In Flagrante Delicto:
Capturing the Moment When
Fusion is Lost in Strabismus

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Velocity of Spontaneous & Shutter-Induced XT are Correlated

$\rho = 0.91$

Velocity of Spontaneous XT & Amplitude are Correlated

$\rho = 0.81$

Blue Cross, Blue Target

Red Cross, Red Target
Conclusions

- In alternating exotropia the deviated eye is unstable, with a standard deviation in horizontal position of ± 2.4°.
- Even the fixating eye is slightly unsteady, compared with controls.
- The outwards eye movement that occurs spontaneously is extremely similar to the outwards eye movement induced by occlusion.
- Therefore, once fusion is broken and the eye begins to move outwards, visual feedback plays no role.
- The peak velocity of the outwards eye movement is correlated with the amplitude of the exotropia.
- Although intermittent exotropia is often blamed on excess divergence tone, in fact, adducting saccades are less accurate than abducting saccades.
- We have not yet solved the chicken or egg problem.