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**A look at two algebra tasks involving sequential data, that seem to prompt a scalar rather than function approach to the underlying linear relation.**

Adams, G. (ed.), Proceedings of the British Society for Research into Learning Mathematics (BSRLM). Vol. 35, No. 3. Proceedings of the day conference, University of Reading, UK, November 7, 2015. London: British Society for Research into Learning Mathematics (BSRLM). 72-77 (2016).

Summary: In this paper we discuss an interview undertaken by the first author with a group of three Year 8 students and their teacher as part of the design research work of the ICCAMS project. The interview involved two tasks in which pairs of values connected by a linear relationship were presented sequentially, either in a table or as coordinate points on a Cartesian grid. The students were asked to make near and far generalisations, which they tended to do by adopting a scalar (or recursive) approach, either in a step-by-step manner or by chunking. From the interviewer's point of view, the scalar and function perspectives are intimately linked, and on occasions during the interview it was easy to believe that this was true for the students too. However, a closer examination suggests that for these students at least, the connection is still tenuous.

*Classification:* H23 I23 D53

*Keywords:* educational research; interviews; finding rules; generalisation; number pattern tasks; generic patterns; figurative patterns; sequences; elementary algebra; linear relationships; coordinates; function relations; recursive relations; scalar view; function view

<http://www.bsrlm.org.uk/IPs/ip35-3/BSRLM-IP-35-3-13.pdf>