



Figure 11: Causal traces show that the last token of the subject name is not always decisive. (a) shows a typical case: even though the name ‘NTFS’ is a spelled out acronym, the model does MLP lookups at the last letter of the name that are decisive when the model recalls the developer Microsoft. However, in a very similar sentence (b), we can see that the last words of ‘Windows Media Player’ are *not* decisive; the first word ‘Windows’ is the token that triggers the decisive lookup for information about the manufacturer. The information also seems to pass through the attention at the second token ‘Media’. Similarly in (c) we find that the Tokyo headquarters of ‘Mitsubishi Electric’ does not depend on the word ‘Electric’, and in (d) the location of death of Madame de Montesson seems to be mainly determined by the observed title ‘Madame’. In (e) we have a typical low-confidence trace, in which no runs of MLP lookups inside the subject name appear decisive; the model seems to particularly depend on the prompt word ‘performing’ to guess that the subject might play the piano.