conjugate of H in the equivalent left co-set, and vice versa.

A necessary and sufficient condition that T is simply transitive is that at least one conjugate of H under G has its operators distributed among less than $n-1$ co-sets of G with respect to H. In particular, when these operators are distributed among $n-2$ such co-sets n must be even and T must involve a system of imprimitivity composed of $n/2$ sets of letters. This is also a necessary and sufficient condition that H is invariant under a subgroup of G whose order is exactly $2h$. If G is simply isomorphic with T and a subgroup of G has its operators distributed among $n-2$ of the co-sets of G with respect to H, its order cannot exceed $2h$, and when it has this order it must involve a subgroup of index 2 which is conjugate with H under G. Moreover, H corresponds to a transitive subgroup of degree $n-2$ in T.

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A NOTE ON TRANSFINITE ORDINALS

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In a supplementary note to an article of theirs,* Alexandroff and Urysohn demonstrated the following theorem.

If to every ordinal α of the second class there corresponds an ordinal $\mu(\alpha)$ such that $\mu(\alpha)<\alpha$, then there exists a non-denumerable set of ordinals of the second class

$$\alpha_1, \alpha_2, \cdots, \alpha_n, \cdots, \alpha_\omega, \cdots, \alpha_\lambda, \cdots$$

such that

$$\mu(\alpha_1) = \mu(\alpha_2) = \cdots = \mu(\alpha_\lambda) \cdots .$$

The present note applies a different method to prove the following more general result.

THEOREM. *Let Ω_δ be the smallest ordinal whose power is $\aleph_\delta$, where $\delta>0$ is a non-limiting ordinal. If to every transfinite ordinal $\alpha<\Omega_\delta$ there corresponds an ordinal $\mu(\alpha)$ such that $\mu(\alpha)<\alpha$,*

* *Mémoire sur les espaces topologiques compacts*, Verhandelingen of the Amsterdam Academy, (1), vol. 45, No. 1.