Online Methodological Appendix

In this appendix, we provide a detailed reasoning for the logical compression of all empty cells remaining in the property space shown in Table 2 of the article entitled *Treaty Amendment Procedures: A Typology from a Survey of Environmental Agreements*. The objective here is to reach a reasonable level of confidence that removed empty cells represent implausible or illogical combinations of rules rather than theoretically possible but empirically absent ones. If we first look at plane 1[[1]](#footnote-1), rules for coverage cannot stand on their own without rules for adoption and entry into force (column ‘A’). Similarly, rules restricting the coverage of an amendment do not make sense when all parties must approve entry into force (column ‘B’). In theory, the incompatibility between a procedure that requires unanimous consent for entry into force and rules of coverage that deal with non-accepting parties should apply to all procedures, notwithstanding rules on adoption. However, there are exceptions. For instance, if we look at plane 2, it may be necessary to deal with non-accepting parties even when a consensus is required for both adoption and entry into force. This is the case when some states have second-tier status in a treaty, like the “non-consultative parties” in the Antarctic Treaty system. Thus, they are excluded from the decision-making process relating to the amendment and do not take part in the required consensus (plane 2, column B).[[2]](#footnote-2) Likewise, there are instances where a single state can veto the entry into force of an amendment even if the latter has received the majority approval required for adoption (plane 3, column B). However, in these cases, if coverage is addressed, it can only be to reaffirm that an amendment approved by all, at least tacitly, also applies to all (cell 3Bd).

Another empirical and logical compression involves the two cells at the bottom right corner of plane 2. An agreement may allow entry into force with a simple majority of accepting parties, but require unanimous consent for adoption. This combination allows for a degree of flexibility when some signatories are unable or unwilling to proceed with ratification. The last empirical and logical compression involves the remaining empty cell in row c on planes 1 and 2. It is inconceivable for a treaty to include a radical provision about coverage, whereby a state is requested to withdraw if it refuses to abide by an amendment, if the adoption procedure for the amendment is not clearly stated in the first place (row c of plane 1) or if it operates under the rule of consensus (row c of plane 2).

1. In this appendix, all numbers, lowercase letters, and uppercase letters refer to Table 2. [↑](#footnote-ref-1)
2. A ‘party without consultative status’ in the Antarctic Treaty system is a contracting party who has not ‘demonstrate[d] its interest in Antarctica by conducting substantial research activity there, such as the establishment of a scientific station or the dispatch of a scientific expedition’ (art IX) and is therefore not involved in the decision-making process regarding amendment (art XII). The Antarctic Treaty, 1 December 1959 (402 UNTS). In our coding, such ‘non-consultative parties’ are not considered as parties. [↑](#footnote-ref-2)