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graph TD; Root[ ] --- NP1[NP]; Root --- VP[VP]; NP1 --- PRON_I[I]; NP1 --- BE[Be]; VP --- VBG[VBG]; VP --- NP2[NP]; NP2 --- ADJP[ADJP]; NP2 --- NP3[NP]; ADJP --- ADJ[ADJ]; ADJP --- NP4[NP]; NP4 --- ADP[ADP]; NP4 --- NP5[NP]; ADP --- NP6[NP]; NP6 --- NOUN[book];
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The diagram illustrates the grammatical structure of the sentence "I am reading a book". The root node branches into two main components: a subject phrase (NP) and a predicate phrase (VP). The subject phrase (NP) contains a personal pronoun ("I") and a verb ("Be"). The predicate phrase (VP) contains a verb ("reading") and a direct object phrase (NP). This direct object phrase (NP) consists of an adjective phrase (ADJP) and a noun phrase (NP). The adjective phrase (ADJP) contains an adjective ("a") and a determiner phrase (NP). The determiner phrase (NP) contains an adposition ("to") and a noun ("book"). The labels for each node are: Root, NP1, VP, PRON\_I, BE, VBG, NP2, ADJP, ADJ, NP3, NP4, ADP, NP5, NP6, and NOUN.