Abstract: Do infants map physical size to social dominance? We familiarized 10-12 and 12-14 month-old infants to animations of a large and small square that took turns walking across a stage in opposite directions. In the test-events, the squares bumped into each other in the middle of the stage, before one of the squares bowed down and moved out of the way for the other square. The bowing square kept on lying down while the other one continued to the end of the stage. Next, animation froze for one minute. 12-month-olds, but not 10-month-olds, looked longer when a big guy bowed for a small guy than vice versa. A control study with one agent removed from otherwise identical animations showed that this is not the case in non-social scenarios, ruling out a lean mere saliency interpretation.