

7.8.s. Summary

Our system is not decisive in part because we always look to new parameters as possible counterexamples to a generalization and assume that terms are not co-aliases unless our resources tell us otherwise. But, while we must consider new terms as possible counterexamples and we must allow for the possibility that terms not made co-aliases refer to different things, we may also consider alternatives that point toward smaller structures. The rules Supplemented Universal Generalization (UG+) and Supplemented Restricted Universal Generalization (RUG+) leads us to consider instances for old as well as new terms when planning for a generalization. And we can secure new compound terms as co-aliases of unanalyzed terms by using the rule Securing a Term (ST).

Even with these rules, we cannot always reach dead-end gaps when derivations fail because dead-end gaps describe finite structures, and invalid arguments are not always divided by finite structures. There are some sets of sentences whose members can be made all true only with an infinite range of reference values. One example consists of sentences saying that a predicate R expresses a relation that is irreflexive and transitive and is such that each reference value stands in this relation to some reference value. No system like ours could drive a gap to a dead end in such cases and, while a very different system might do better in some of them, it has been shown that no system could do so in all such cases.