

Appendix to § 1.1

(This is basically a more detailed account of § 1.1 of [MO])

Def A J -model is an amenable structure $M = \langle J_\alpha^A, B \rangle = \langle (J_\alpha^A, A, B) \rangle$,
(or mutation mutant):
 $\langle J_\alpha^{A_1, \dots, A_n}, B_1, \dots, B_n \rangle$.

Def A J -model $M = \langle J_\alpha^A, B \rangle$ is acceptable iff whenever $\beta < \alpha$,
 $\omega \leq \tau \leq \omega_\beta$ and $\exists (\tau) \cap J_{\beta+1}^A \not\subseteq J_\beta^A$,
Then $\overline{\omega_\beta} \leq \tau$ in $J_{\beta+1}^A$
(i.e. $\forall f \in J_{\beta+1}^A \ f: \tau \xrightarrow{\text{onto}} \omega_\beta$).

Lemma 1 " $\langle V, A, B \rangle$ is acceptable"
is a \mathcal{Q} condition ψ
(i.e. $M \models \psi \iff M$ is an acceptable J -model)