SECTION	OVERVIEW	FURTHER READING
Part 1 Introduction to Nonverbal Communication	**Part 1A** • Nonverbal communication (NVC) consists of both bodily communication and paralanguage (tone, pitch, pauses and filled hesitations). • NVC is important at the personal level (e.g. the interpretation of facial expressions, the significance of micro-expressions). **Part 1B** • NVC is also important at the societal level. • Margaret Thatcher example: Thatcher was perceived as 'The Iron Lady': bossy, domineering and in control. She would notably talk over interviewers. Thatcher thought that the (usually male) interviewers were being aggressive and trying to control her during interviews so she would talk over their interruptions. However, micro-analysis of Thatcher's speech and behaviour demonstrated that it was in fact her style of interaction that was inadvertently cueing interviewers in. Her style of NVC was signalling to the interviewer that she had finished talking when in fact she had not. This seemingly small micro-behaviour probably helped shape the entire political history of this country.	Beattie, G. (2003). Visible Thought: The New Psychology of Body Language. London: Routledge. Beattie, G., Cutler, A., & Pearson, M. (1982). Why is Mrs Thatcher interrupted so often? Nature, 300, 744-747.

SECTION	OVERVIEW	FURTHER READING
Part 2 Theories of Body Language	• **Mehrabian**: Research from the 1960s into the effects of consistencies and inconsistencies in communication on interpersonal attitudes. **Findings**: When there are inconsistencies between the verbal and nonverbal channel, the nonverbal component will dominate in determining the overall message. Mehrabian concluded that only 7% of communication is verbal. **Limitations**: These experiments did not consider language as we normally understand it (i.e. we use meaningful sentences to communicate, not individual words). • **Argyle:** Attempted to address these limitations by using verbal messages to convey interpersonal attitudes rather than individual words. **Findings:** Argyle found that the nonverbal channel outweighed the verbal channel. He concluded that NVC is twelve and a half times more powerful than language in the communication of interpersonal attitudes. **Limitations:** Only one encoder was used which raises issues of generality. The effect is probably dependent upon what is said, who is saying it and the context in which it is said.	Mehrabian, A. & Farris, S.R. (1967). Inference of attitudes from nonverbal communication in two channels. Journal of Consulting Psychology, 31, 248-252. Mehrabian, A. & Wiener, M. (1967). Decoding of inconsistent communications. Journal of Personality and Social Psychology, 6, 109-11. Argyle, M., Alkema, F. & Gilmour, R. (1971). The communication of friendly and hostile attitudes by verbal and nonverbal signals. European Journal of Social Psychology, 1, 385-402. Argyle, M., Salter, V., Nicholson, H., Williams, M., & Burgess, P. (1970). The communication of inferior and superior attitudes by verbal and nonverbal signals. British Journal of Social and Clinical Psychology, 9, 222-231.

SECTION	OVERVIEW	FURTHER READING
Part 3 New Theory of Body Language	• Is it just language that represents thought? • **According to Argyle**: *'Humans use two quite separate languages, each with its own function'* – by two separate languages, Argyle means language and NVC. Was he right? • **Not according to McNeill**: *'To get the full cognitive representation that the speaker had in mind, both the sentence and the gesture must be taken into account.'* This was a radical new theory of communication. • McNeill argued that the hand movements people make when they talk convey a core part of the underlying message. If you want to fully understand the message, you need to take into account both the sentence and the gestural movement: • *'Utterances possess two sides, only one of which is speech; the other is imagery… To exclude the gesture side, as has been traditional, is tantamount to ignoring half of the message out of the brain.'* • Put simply, part of the message comes out in the speech system, and part of the message comes out in the gestural system.	Argyle, M. & Trower, P. (1979). Person to Person: Ways of Communicating. London: Harper and Row. McNeill, D. (1985). So you think gestures are nonverbal? Psychological Review, 92, 350–371. McNeill, D. (1992). Hand and mind. What gestures reveal about thought. Chicago: University of Chicago Press. McNeill, D. (2000). Language and gesture. Cambridge: Cambridge University Press.

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Part 3 Continued New Theory of Body Language	• Do these gestures convey information? Gestures do convey significant amounts of semantic information, either on their own or in combination with speech. Research by Beattie and Shovelton (1999a, b) consistently demonstrated that participants who see gestures in addition to hearing the speech receive significant amounts of additional semantic information (compared to speech alone). • In one study, participants were played either speech segments or gesture-speech combinations of a narrated cartoon story and were then asked about certain details of the story. In the gesture-speech combination, participants received 60% more information compared to the speech alone segment (Beattie & Shovelton, 1999a). Furthermore, there were striking individual differences in ability to decode gesture (Beattie & Shovelton, 1999b). • How important is the information represented in gesture? Beattie and Shovelton (2006) looked at how size information is encoded by gestures and found that, rather than being a trivial channel of communication, some of the most important information in a message is represented in the gestural channel.	Beattie, G. & Shovelton, H. (1999a). Mapping the range of information contained in the iconic hand gestures that accompany spontaneous speech. Journal of Language and Social Psychology, 18, 438–462. Beattie, G. & Shovelton, H. (1999b). Do iconic hand gestures really contribute anything to the semantic information conveyed by speech? An experimental investigation. Semiotica, 123, 1–30. Beattie, G. & Shovelton, H. (2006). When size really matters: How a single feature is represented in the speech and gesture modalities. Gesture, 6, 63-84.

SECTION	OVERVIEW	FURTHER READING
Part 4 Applications of Gesture Research I (Mind Reading)	• **McNeill**: *'Gestures exhibit images that cannot always be expressed in speech, as well as images the speaker thinks are concealed.*' Through their gestures, '*People unwittingly display their inner thoughts and ways of understanding events of the world.'* • Evidence that unconscious gestures are more accurate indicators of underlying thoughts (see Beattie, 2003; 2010), as demonstrated by gesture-speech mismatches (where someone is saying one thing verbally, but something different in the gestural channel). • Gestures, and in particular gesture-speech mismatches, can be particularly revealing because we can consciously edit our speech but we cannot edit our (unconscious) gestures. • Gestures in deception: In a study conducted by Cohen, Beattie and Shovelton (2010), participants were asked to narrate a cartoon story twice. In one condition they provided an accurate account of the story, in the other they introduced false details. It was found that deceptive gestures had significantly fewer post-stroke holds and shorter stroke phase durations than those produced alongside truthful utterances. In addition, a number of participants produced gesture-speech mismatches, but only in the deception condition.	McNeill, D. (1992). Hand and mind. What gestures reveal about thought. Chicago: University of Chicago Press. Beattie, G. (2003). Visible Thought: The New Psychology Of Body Language. London: Routledge. Beattie, G. (2010). Why Aren't We Saving The Planet? A Psychologist's Perspective. London: Routledge. Cohen, D., Beattie, G., & Shovelton, H. (2010). Nonverbal indicators of deception: How iconic gestures reveal thoughts that cannot be suppressed. Semiotica, 182, 133-174.

SECTION	OVERVIEW	FURTHER READING
Part 5 Applications of Gesture Research II (Advertisements)	• Some television advertisements use gestures, but these gestures possess few of the semantic or structural properties of natural gestures. • Beattie & Shovelton (2005) created television advertisements based on the new psychological theory of body language. This research found that advertisements in which the message was split between speech and iconic gesture (possible on TV) were significantly more effective than advertisements in which meaning resided purely in speech or language (such as radio/newspaper). • In a second experiment, Beattie and Shovelton (2005) compared the communicative power of professionally made TV advertisements in which a spoken message was accompanied by either iconic gestures or by pictorial images, and found the iconic gestures to be more effective. It was hypothesised that iconic gestures are so effective because they illustrate and isolate the core semantic properties of a product. • This research suggests that TV advertisements can be made more effective by incorporating iconic gestures with exactly the right temporal and semantic properties.	Beattie, G. & Shovelton, H. (2005). Why the spontaneous images created by the hands during talk can help make TV advertisements more effective. British Journal of Psychology, 96, 21–37.