Modelling Comparative Concepts in Conceptual Spaces

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Comparative concepts (such as ‘greener than’) are fundamental to our grasp of associated categorical concepts (‘green’). Some comparative concepts seem natural, whereas other ones seem rather gerrymandered---e.g., compare ‘x is greener than y’ and ‘x and y are such that either (i) x and y are inspected before midday and x is greener than y, or (ii) x and y are inspected after midday and x is bluer than y’. What kind of cognitive structures underly our ability to order objects? And why do we order objects the way we do, and not in other ways? The aim of this talk is to outline an account of comparative concepts within a conceptual spaces framework. The account bears for one on the account of naturalness for comparative concepts. For another, it bears on the theory of gradable concepts, i.e., the type of categorical concepts expressed by gradable terms in natural language. The approach is novel in that it carries some basic assumptions from Peter Gärdenfors' conceptual spaces account of categorical concepts over to comparative concepts (in his monograph ‘Conceptual Spaces’ [2000]). The offered approach is more general in that (i) it bears also on graded (non-binary) types of categorisation, and (ii) it provides an independent rationale for adopting Gärdenfors' particular binary model of categorisation. My results hinge essentially on some assumption which is well motivated at least for visual concepts such as colour concepts. Time permitting, I will also say something on an alternative conceptual spaces account of comparative that was most recently presented in a joint paper with Lieven Decock and Igor Douven.