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# SAR INTERFEROMETRY WITH ERS

**1995**

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**ESA/ESRIN**  
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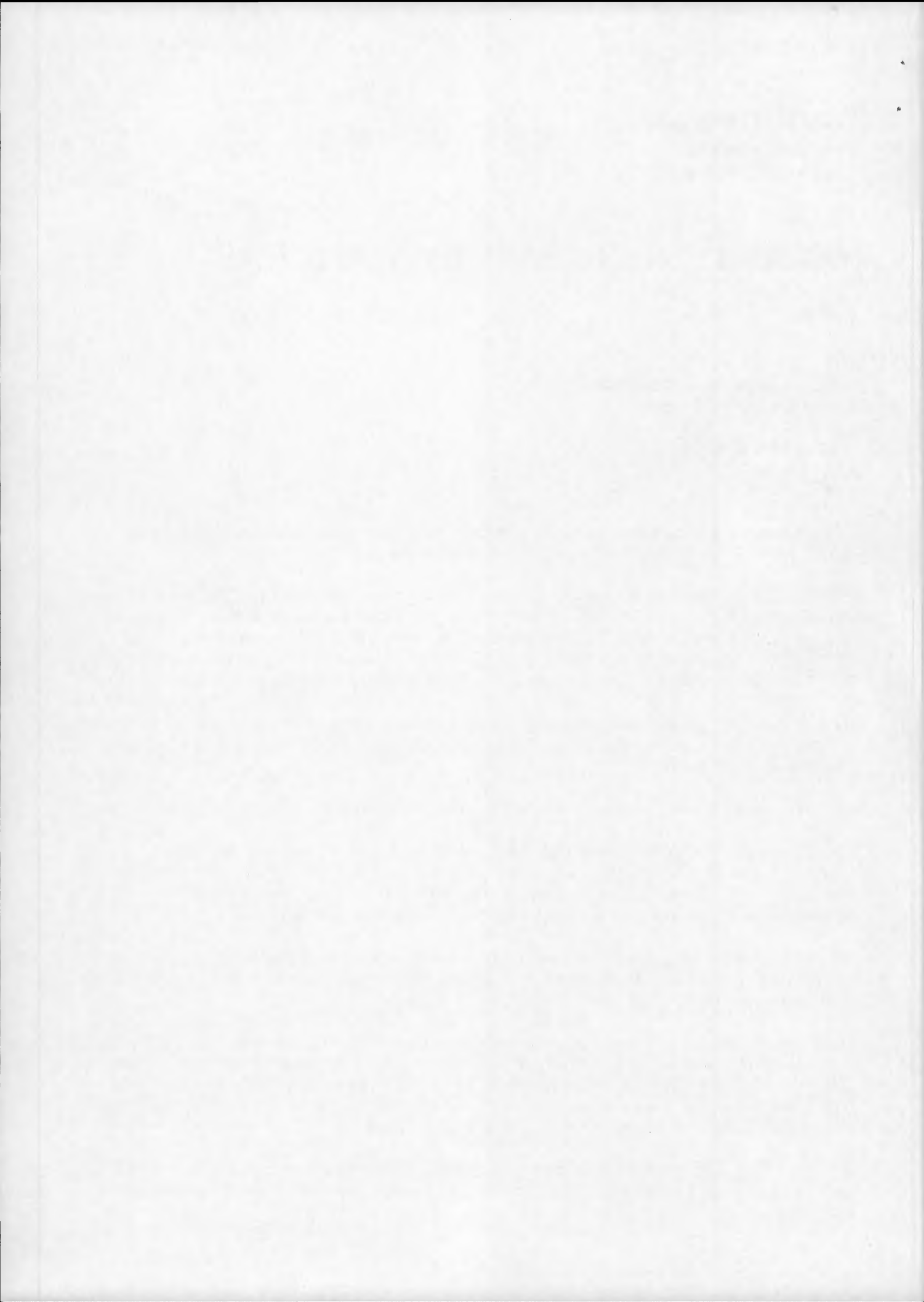
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By using 3 or more passes of satellite imagery, the resulting DEMs themselves can be differenced to reveal changes in the Earth's surface topography on a scale compatible with the wavelength of the SAR instrument; ie. a few centimetres for ERS-1.



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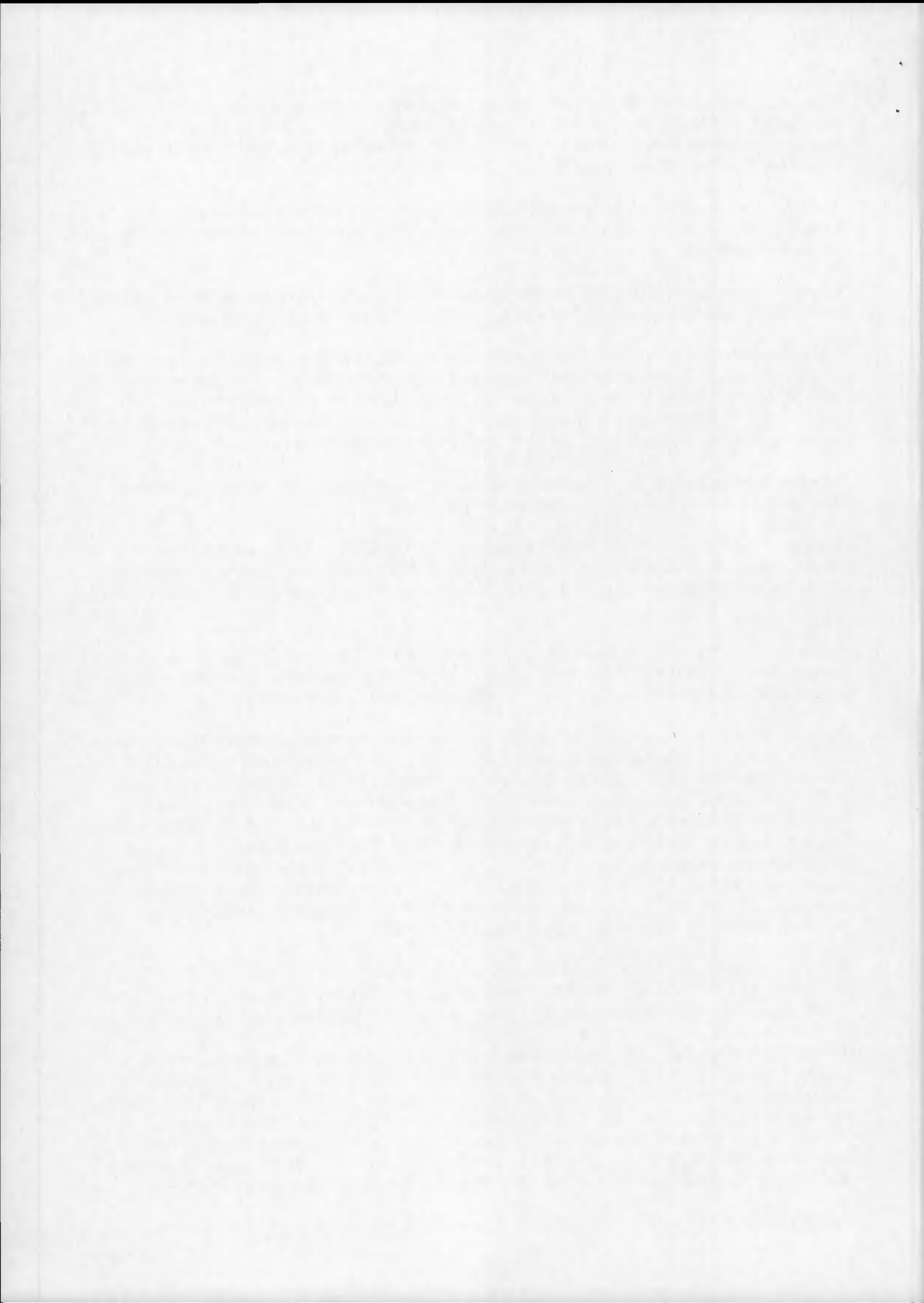
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Finally, the successful launch of ERS-2 earlier this year presents an exciting opportunity to fly both ERS-1 and ERS-2 in tandem as a single Interferometer. The ERS Tandem mission began in September 95 and will last for a period of 9 months. Currently, the two satellites are in both in 35 day repeat orbits (for global coverage) but in a configuration such that there a 1-day interval between ERS-1 & ERS-2 observing the same area of ground. A number of Groups are already reporting high values of interferogram quality (phase coherence) from this 1-day Tandem configuration.

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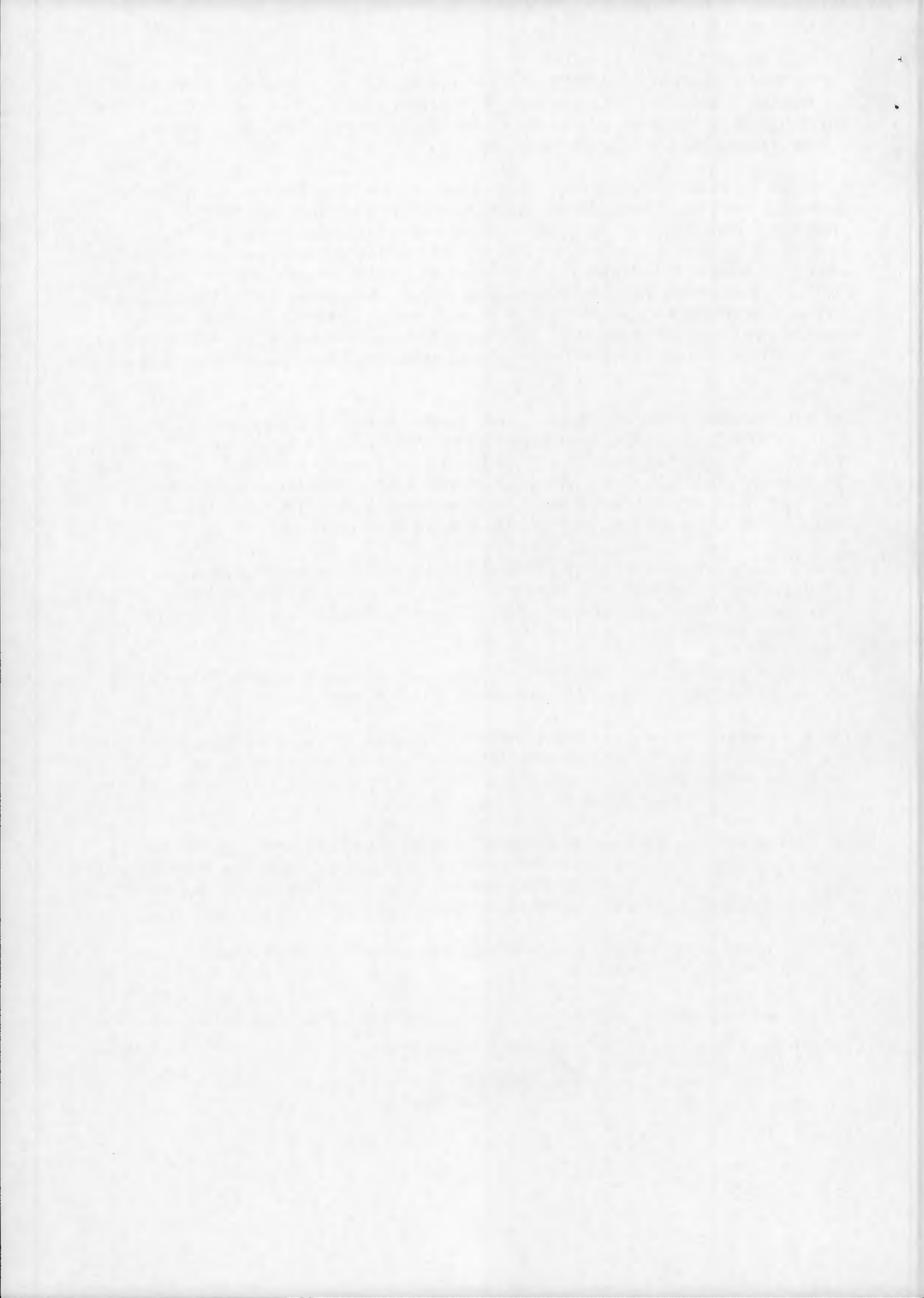
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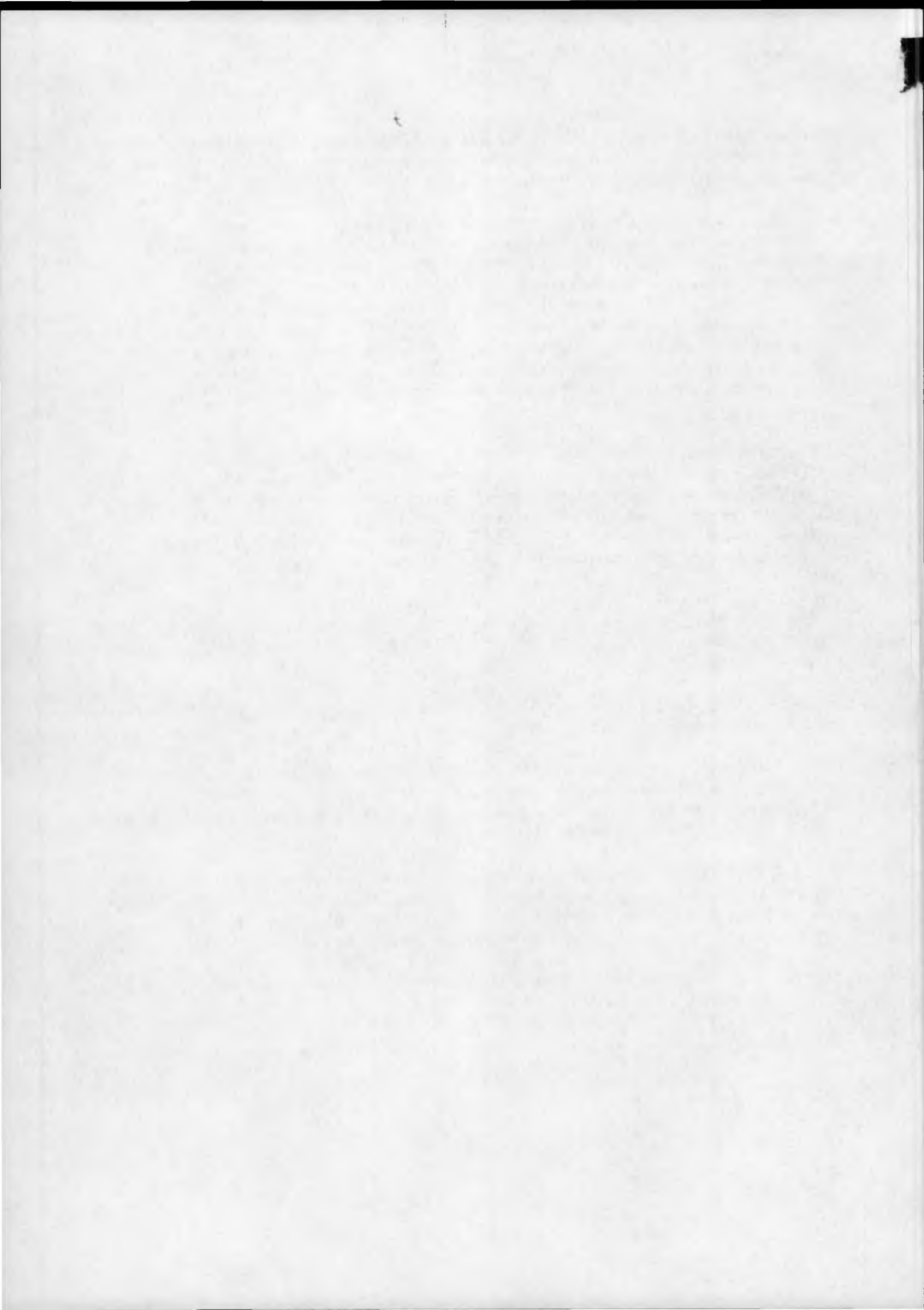
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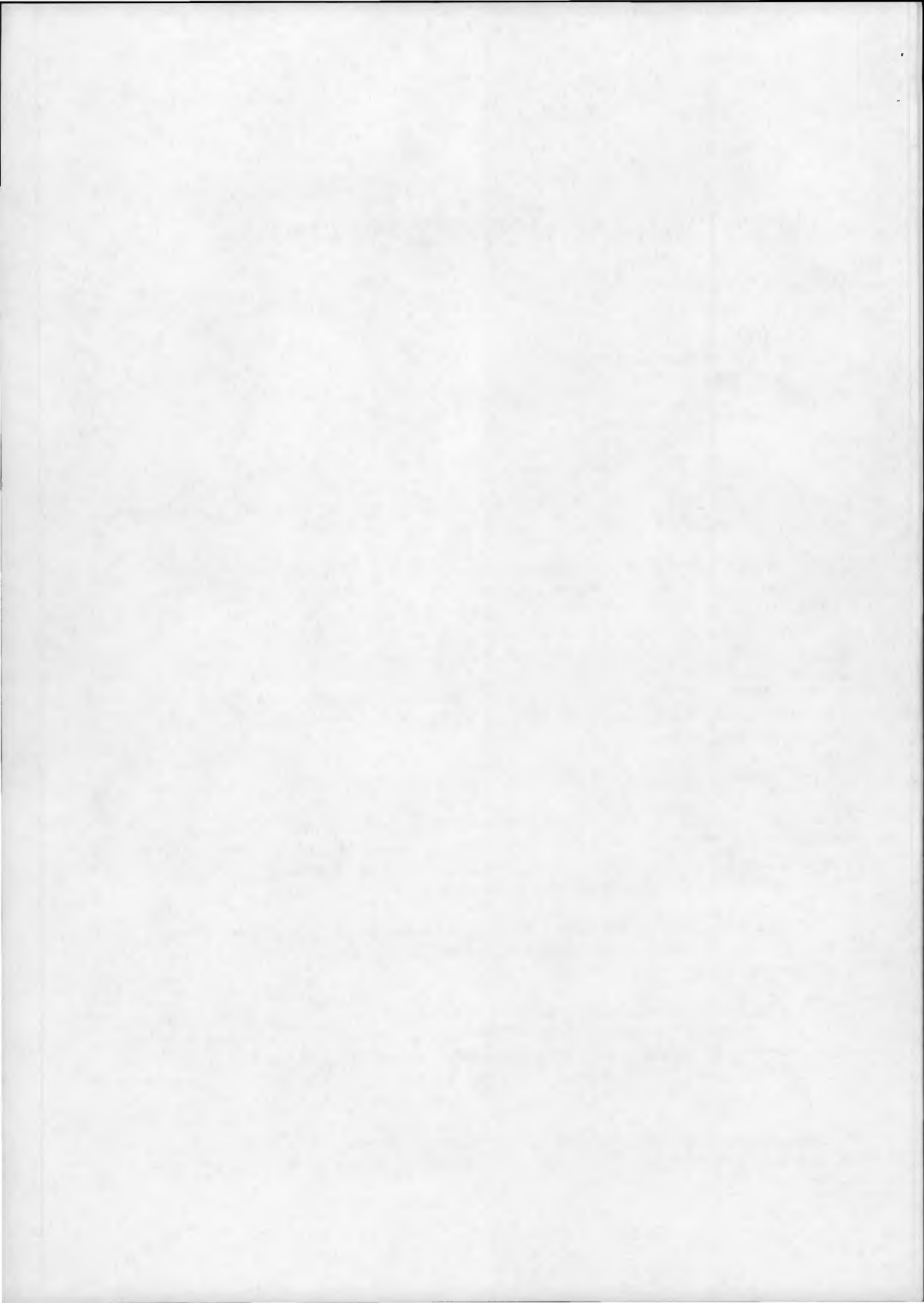
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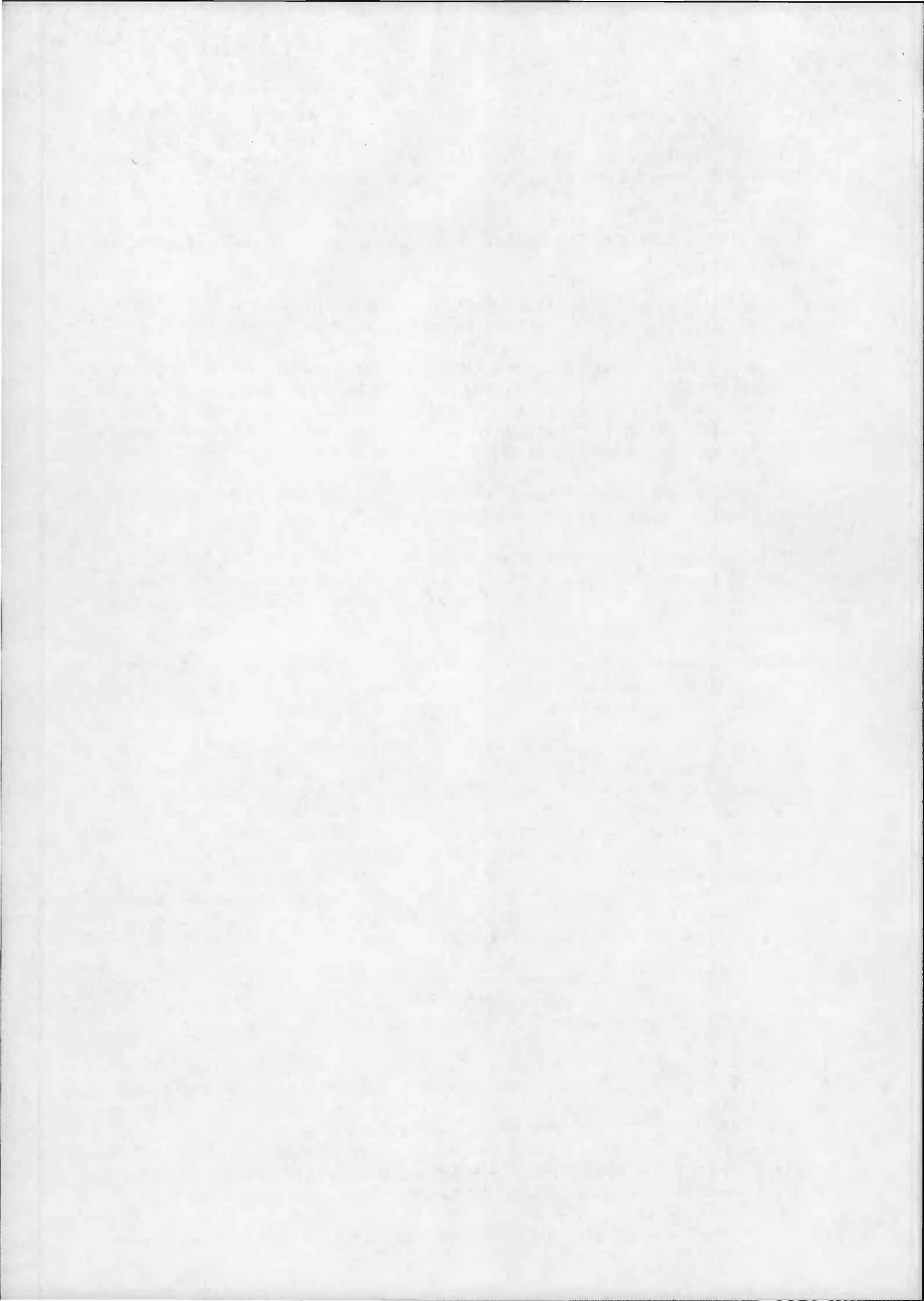
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