1 Notation

We will denote the class of ordinals by On. For X, Y sets we denote by ${}^X Y$ the set of all functions from X to Y. For an infinite cardinal κ, we let H_κ be the set of sets X such that the cardinality of the transitive closure of X is $<\kappa$. ZF^- will denote ZF with the Collection scheme but without the Power Set axiom, following the results of [?]. We write GBC for Gödel-Bernays class theory with the Axiom of Choice, and GB for GBC without the Axiom of Choice. The symbol $\lightning$ will denote a contradiction and $\mathscr{P}(X)$ denotes the power set of X. We will sometimes denote elementary embeddings $\pi\colon (\mathcal{M}, \in) \to (\mathcal{N}, \in)$ by simply $\pi\colon\ \mathcal{M} \to \mathcal{N}$. Generally, α, β, γ will denote ordinals and $\kappa, \lambda, \theta, \delta$ cardinals.