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**In which sense H. Weyl's "Creative definitions" generalizes Peano school's "Definitions by abstraction" ?**

At the end of the 19th century, the members of Peano School elaborated a typology of mathematical definitions. Among them, they distinguish "definitions by abstraction" – for the definition of which they create the concept of "equivalence relations".

Starting from the remark that equivalence relations (reflexive, symmetrical and transitive binary relations) may be redefined as being exactly the binary relations which are equal to any of the two indiscernibility predicates they induce, we will see how "definitions by abstraction" (or "abstraction principles" as Russell coined them) may be reformulated in terms of relational indiscernibility. From there, Peano school's definition by abstractions appear to be but a particular case of a more general scheme of "abstraction principles" founded upon relational indiscernibility, which happen to be essentially the ones elaborated by Hermann Weyl under the name "Creative definitions", to found the hilbertian notion of ideal element.

After having extended that frame to indiscernibility predicates induced by binary relations between possibly different sets (generalizing the situation of indiscernibility induced by binary relations *over a set*), we will see that the notion of type (sets closed by bi-orthogonal, for an orthogonality operation defined from the binary relation) may play, in that context, the same role as the one played by equivalence classes in the particular case of definitions by abstraction.