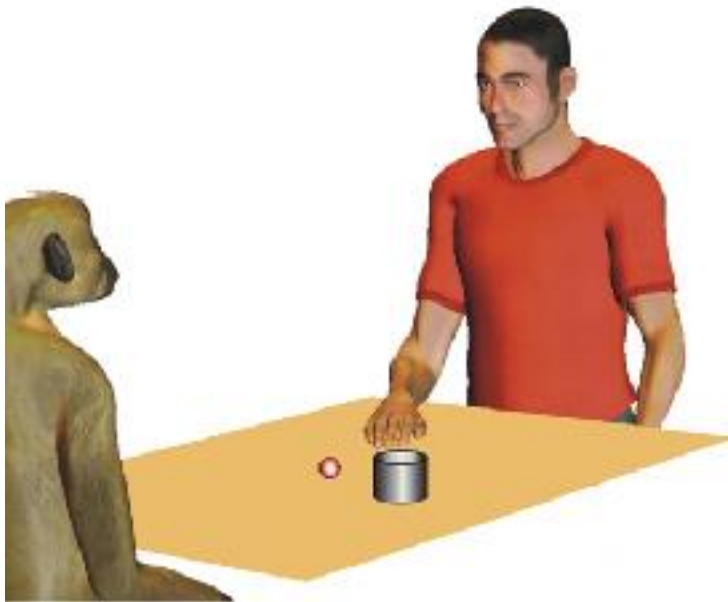
Due teorie principali:

Teoria della teoria: bambino come uno scienziato che osserva e testa delle ipotesi su come gli stati mentali possono produrre un comportamento

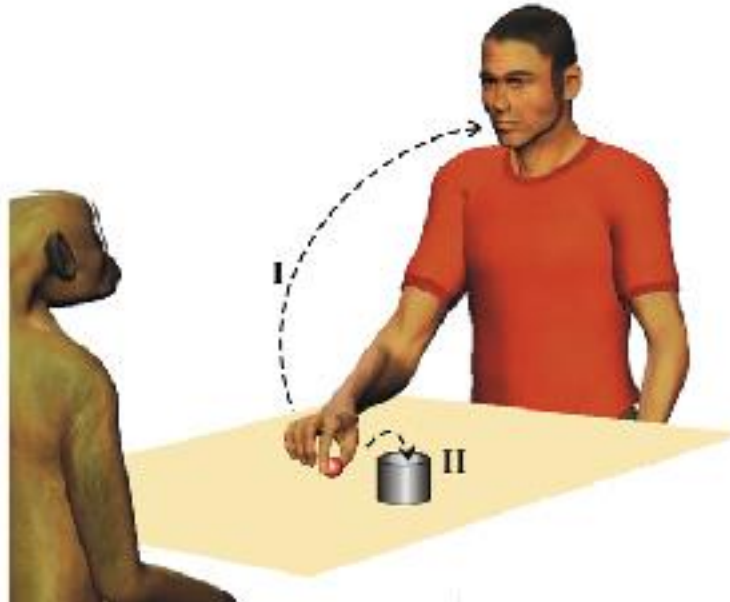
Teoria della simulazione: l’osservatore comprende implicitamente lo stato mentale dell’altro simulando internamente il comportamento osservato.

Compito visivo

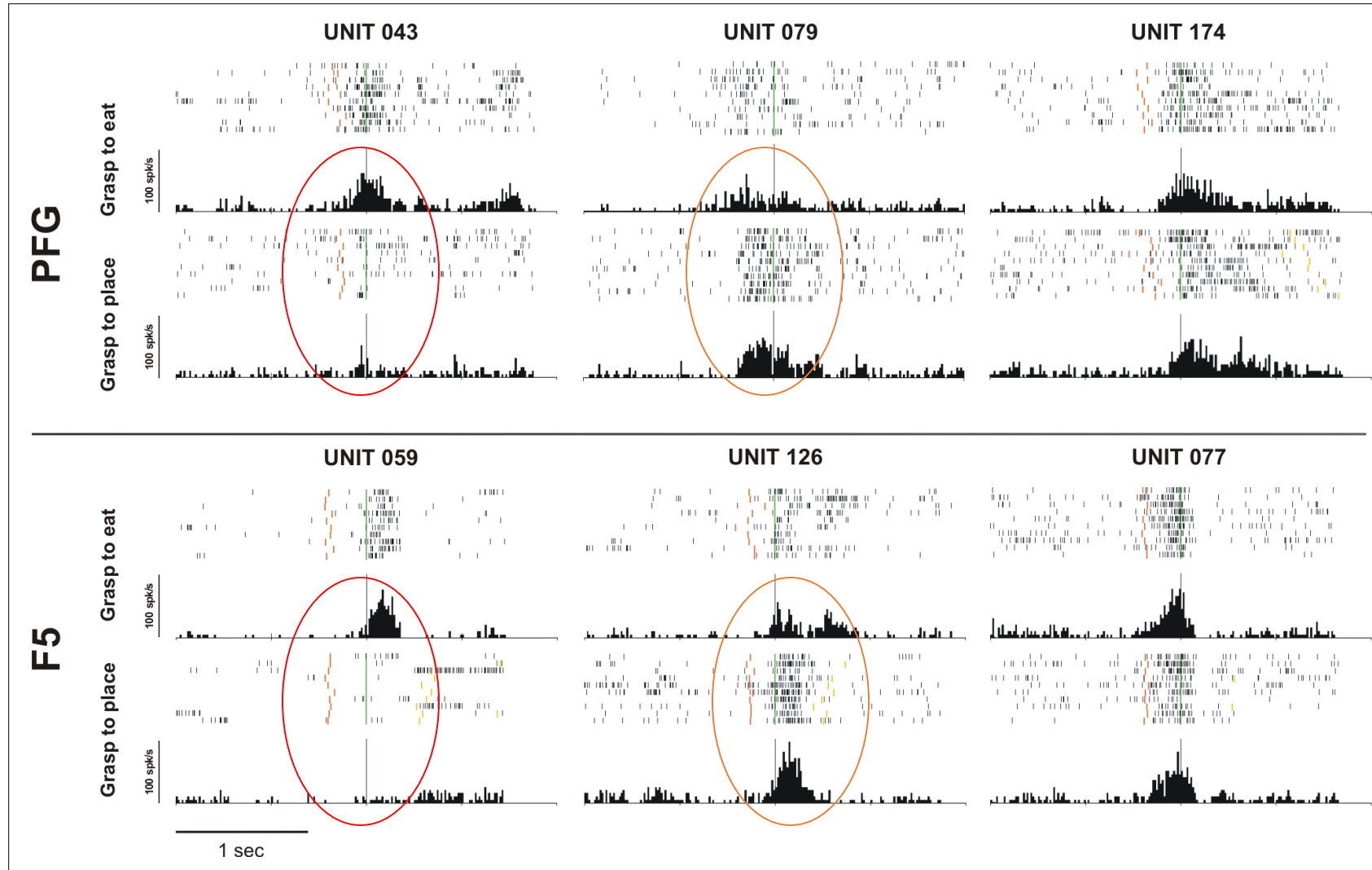
A



B



Risposte dei neuroni mirror di PFG e F5 durante il compito visivo



I neuroni mirror di PFG e F5 *predicono* l'intenzione dell'agente osservato

Codifica dello scopo dell'azione nei neuroni di afferramento di PFG and F5 durante l'osservazione dell'azione svolta da un altro

A) PFG neurons

Action Goal Related		Not Action Goal Related	Total
Eating > Placing	Placing > Eating	Eating = Placing	
17 (81.0%)	4 (19.0%)		
21 (77.8%)		6 (22.2%)	27 (100%)

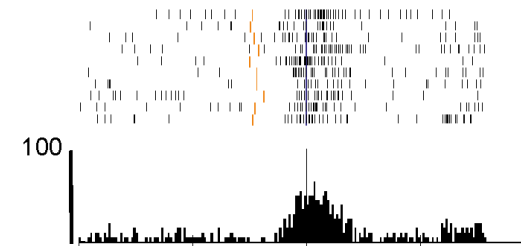
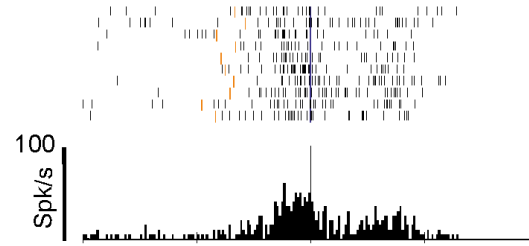
B) F5 neurons

Action Goal Related		Not Action Goal Related	Total
Eating > Placing	Placing > Eating	Eating = Placing	
23 (92.0%)	2 (8.0%)		
25 (69.5%)		11 (30.5%)	36 (100%)

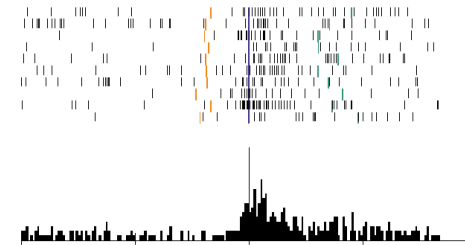
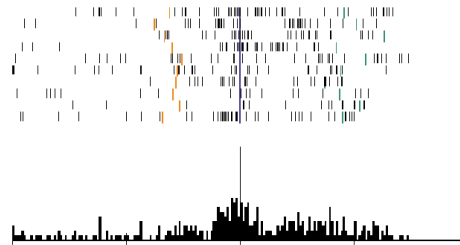
Unit 126

Unit 109

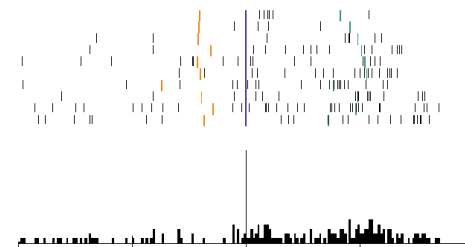
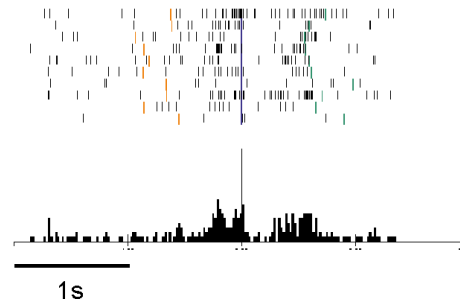
Grasp to eat
(food)



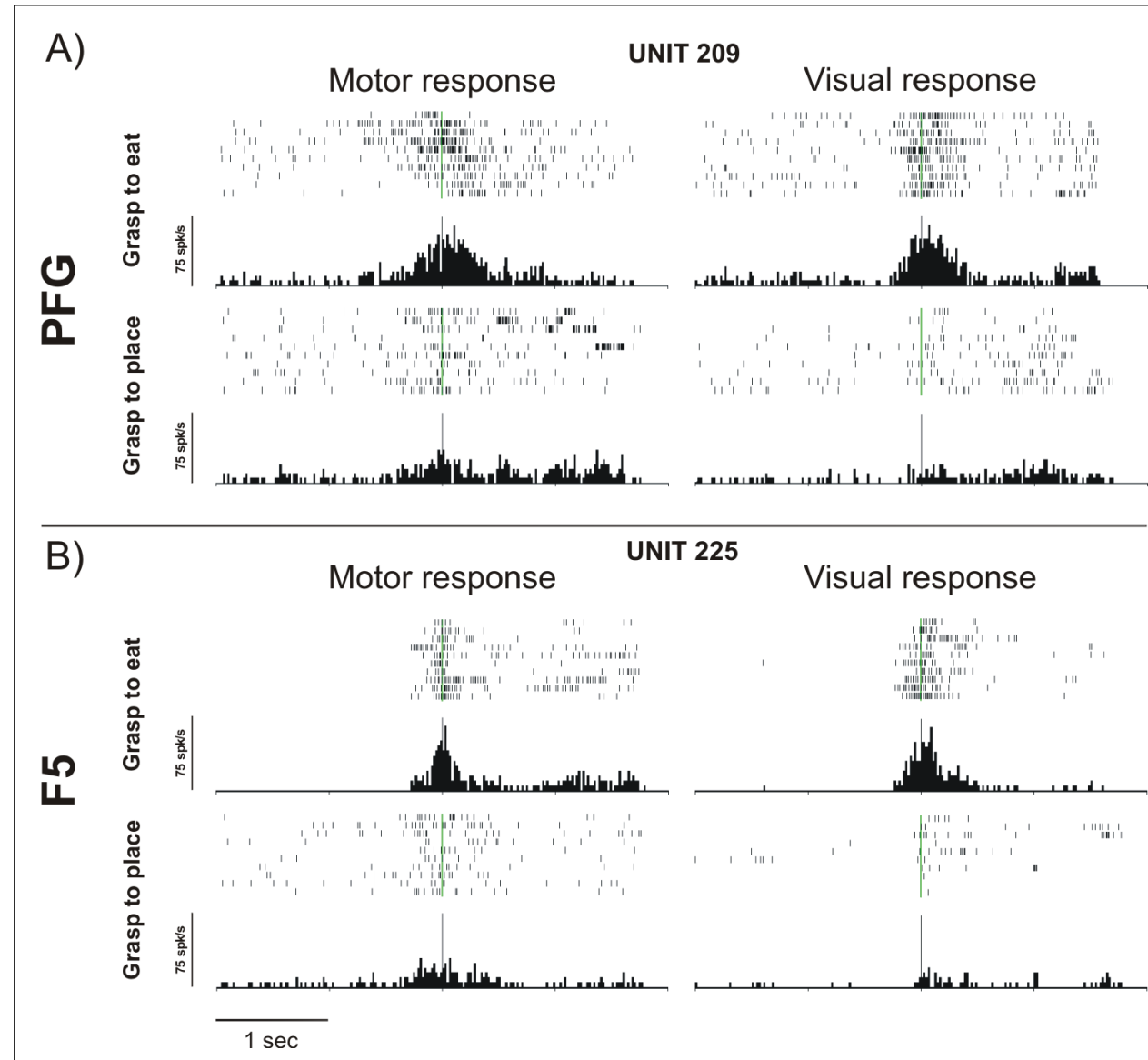
Grasp to place
(food)



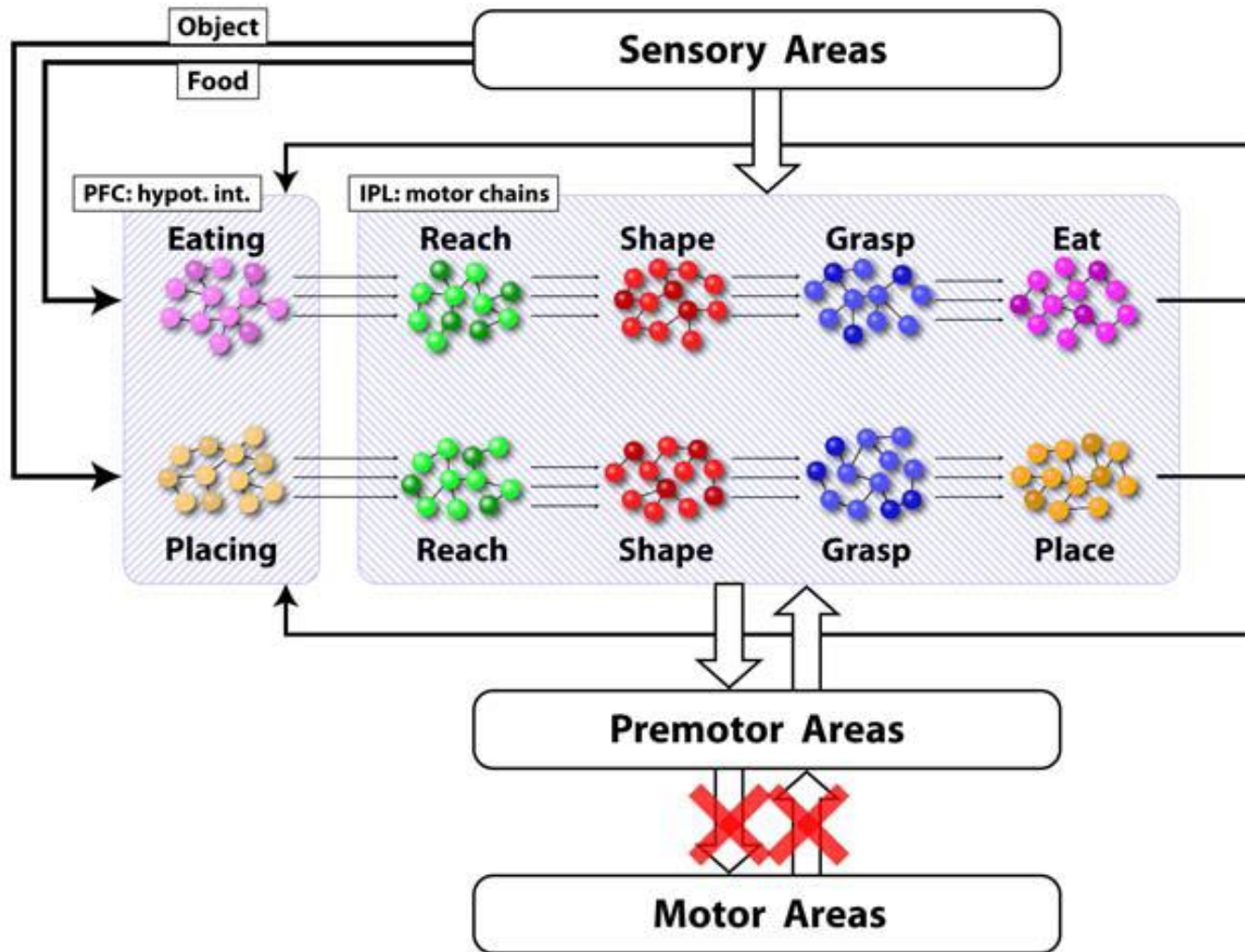
Grasp to place
(object)

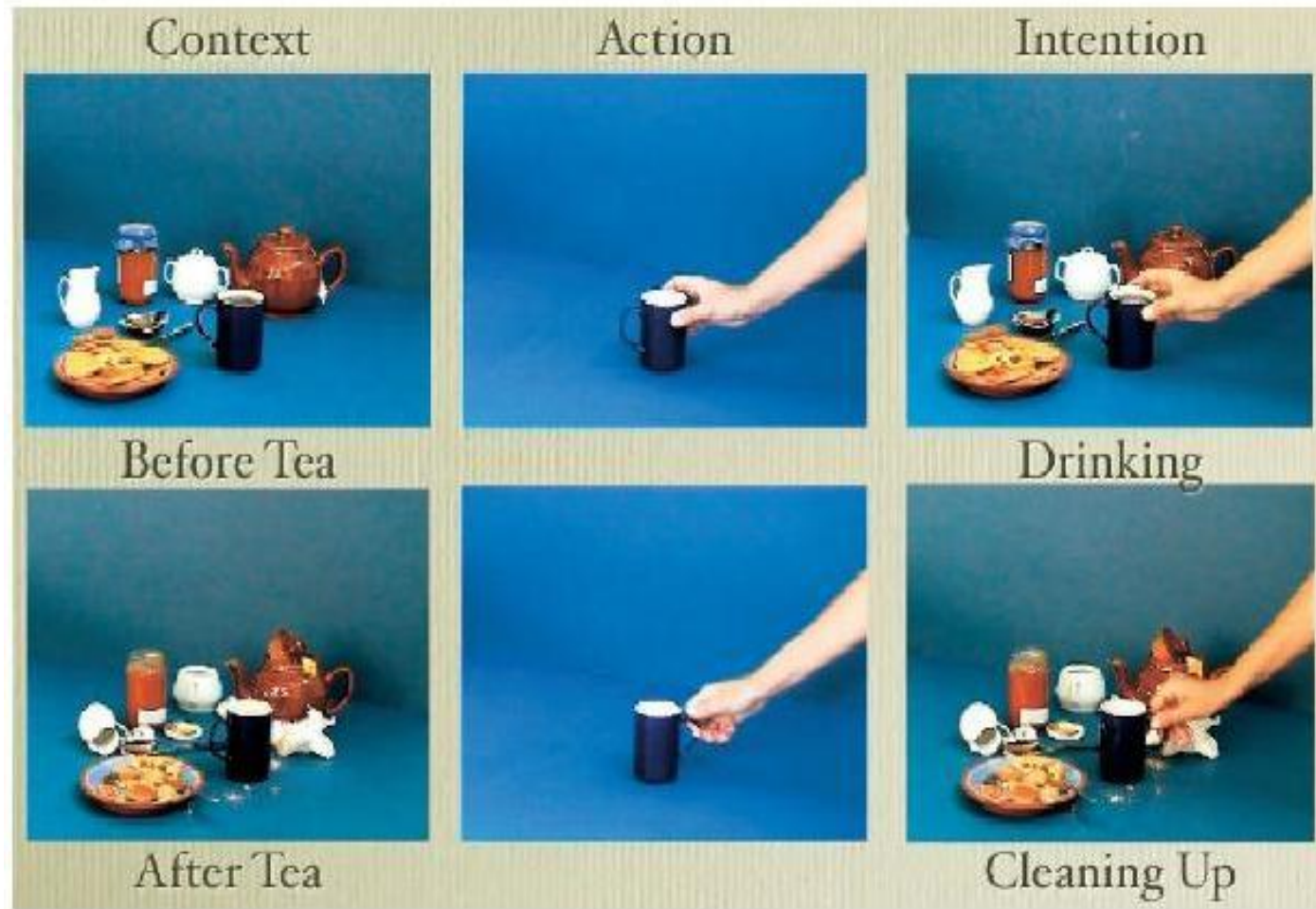


Congruenza visuomotoria (in termini di intenzione) dei neuroni specchio

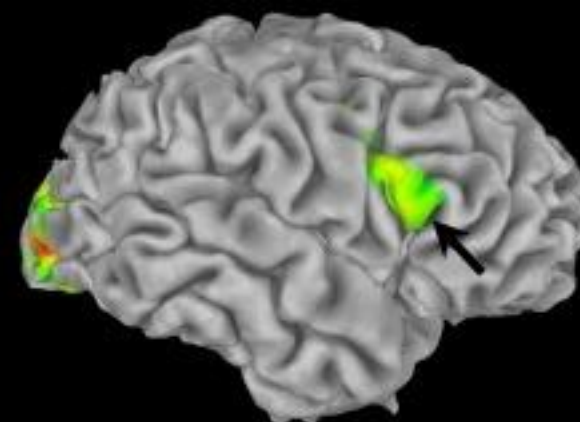
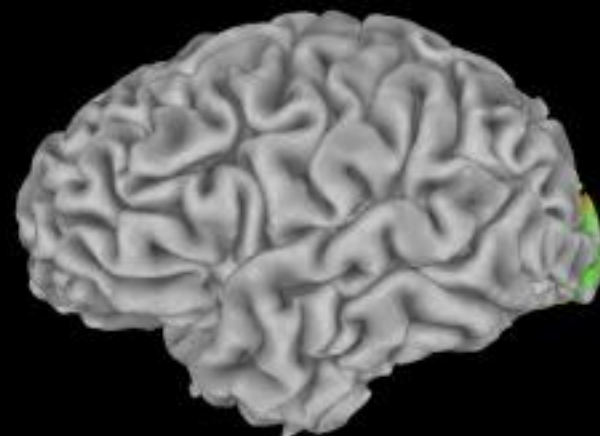


Compito visivo

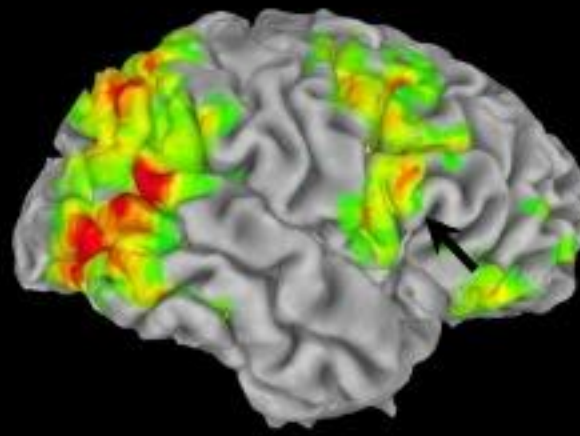
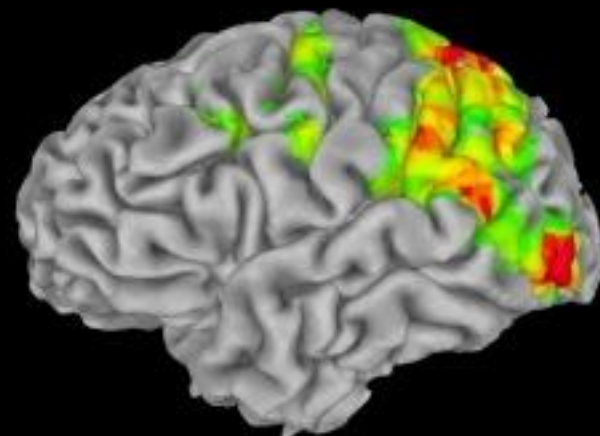




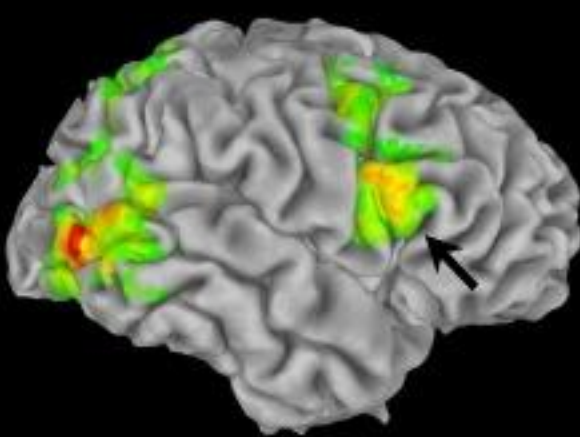
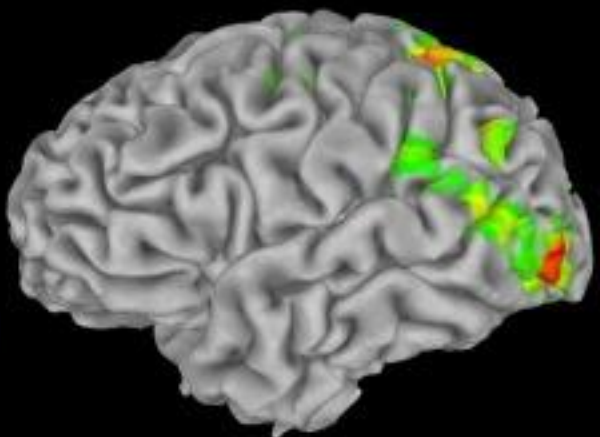
Intention
minus
Action

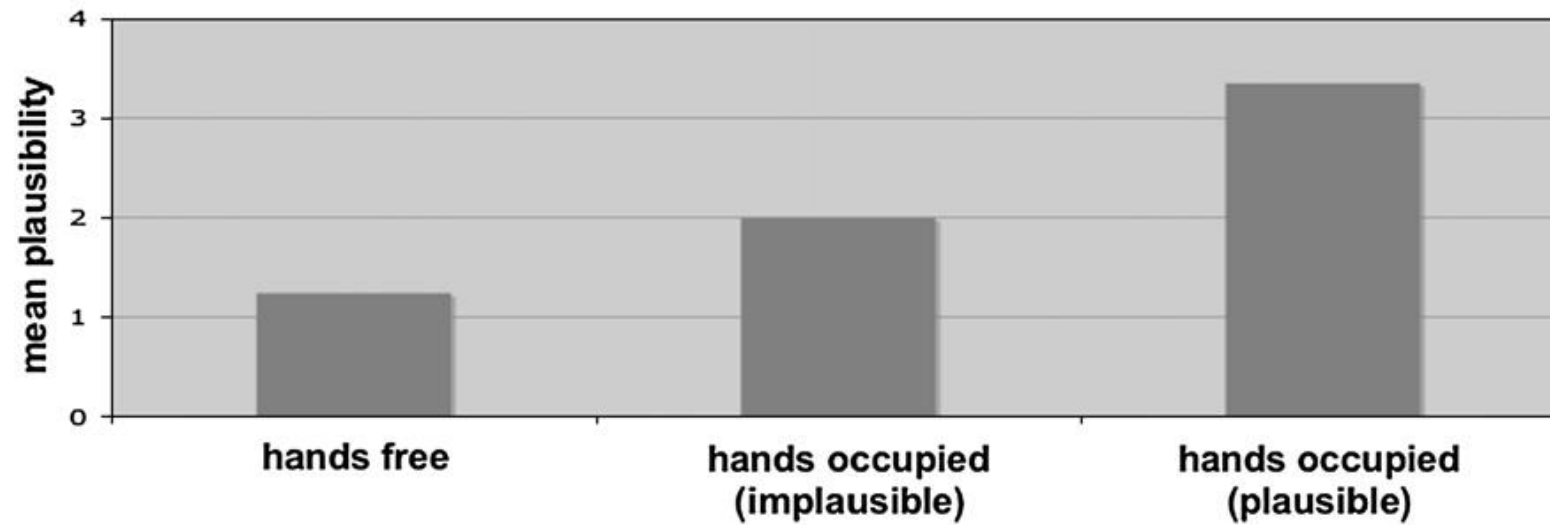


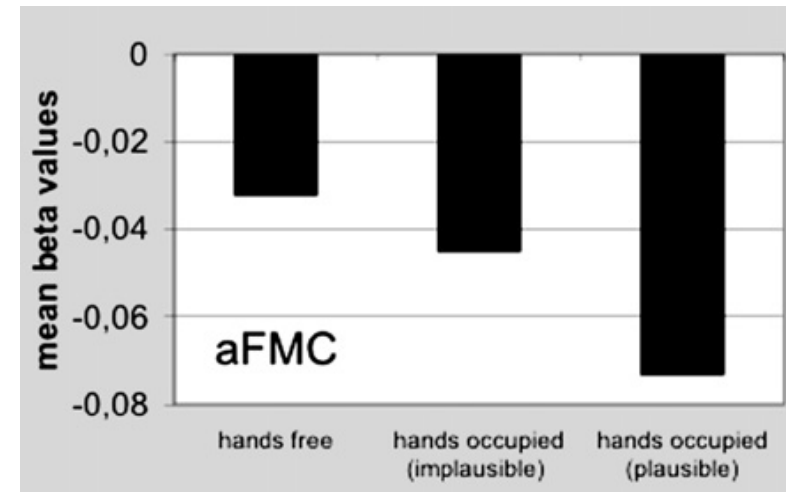
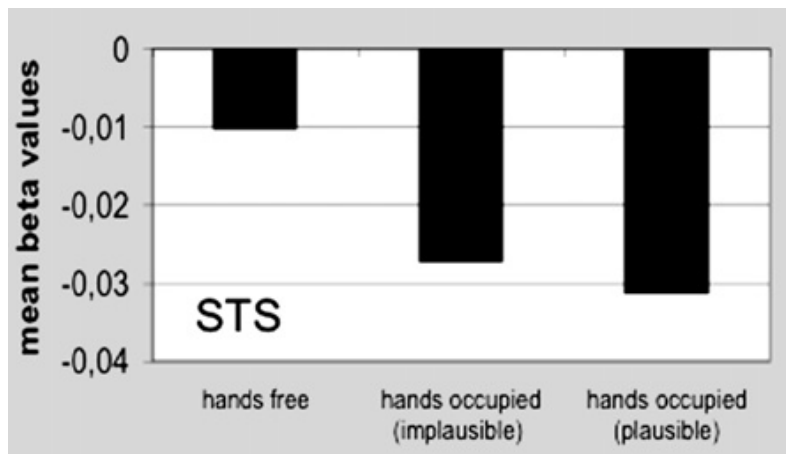
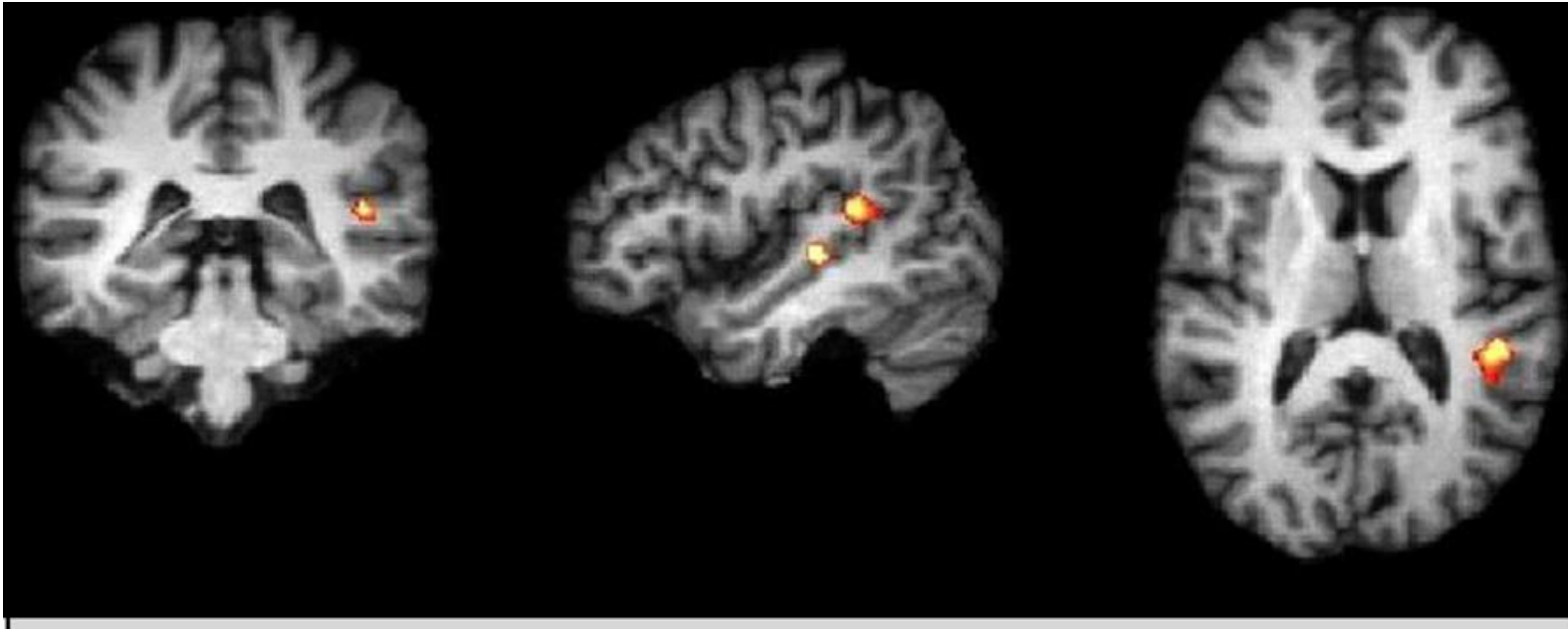
Intention
minus
Context



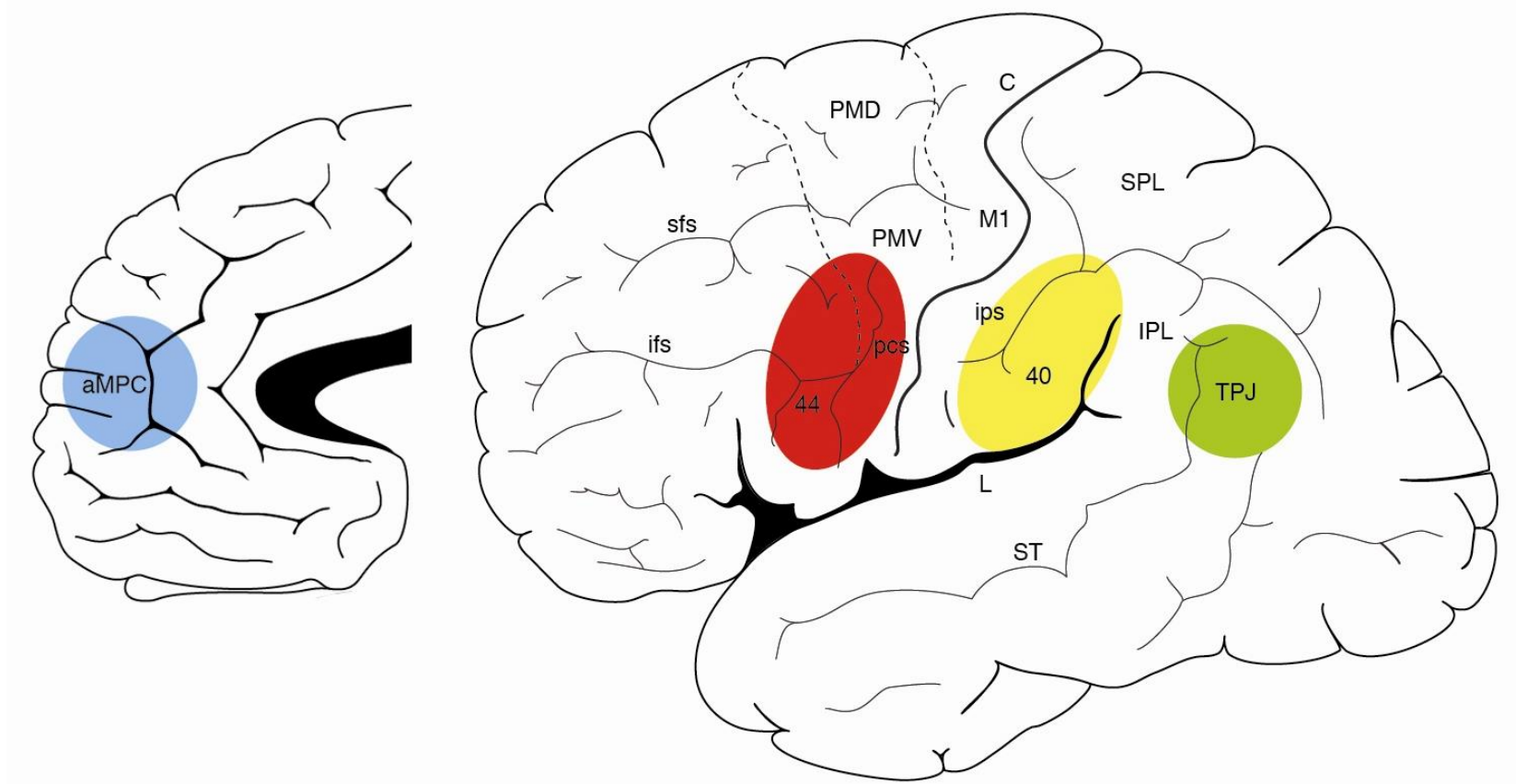
Intention
minus
(Action+Context)



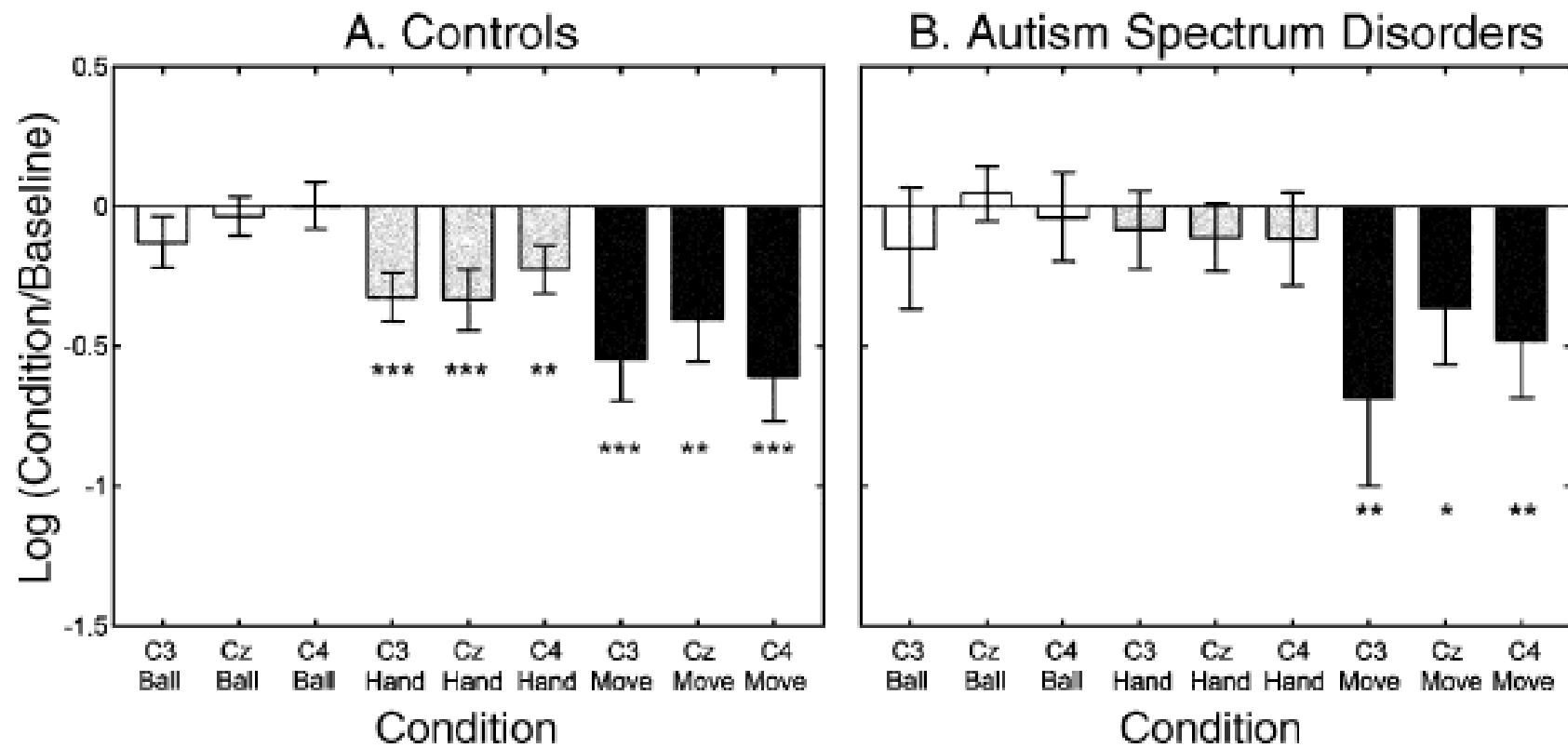




Il circuito della «mentalizzazione» a confronto con il circuito per la comprensione delle azioni

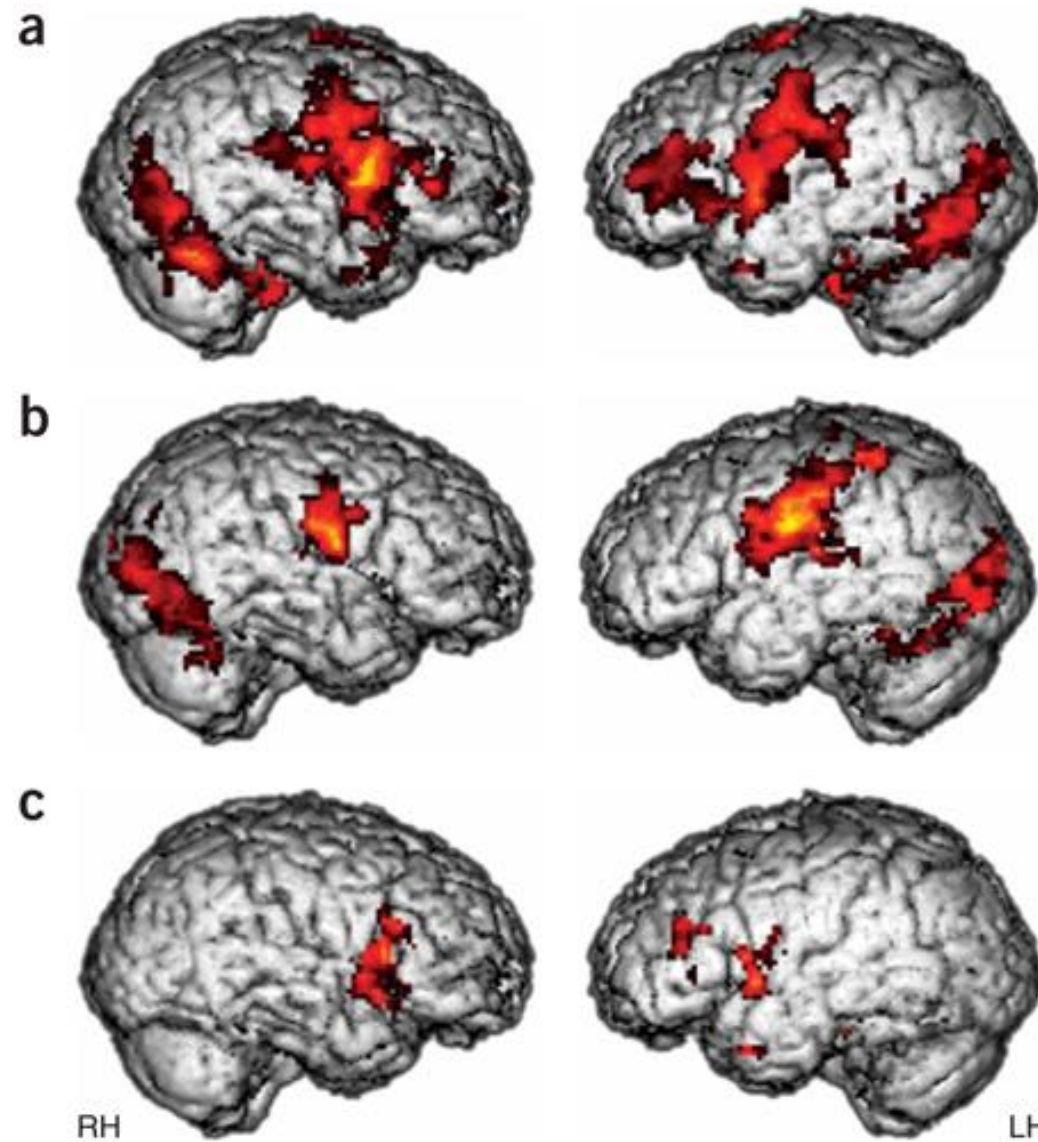


Sistema mirror e autismo



- Watching bouncing balls
- Watching moving hand
- Performing hand movement

Imitazione di espressioni emotive nei TD e negli ASD



Dapretto et al. 2006

Comparazione tra le attivazioni ottenute durante l'osservazione di espressioni emozionali nei TD e negli ASD

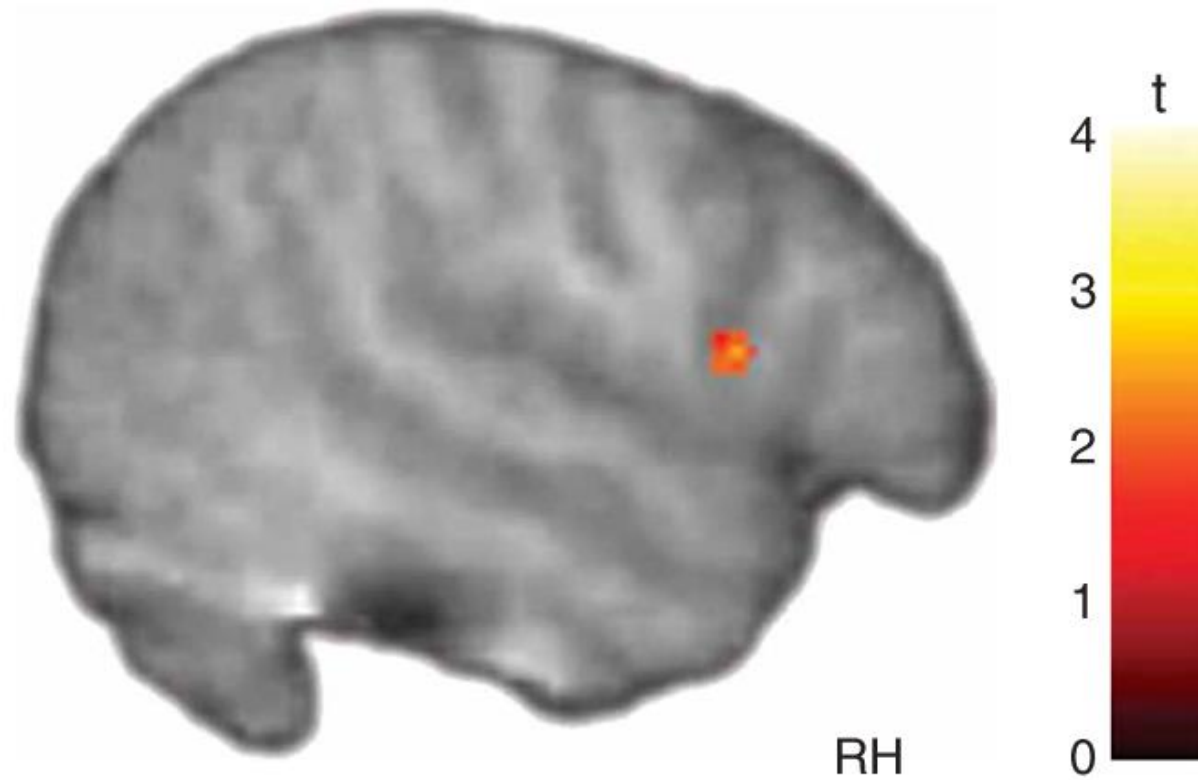
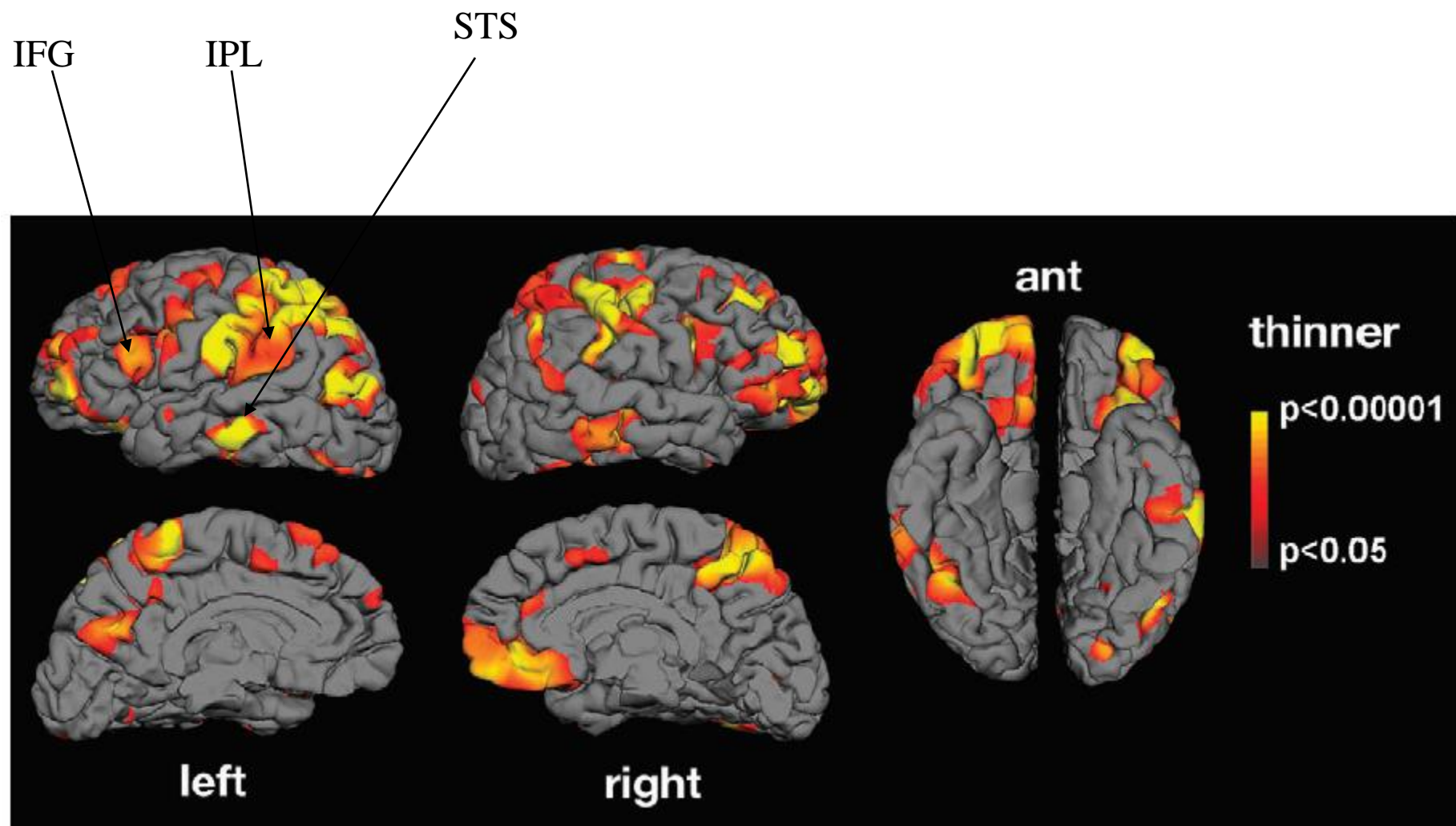


Table 1

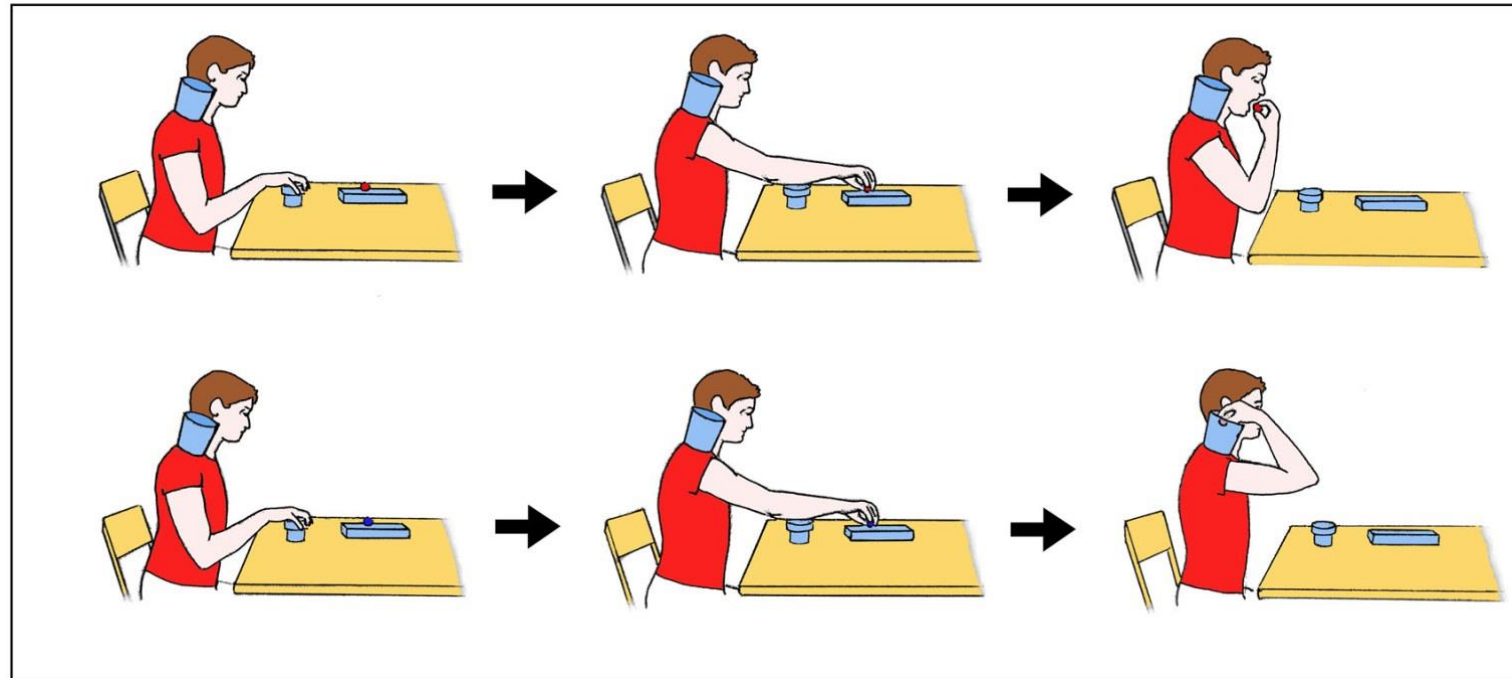
ADI-R and ADOS scores of each participant in the ASD group

	ADI-R			ADOS			Clinical diagnosis
	Communication	Social	Repetitive behaviors	Communication	Social	Total	
Subject 1	5	13	1	2	9	11	PDD
Subject 2	14	24	2	2	6	8	Autism
Subject 3	12	15	2	2	6	8	Asperger
Subject 4	7	15	5	3	5	8	Autism
Subject 5	20	27	11	7	13	20	Autism
Subject 6				2	6	8	PDD
Subject 7	13	12	2	3	8	11	Asperger
Subject 8	7	15	2	1	5	6	Asperger
Subject 9	8	16	6	3	5	8	Autism
Subject 10	16	22	8	3	10	13	Autism
Subject 11	14	26	6	2	8	10	Autism
Subject 12	10	14	2	3	3	6	Autism
Subject 13	7	15	5	1	5	6	Asperger
Subject 14	11	18	8	2	6	8	Autism

Note: ADOS, Autism Diagnostic Observation Schedule; PDD, pervasive developmental disorder.



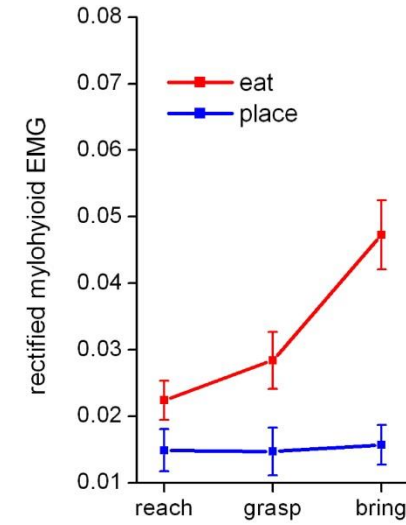
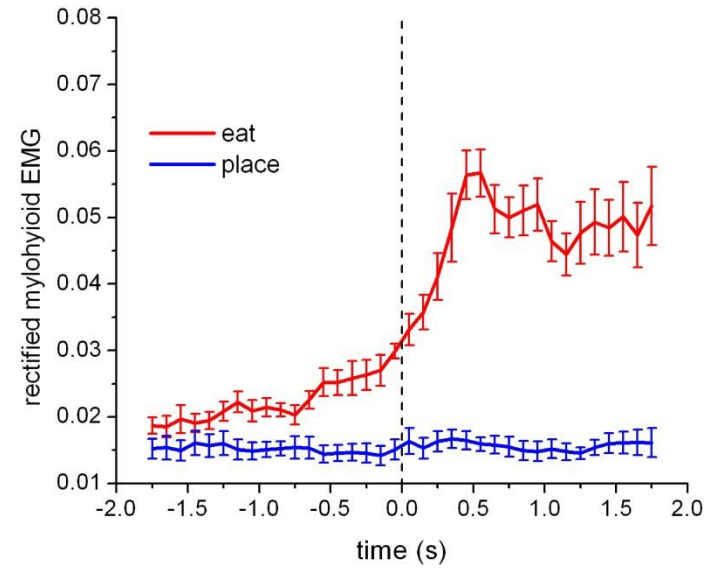
Compito motorio



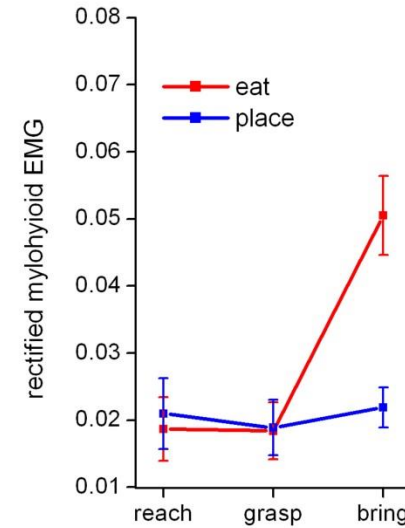
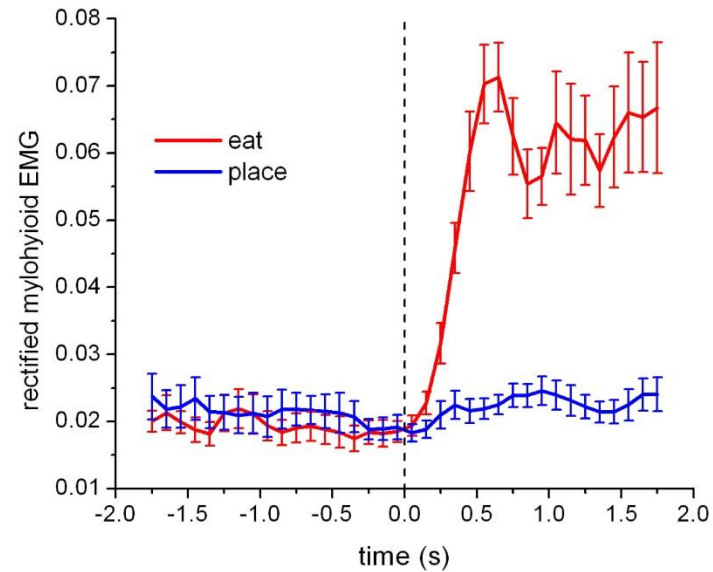
TD (n=8)
Età 5.2-11.9
Media 6.5

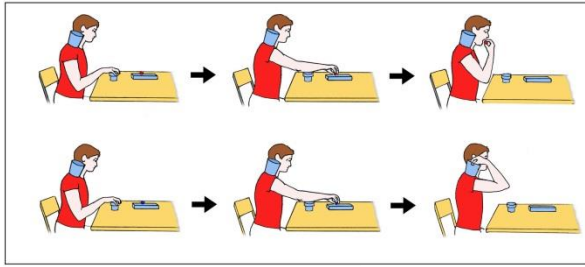
A (n=8)
Età 5.1-9.0
Media 6.1

typically-developing children



autistic children



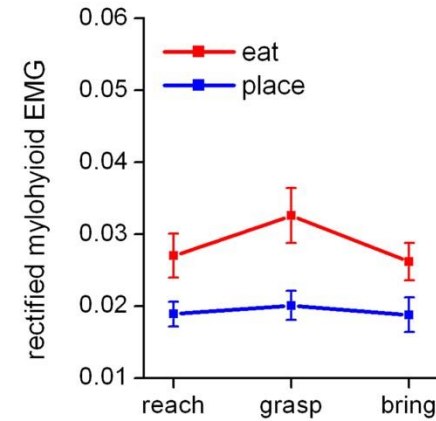
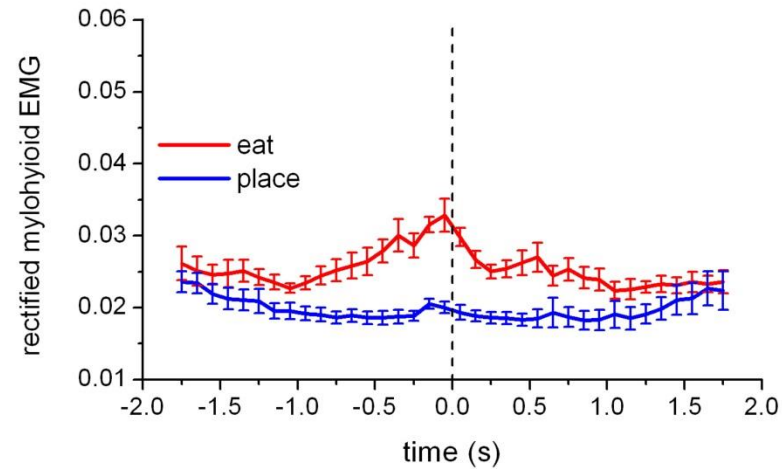


Compito di osservazione

typically-developing children

TD (n=8)
Età 5.1-9.1
Media 6.5

A (n=7)
Età 5.1-9.0
Media 6.2



autistic children

