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Mycielski asked [1] whether all subsets of the space $\kappa^{\mathrm{cf}\,\kappa}$ with its lexicographic order topology that are constructible from $\kappa^{\mathrm{cf}\,\kappa}$ may have the properties that are immediate analogs of the Baire and the perfect set properties, for all κ. He asked also [2] more generally about appropriate descriptive set theories for these spaces. We derive some consequences of Mycielski's proposal, e.g., by showing that then the universe is not constructible from any set and contains a certain portion of large cardinals. We show also that, under some assumptions on κ, most of concepts and results of classical descriptive set theory have immediate analogs for the space $\kappa^{\mathrm{cf}\,\kappa}$.

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As an alternative to Gentzen's schema $(\to\mathrm{L})$ for the introduction of implication on the left side of the sequent sign in the intuitionistic sequent calculus **LJ** we propose the schema $(\to\mathrm{L})^\circ$:

$$(\to\mathrm{L})\ \frac{\Gamma\vdash A\quad \Delta, B\vdash C}{\Gamma,\Delta, A\to B\vdash C}\qquad (\to\mathrm{L})^\circ\ \frac{\Gamma\vdash A}{\Gamma, A\to B\vdash B}$$

In the absence of cut, $(\to\mathrm{L})^\circ$ is weaker than $(\to\mathrm{L})$. In the system based on $(\to\mathrm{L})^\circ$, cut is admissible except for cuts whose left premiss is the conclusion of $(\to\mathrm{L})^\circ$, i.e., cuts of the following restricted form:

$$\begin{array}{l} \\ (\to\mathrm{L})^\circ \\ (\mathrm{cut}) \end{array} \dfrac{\dfrac{\vdots}{\Gamma\vdash A}\qquad \begin{array}{c}\vdots\\ A,\Delta\vdash C\end{array}}{\Gamma,\Delta\vdash C}$$

Using cut in this restricted form, $(\to\mathrm{L})$ and $(\to\mathrm{L})^\circ$ can be shown to be equivalent. Unlike full cut, applications of restricted cut do not compromise the subformula property and are harmless in this sense. Philosophically, $(\to\mathrm{L})^\circ$ is motivated by the interpretation of implications as rules [1, 2] and can be viewed as a direct translation of *modus ponens* into the sequent calculus.

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