

Chapter IV Creating and altering visual percepts through lesions and electrical stimulation

(Finger 2000, Sacks 1995)

4.1. Correlations and Causality in Neuroscience

4.2. A panoply of lesion tools to study the functional role of brain areas in animals

(Afranz et al 2015, Alberts et al 2002, Born & Bradley 2005, Boyden et al 2005, Buckley & Gaffan 1997, Buckley & Gaffan 1998, Dean 1976, Gross 1994, Han et al 2011, Han et al 2009, Holmes & Gross 1984, Merigan et al 1993, Meunier et al 1993, Meunier et al 1996, Michalski et al 1993, Nassi et al 2013, Ponce et al 2008, Tomita et al 1999)

4.3. Some tools to study the functional role of brain areas in humans

(Galaburda & Buchaine 2003, Heilman & Valenstein 1993, Huber 1994, Manford & Andermann 1998, Milner 1958, Milner 1968, Sacks 1995, Sperry 1982)

4.4. Partial lesions in primary visual cortex lead to localized scotomas

(Glickstein 1988, Gross 1994, Holmes 1918a, Holmes 1918b, Hubel & Wiesel 1974, Krieg 1975, Lashley 1950, Morgan & Stellar 1950, Riddoch 1917, Stoerig & Cowey 1997, Weiskrantz 1996, Zeki & Ffytche 1998)

4.5. What and Where pathways

(Felleman & Van Essen 1991, Haxby et al 1991, Kluver & Bucy 1939, Mishkin 1982, Ungerleider & Mishkin 1982)

4.6. Dorsal stream lesions

(Berger & Posner 2000, Bisiach & Luzzatti 1978, Driver & Mattingley 1998, Farah et al 1990, Goodale & Milner 1992, Zeki 1991, Zihl et al 1983)

4.7. Inferior temporal cortex is critical for visual object recognition in monkeys

(Afranz et al 2015, Britten et al 1992, Dean 1976, Holmes & Gross 1984, Kluver & Bucy 1939, Mishkin 1954, Mishkin & Pribram 1954, Ungerleider & Mishkin 1982, Weiskrantz & Saunders 1984)

4.8. Lesions leading to shape recognition deficits in humans

(Behrmann & Avidan 2005, Behrmann et al 1992, Benson & Greenberg 1969, Benton & Wav Allen 1972, Buxbaum et al 1999, Capitani et al 2003, Cattaneo & Vecchi 2011, Damasio et al 1990, De Renzi 2000, Duchaine & Nakayama 2006, Dutton et al 2004, Dutton 2003, Dutton 2006, Farah et al 1992, Forde & Humphreys 1999, Gainotti & Silveri 1996, Gauthier et al 1999, Hart & Gordon 1992, Hart et al 1985, Heilman & Valenstein 1993, Humphreys 1996, Humphreys & Riddoch 1993, Humphreys & Riddoch 2011, Karnath et al 2009, Kimura 1963, Le et al 2002, McCarthy & Warrington 1994, McKillop & Dutton 2008, Milders & Perrett 1993, Sacchett & Humphreys 1992, Sacks 1995, Sacks 1997, Sacks 1998, Shrager et al 2006, Tippett et al 1996, Warrington & Mc Carthy 1983, Warrington & Mc. Carthy 1987, Warrington & McCarthy 1994, Warrington & Shallice 1984, Young et al 1994, Zeki 1990)

4.9. Invasive electrical stimulation of the human brain

(Anderson & Lenz 2009, Bartolomei et al 2004, Blanke et al 2002, Blanke et al 2000, Borchers et al 2012, Brindley & Donaldson 1972, Brindley & Lewin 1968, Coleshill et al 2004, Crick et al 2004, Desmurget et al 2009, Dobelle & Mladejovsky 1974, Fried 2014, Gloor et al 1982, Kleinman et al 2007, Lee et al 2000, Lozano & Lipsman 2013, McCarthy et al 1999, Murphey et al 2009, Murphey et al 2008, Ojemann 2014, Parvizi et al 2012, Penfield 1958, Penfield & Jasper 1954, Penfield & Milner 1958, Penfield & Perot 1963, Ray et al 1999, Schmidt et al 1996, Suthana et al 2012, Tellez-Zenteno et al 2006)

4.10. Electrical stimulation in primate visual cortex

(Afraz et al 2006, Armstrong et al 2006, Ditterich et al 2003, Salzman et al 1990, Salzman et al 1992, Schiller & Tehovnik 2008)

4.11. References

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