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# The role of breakdown in the growth of large karst cavities in the Yorkshire Dales, UK.

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The glacio-karst of the Yorkshire Dales National Park contains several large voids. The origin of voids like Gaping Gill Main Chamber has been speculated upon since cave exploration began in the area. Stoping and collapse have long been considered important void growth processes. The cave exploration community has evidence from wall and roof rock surveys, along with records of active block collapse. However, no large blocks appear in Ground Penetrating Radar (GPR) profiles of cavern floor sediments. Therefore, stoping and collapse must be accompanied by block breakdown and bulking. Sediment solution and possibly mechanical erosion must also occur; otherwise voids would fill with bulked up, stoped material. The full range of processes forming large voids in the Yorkshire Dales should be reconsidered