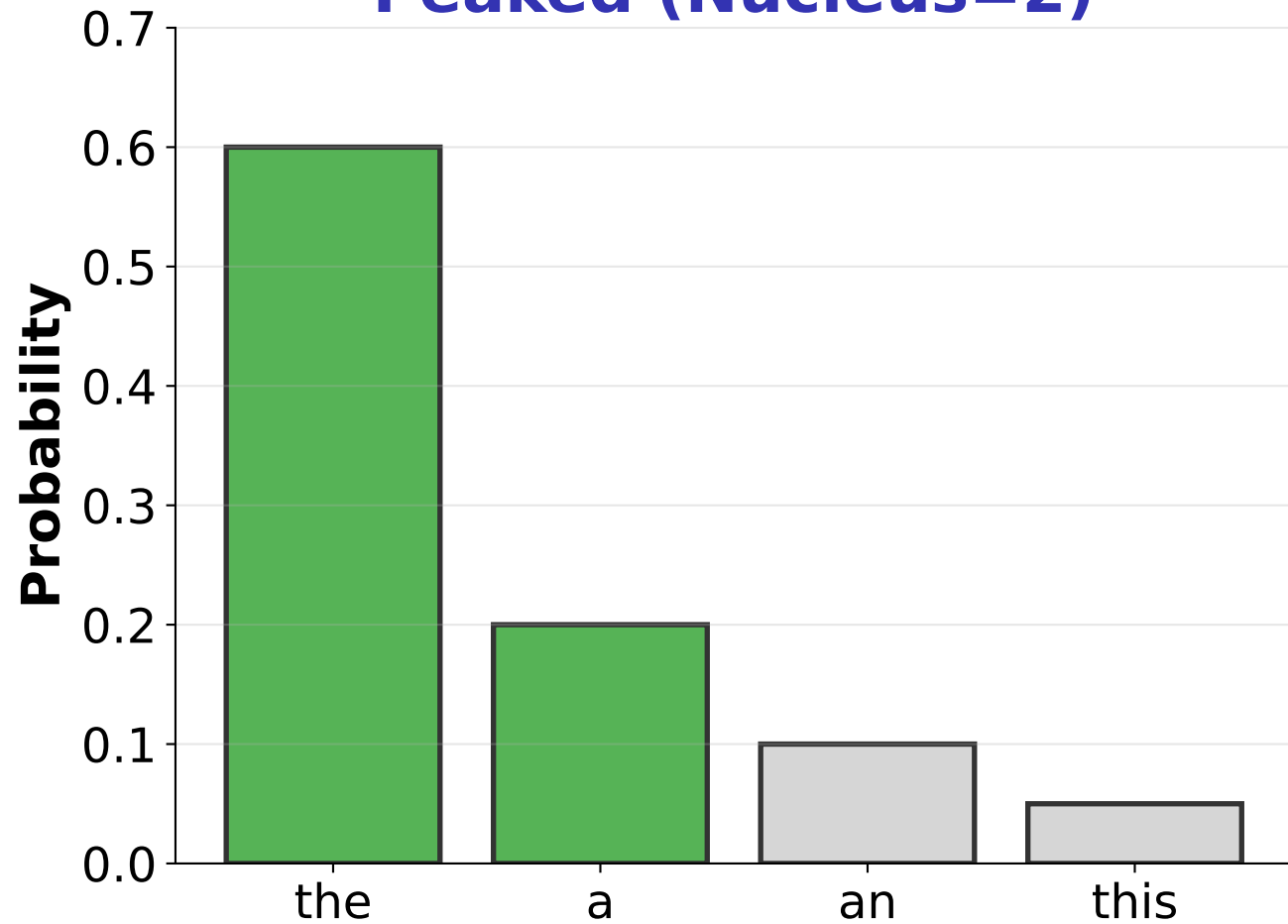Nucleus Adapts to Distribution