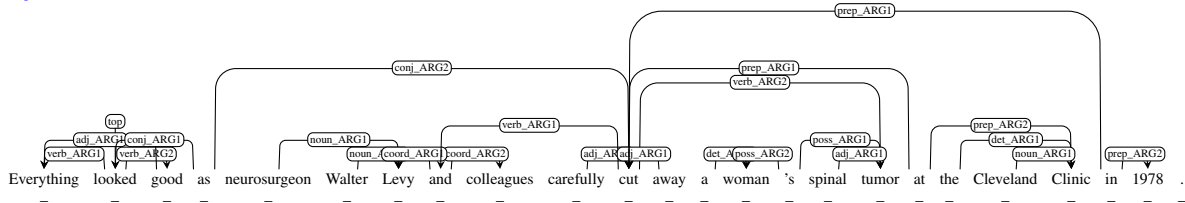
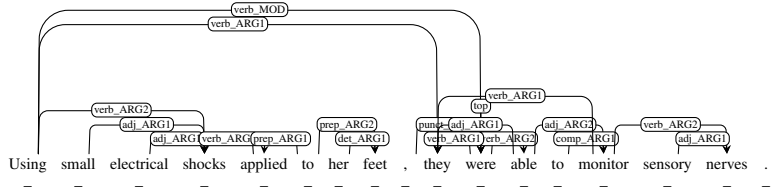


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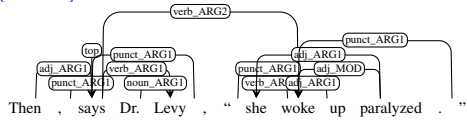
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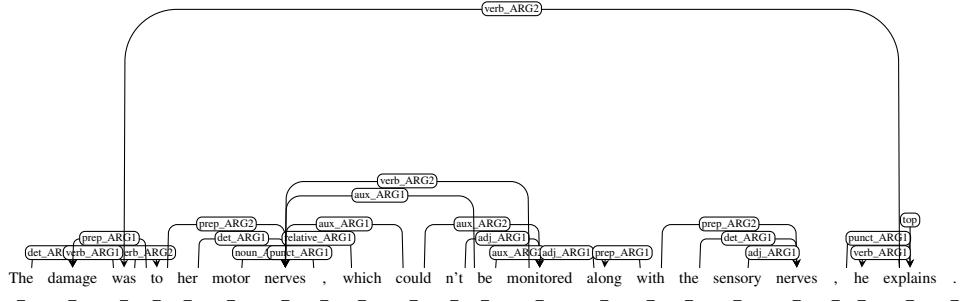
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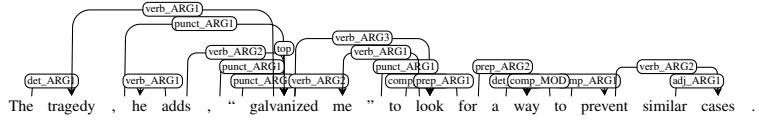
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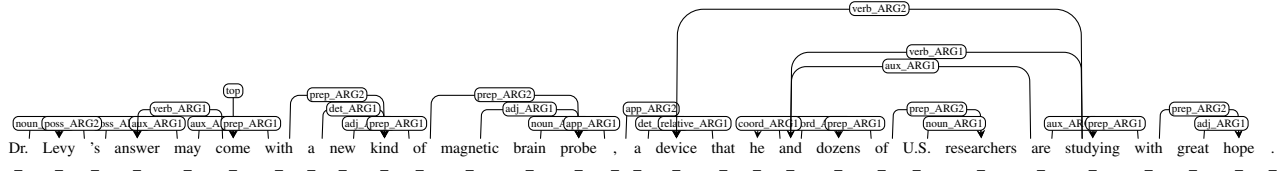
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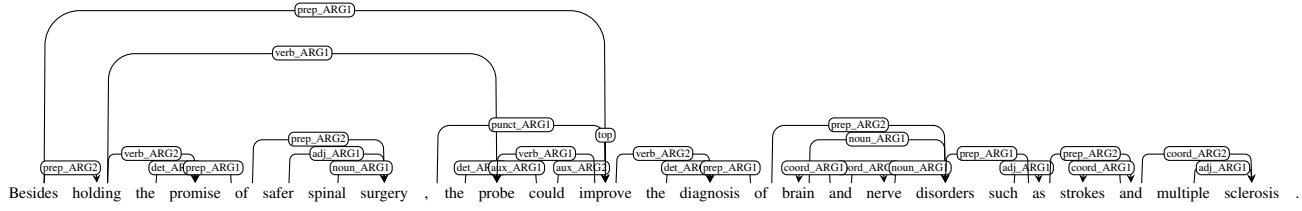
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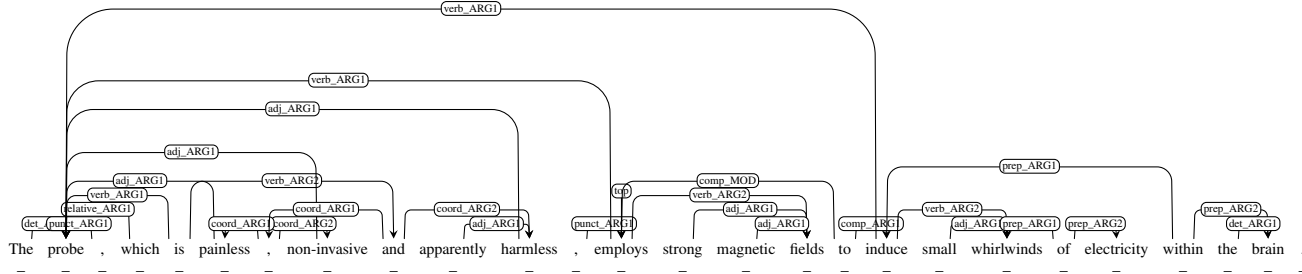
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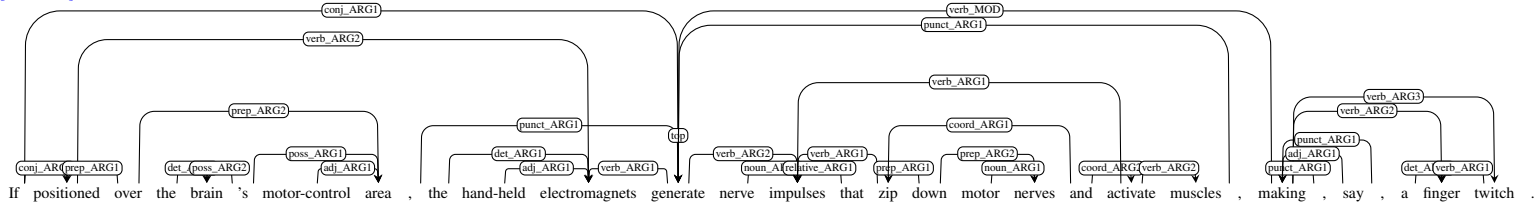
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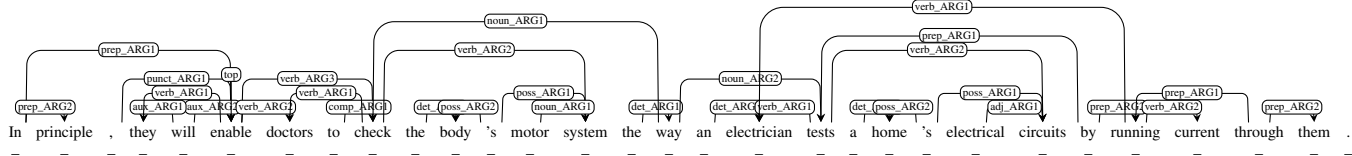
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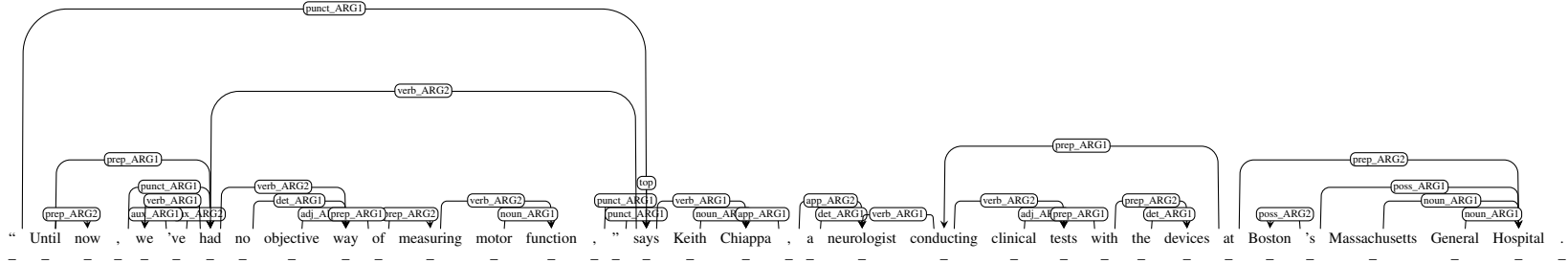
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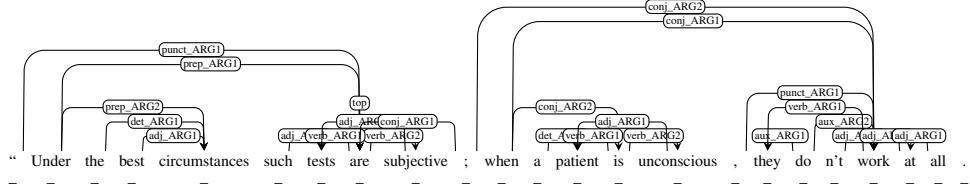
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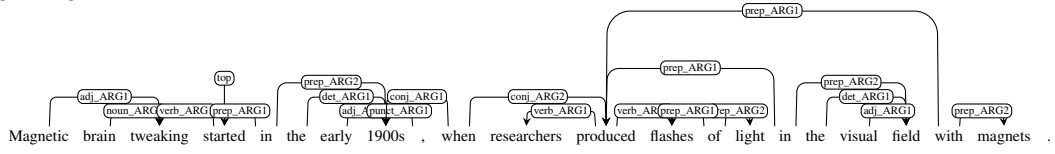
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[20297015]

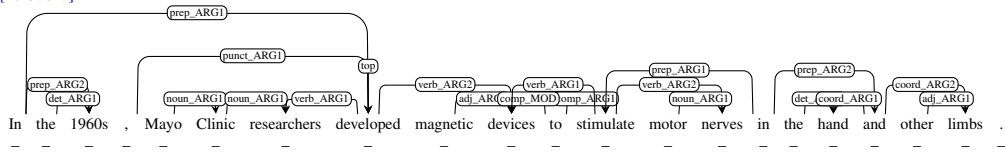


[20297016]



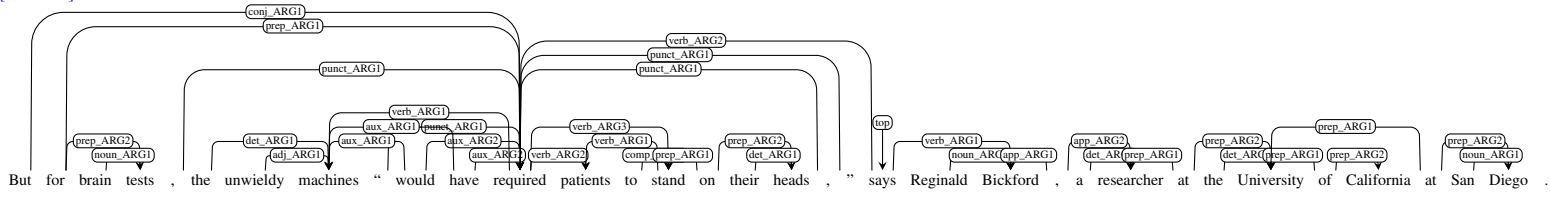
Magnetic brain tweaking started in the early 1900s, when researchers produced flashes of light in the visual field with magnets.

[20297017]



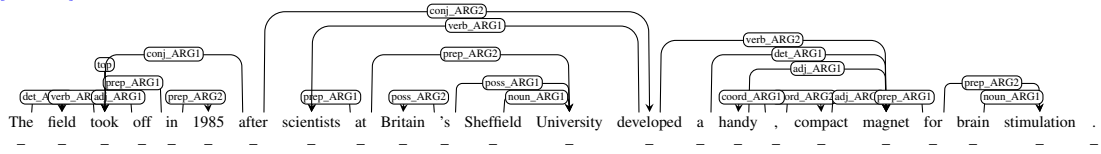
In the 1960s, Mayo Clinic researchers developed magnetic devices to stimulate motor nerves in the hand and other limbs.

[20297018]



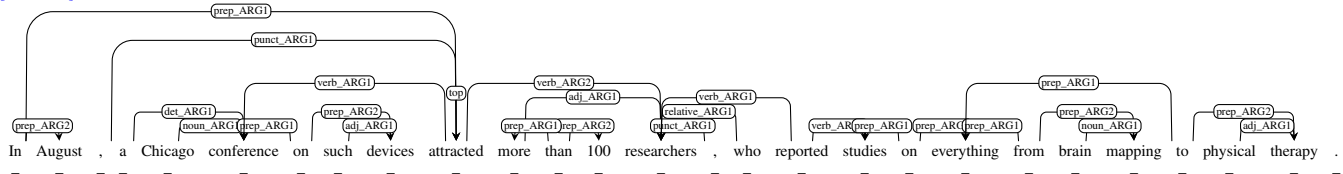
But for brain tests, the unwieldy machines would have required patients to stand on their heads, says Reginald Bickford, a researcher at the University of California at San Diego.

[20297019]



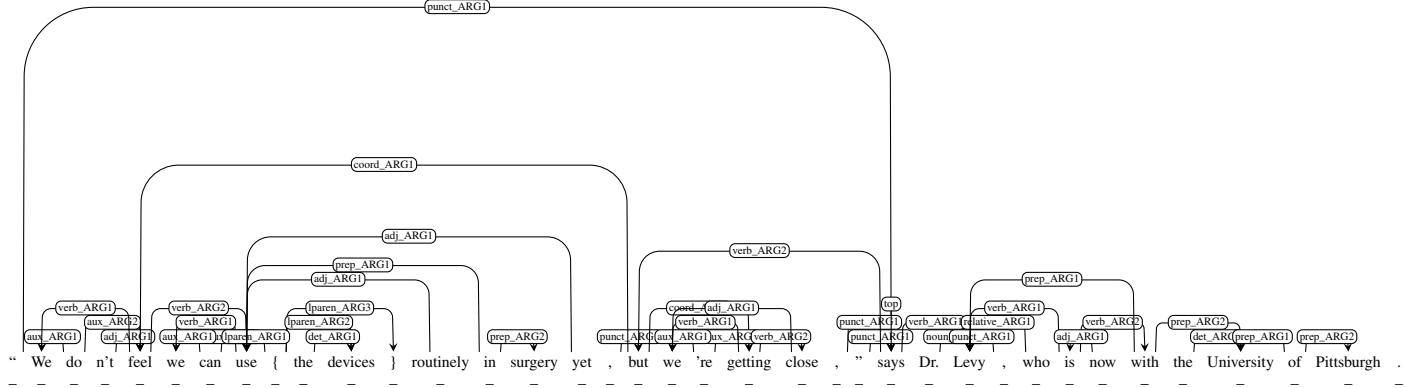
The field took off in 1985 after scientists at Britain's Sheffield University developed a handy, compact magnet for brain stimulation.

[20297021]



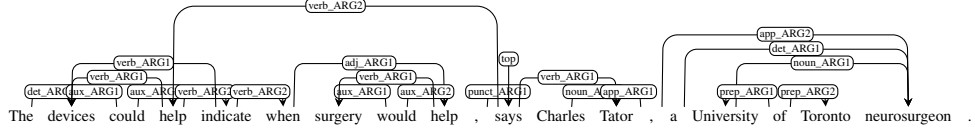
In August, a Chicago conference on such devices attracted more than 100 researchers, who reported studies on everything from brain mapping to physical therapy.

[20297022]



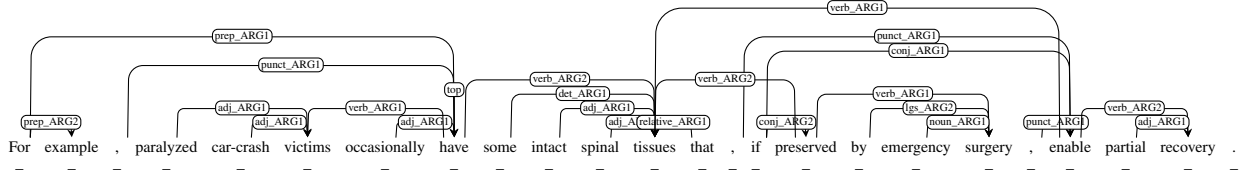
We do n't feel we can use the devices routinely in surgery yet, but we're getting close, says Dr. Levy, who is now with the University of Pittsburgh.

[20297024]



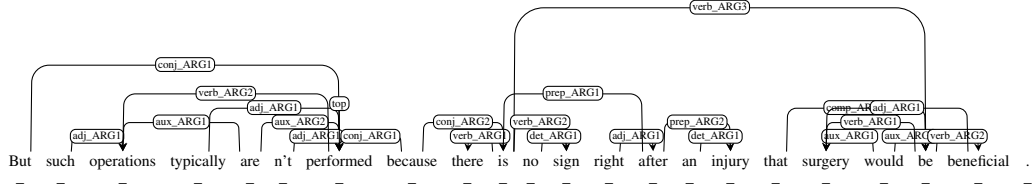
The devices could help indicate when surgery would help, says Charles Tator, a University of Toronto neurosurgeon.

[20297025]



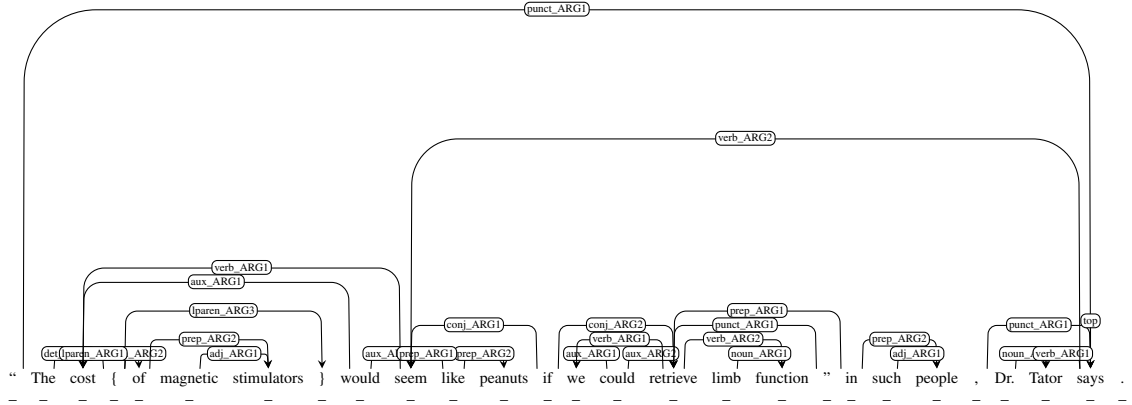
For example, paralyzed car-crash victims occasionally have some intact spinal tissues that, if preserved by emergency surgery, enable partial recovery.

[20297026]



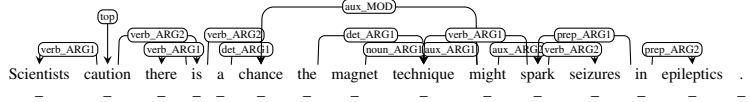
But such operations typically are n't performed because there is no sign right after an injury that surgery would be beneficial.

[20297027]



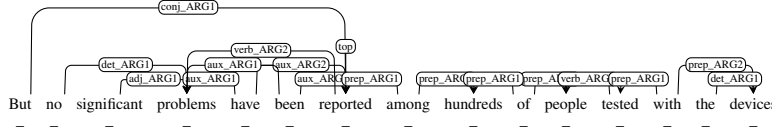
The cost of magnetic stimulators would seem like peanuts if we could retrieve limb function in such people, Dr. Tator says.

[20297028]



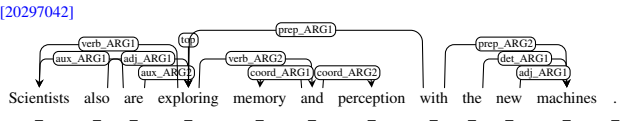
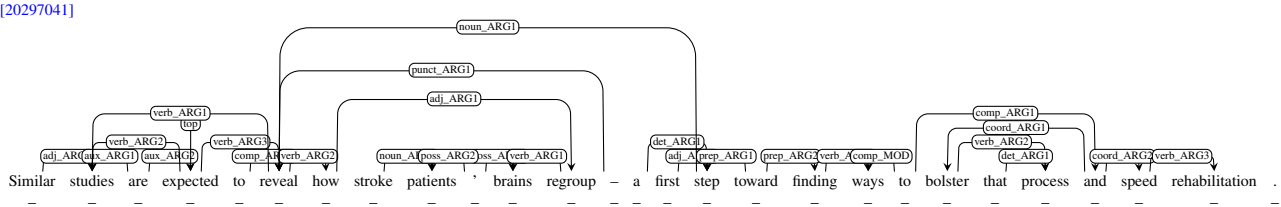
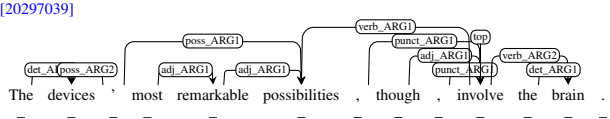
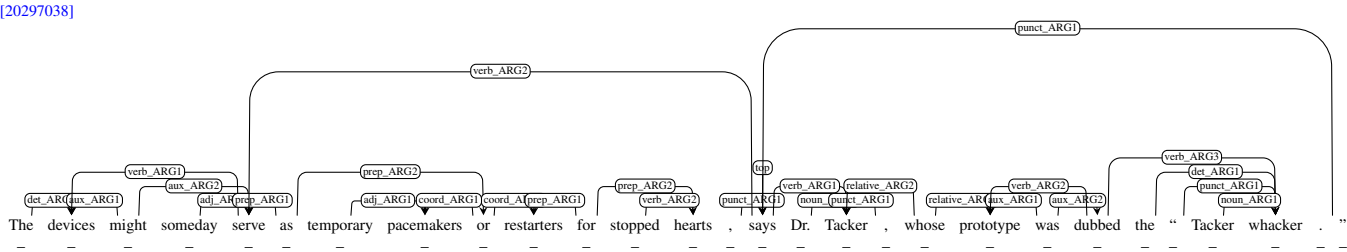
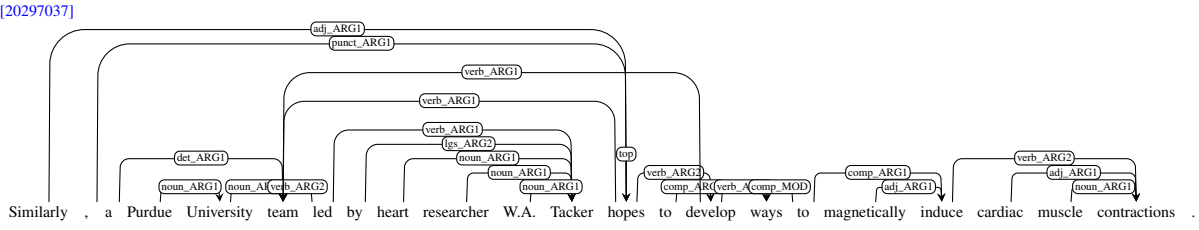
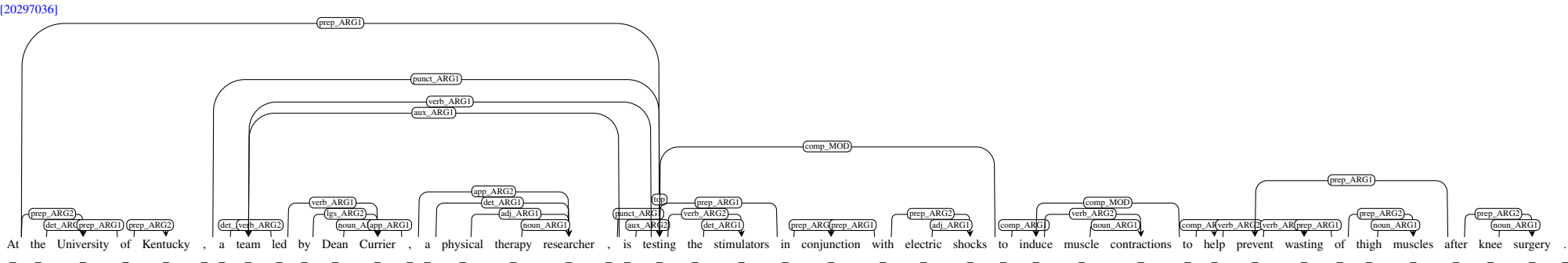
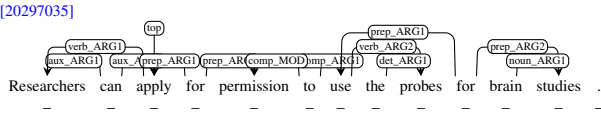
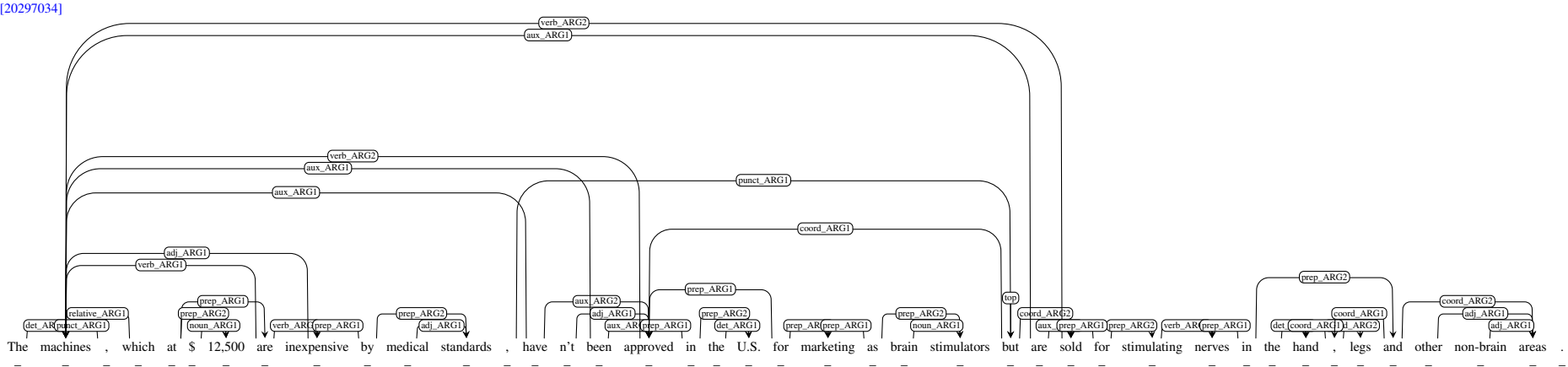
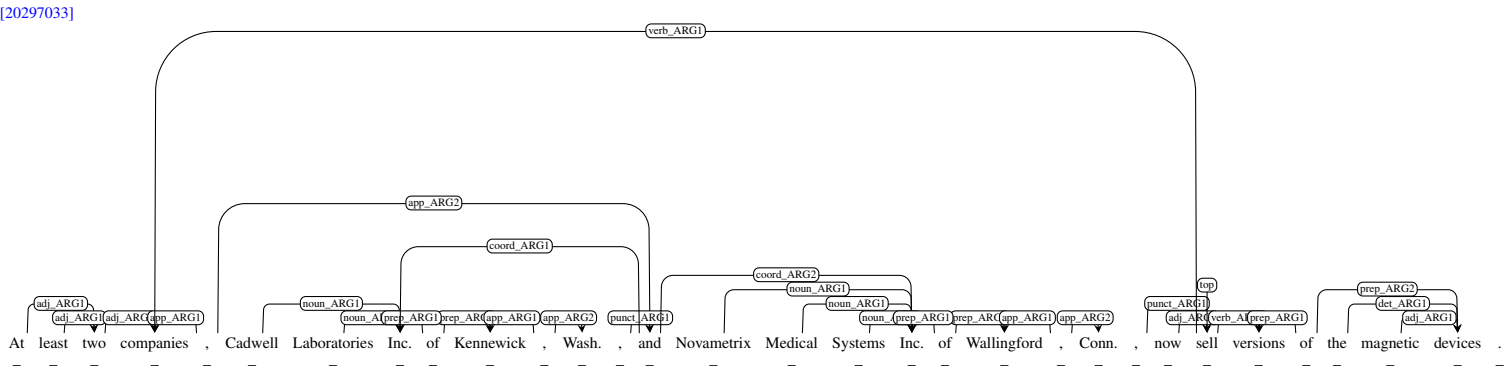
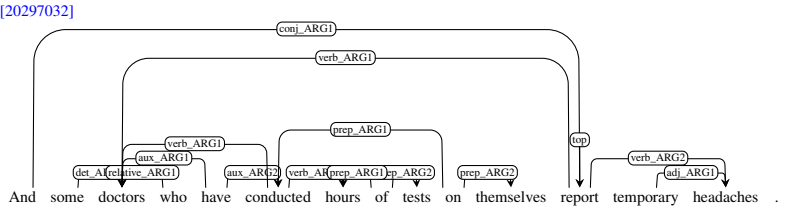
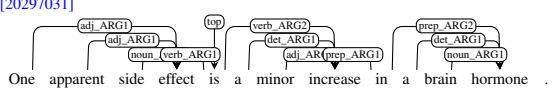
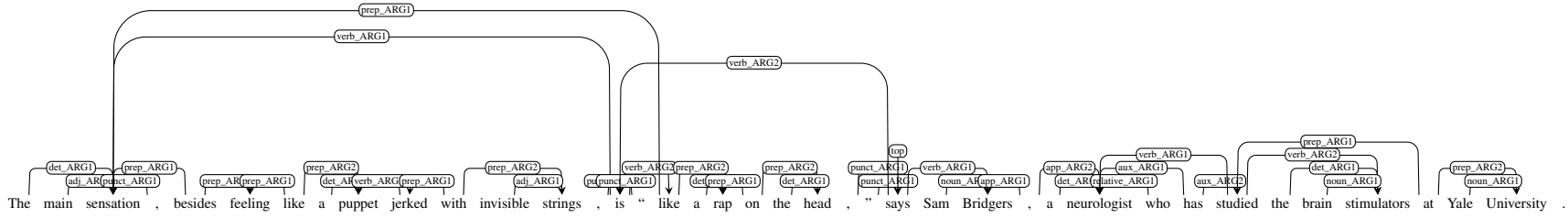
Scientists caution there is a chance the magnet technique might spark seizures in epileptics.

[20297029]

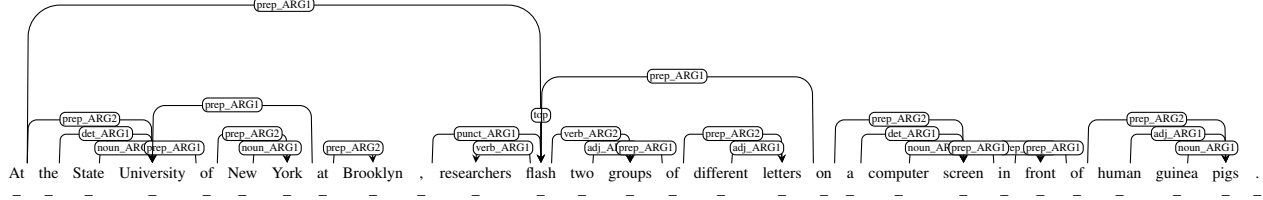


But no significant problems have been reported among hundreds of people tested with the devices.

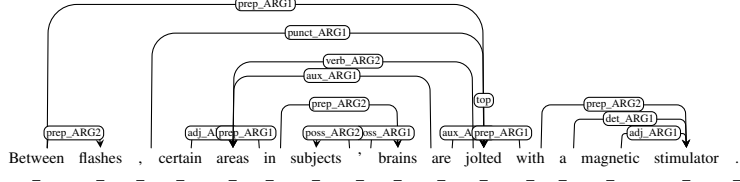
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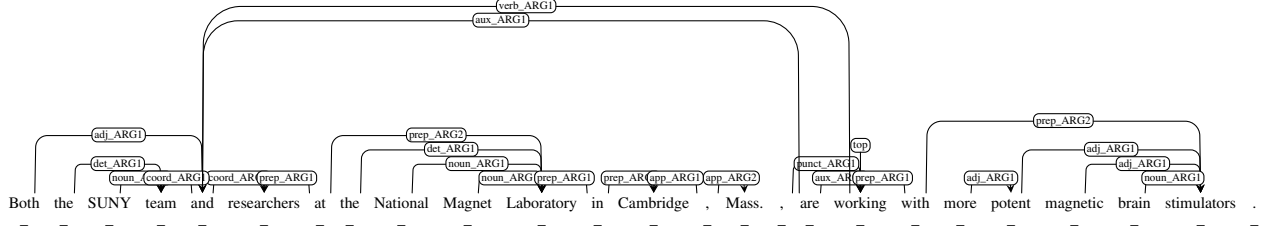
[20297043]



[20297044]



[20297049]



[20297050]

