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Titolo	Cognitive and computational aspects of face recognition : explorations in face space / / edited by Tim Valentine
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Collana	Psychology Library Editions: Perception ; ; Volume 29
Altri autori (Persone)	ValentineTim <1959->
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Nota di contenuto	1. The development of face recognition / Robert A. Johnston and Hadyn D. Ellis -- 2. Expertise and the caricature advantage / Sarah V. Stevenage -- 3. Face recognition and configural coding / Gillian Rhodes -- 4. An account of the own-race bias and the contact hypthesis based on a 'face space' model of face recognition / Tim Valentine, Patrick Chiroro and Ruth Dixon -- 5. Distinctiveness and memory for unfamiliar faces / Judith A. Hosie and Alan B. Milne -- 6. Memorability, familiarity and categorical structure in the recognition of faces / John R. Vokey and J. Don Read -- 7. Missing dimensions of distinctiveness / Vicki Bruce, A. Mike Burton and Peter J. Hancock -- 8. A perceptual learning theory of the information in faces / Alice J. O'Toole. [et al.] -- 9. A manifold model of face and object recognition / Ian Craw -- 10. Perspectives on face perception. Directing research by exploiting emergent prototypes / Philip J. Benson.
Sommario/riassunto	How can computers recognize faces? Why are caricatures of famous faces so easily recognized? Originally published in 1995, much of the previous research on face recognition had been phenomena driven. Recent empirical work together with the application of computational,

mathematical and statistical techniques have provided new ways of conceptualizing the information available in faces. These advances have led researchers to suggest that many phenomena can be explained by the structure of the information available in the population(s) of faces. This broad approach has drawn together a number of apparently disparate phenomena with a common theoretical basis, including cross-race recognition; the distinctiveness of faces; the production and recognition of caricatures; and the determinants of facial attractiveness. This title provides a state of the art review of the field at the time in which the authors use a wide variety of approaches. What is common to all is that the authors base the accounts of the phenomena they study or their model of face recognition on the statistics of the information available in the population of faces. On publication this title was a comprehensive, up-to-date review of an important area of research in face recognition written by active researchers. It includes contributions from mathematics, computer science and neural network theory as well as psychology. It is aimed at research workers and postgraduate students and will be of interest to cognitive psychologists and computer scientists interested in face recognition. It will also be of interest to those working on neural network models of visual recognition, perceptual development, expertise in visual cognition as well as facial attractiveness and caricature.