

Some Suggestions for a Theory of Legal Concepts

Introduction

The purpose of this article is to suggest, on the level of the theory of concepts, a possible way out for the relative isolation, in which methodology of law finds itself. Indeed, traditionally, methodology of law examines “wie aus ihm (i.e. the general norm) durch seine Anwendung, Konkretisierung und Fortbildung, das wirkliche, d.h. das in Anwendung stehende, sich verwirklichende Recht wird” (1). It is true that recently these problems have been stated in a rather new way, because one has applied the methods of modern symbolic logic to the different techniques, with which, starting from the general norm, the individual case is settled; but nevertheless this does not bring with it a genuine modification of the traditional outlook. So that the contrast with methodology of empirical science remains still great.

Scientific concepts

Let us sum up then, very briefly, and only as an introduction to what follows, the theory of concepts of empirical science (2).

A scientific concept (such as need, reinforcement, atom...) functions in a scientific law or theory, with the aid of which many empirical phenomena can be explained or predicted. On the ground of the *principle of verification* (or of falsification!), this implies that those concepts entertain certain relations to predicates referring directly to the observable reality.

(1) K. Larenz, *Methodenlehre der Rechtswissenschaft*, Berlin, Heidelberg, Göttingen, 1960, p. 149.

(2) For a more detailed account, see C. G. Hempel, *Aspects of Scientific Explanation, and other Essays in the Philosophy of Science*, New York - London, 1965; id. *Fundamentals of Concept Formation in Empirical Science*, *Encyclopedia of the Unified Science*, Chicago, 1951.

Since however there is on the other hand the inclination for explaining, with a minimum of principles, as many empirical data as possible, scientific concepts can't be connected with one, very specific empirical field, but will have to denote very different fields. The first aspect is called by Carl HEMPEL the *empirical import* of scientific concepts, the second one is called the *systematic import*.

A. The first methodologists, inspired in this by the early neopositivist principle of verification that they transplanted and adapted to concepts (instead of propositions), proposed to call a concept meaningful, only when it is itself an observation-term, or when it is reducible to such a term, by a finite series of stipulative or nominative definitions. So the empirical import was clearly secured; but the actual practice of the scientists was ignored, for they use many concepts which can't be reduced, in the indicated manner, to the observational vocabulary V_B .

B. Difficulties arise already with regard to the so-called *disposition terms*, which purport "to describe not what given elements *are*, or *do* in fact, but rather what they are *able* or *likely* to be or do, what they have the power or tendency to be or do, whether or not they are or do so in fact" (3). (magnetic, phototropic, introvert, matriarchal...).

Let F be 'fragile,' and let us define F as

$$F(x) = (t) (Pxt \supset Bxt)$$

x is fragile, when, and only when, for every t,
if one gives x a push at t, then x breaks at t.

But if " \supset " represents the so-called material implication, then we immediately meet a lot of puzzling difficulties. For the proposed definition forces us to call an object x F, whenever $Pxt \supset Bxt$ holds; and we know that this is the case, as soon as the implicans is false. Thus, if actually nobody hits x, Pxt is false, the implication as a whole is true, and x is F; even if, in this case, it is as solid as possible.

In order to avoid this, and other difficulties, Rudolf CARNAP (4) proposed a solution, by defining the disposition term by means of one or more reduction-sentences: when an object has a given property (P_1), — when, e.g., it is exposed to certain test-conditions, — it has the property Q (the disposition term to be defined), when and only when it shows the response P_2 . Reduction sentences have then the following structure:

$$P_1 x \supset (Qx \equiv P_2 x).$$

(3) I. Scheffler, *The Anatomy of Inquiry*, London, 1964, p. 167.

(4) In *Testability and Meaning*, in *Phil. Sc.*, III, 1936, pp. 454 et seq.; partly reprinted in H. Feigl & M. Brodbeck, eds. *Readings in the Philosophy of Science*, New York, 1953.

And now it turns out that

1° the difficulty mentioned above does not arise, since, if the test-condition fails, we are no longer forced to qualify the object x as having the disposition.

2° the original criterion, i.e. the complete and explicit reduction of all concepts to the observational vocabulary, has to be abandoned: the sentence, ' Qx ' can only be replaced by the observational sentence ' $P_1 x \supset P_2 x$ ', if x has really P_1 . Thus, only in certain contexts ' Q ' can be said to be reducible to V_B .

3° Scientific concepts become *open* concepts, for their meaning can be specified by adding more reduction sentences, i.e. more contexts in which they are entirely reducible to V_B . Moreover, certain relations, expressible in terms of laws or lawlike statements, hold between those reduction-sentences, defining the same Q . "Sets of reduction sentences combine in a particular way the functions of concept formation and of theory formation" (5).

C. On the level of *theoretical concepts*, still more attention is paid to the systematic import of scientific concepts.

A theory, properly said, consists of three parts (6):

1. First of all, we have an *axiomatic system*, having only syntactical relevance, for it specifies certain relations, with given properties (e.g. associativity), between certain "descriptive" terms, whose (semantical) meaning is again ignored, for they are represented by variables. All the terms of the system are defined ultimately in terms of the "primitives", whose meaning is only specified, in the indicated manner, by the axioms (implicit definitions). So the sentences of the system do not express statements, capable of being true or false, but rather statement-forms.

2. Naturally, a *scientific* theory must deal with reality; and therefore the described logical skeleton has to be *interpreted*, i.e. its primitive terms (and, by implication, the defined terms; but the relation can be inversed too) have to be related to given empirical terms by the coordinating definitions (or the semantical rules). This coordination however is such that 1° the theoretical terms of the axiomatic system obtain only a partial empirical interpretation (holding only for certain contexts); 2° not all the primitive terms are interpreted; some of them can remain incoordinated. All we

(5) Hempel, *Fundamentals of Concept Formation in empirical Science*, p. 28.

It is interesting to observe that the logical structure, exemplified by the reduction sentences, is also exhibited by the famous operational definitions, introduced by P. W. Bridgman, and by the much debated intervening variables of psychology.

(6) This account is inspired by E. Nagel, *The Structure of Science, Problems in the Logic of scientific Explanation*, London, 1961, Chapter V.

know of the latter is what we can infer from the axioms, in which they function, and which specify relations holding between the interpreted terms and the uninterpreted ones.

And so we understand that the meaning of a given theoretical term is not something absolute, but depends on the system it forms part of: with certain axioms, the term has a meaning, with other ones, it is meaningless (7). Indeed, the theoretical terms are introduced jointly; they form one system, in the straightforward sense of the word.

3. Finally, most theories have one or more *models*. Although the latter are systematically superfluous, their heuristic value is very great.

The role and the utility of such theories which live, so to speak, their own logical lives, and the relations of which with empirical reality are, from a certain viewpoint, accidental, have provoked a highly animated debate among methodologists. But for our purpose, it will be sufficient to emphasize their remarkable explanatory power and their suggestive heuristic value.

1° Theories, as stated above, live their own logical lives. This involves that we can leave out of account their meaning, retaining only the logical skeleton, and examine what propositions can possibly be deduced from the original suppositions or axioms. Admittedly, the number of provable propositions will be infinite, but it will be very illuminating to select the non-trivial consequences from the trivial ones, to give them an empirical interpretation, and to verify if they are true.

2° Since the descriptive terms of a theory are, in fact, variables, we can give them any interpretation we like. And if it arrives then that for 2 or ... n different interpretations, all the theorems of the system become true statements, we have at once one theory, explaining very different fields.

From this, — given the complexity of the problems here referred to — perhaps ridiculously brief account, the reader will be able to infer and to evaluate the gap lying between methodology of law, and methodology of empirical science. Naturally, law is normative, and not empirical; but should this really be a reason to stop us from seeking new ideas and perspectives in the very brilliant and imposing results of empirical methodology? “Lawyers must not fear that, by consulting the methodology

(7) R. Carnap, The methodological character of theoretical concepts, in H. Feigl, M. Scriven & G. Maxwell, eds. *Minnesota Studies in the Philosophy of Science*, vol. I, p. 68, Minneapolis, 1956.

of science we trespass on a foreign land and import from there ideas alien to our own" (8).

Positing the Problem

In the light of the preceding summary, it should be evident that a theory of legal concepts, inspired by the empirical methodologists, will have to start from a duality between an analogue of an observational vocabulary and a theoretical vocabulary, in order to examine the relations between the two vocabularies, and to evaluate the function and the utility of the latter. In the following sections, we will try to give some suggestions, which might be helpful in the execution of this very ambitious program.

Let us start from a primitive legal order, viz. the well known Lex Salica (9).

Si quis secundum digitum, unde sagitta trahitur, excusserit, mallobergo brioro, solidus XXXV culpabilis iudicetur.

Si medianum digitum.... excusserit, mallobergo taphano, solidus XXXV culpabilis iudicetur.

Si vero pedis capulatus fuerit et ibidem mancus teniat, mallobergo chudachina chamina, solidus XLV culpabilis iudicetur.

We have here a series of commands, of *general* norms, presented in a typical juridical form, linking a certain behaviour with a certain punishment. Because of the generality of the norms in question, the behaviour and the punishment must be referred to by means of a concept. But the concepts in our example are still very simple; they belong to the observational vocabulary of everyday language. We can thus say that these concepts, denoting the circumstances under which certain legal consequences will be produced (including the delimitation of the persons whose behaviour has to be sanctioned) and these consequences themselves, correspond to the observational vocabulary V of empirical science. And if there are still other non-observational terms in law, they certainly must entertain certain relations to the empirical legal concepts; for otherwise it would be impossible for a norm to regulate efficaciously people's behaviour. Fairness however forces us to signalize that there is a very great, and sometimes distressing contrast between the legal observational vocabulary and the observational vocabulary of science. The latter is really observa-

(8) B. Horvath, *Field, Law and the Law Field*, *österreichische Zeitschrift für öffentliches Recht*, VIII, p. 55.

(9) The examples are taken from chapter XLVIII: De dibilitatibus.

tional, i.e. only what is directly observable ⁽¹⁰⁾, is a part of it; the former on the contrary stems, as mentioned above, from the vague and unprecise everyday language; and contains many terms, such as, 'the intention of injuring, a good will, the accuracy of a good pater familias' which, in psychology e.g., would only be tolerated as highly questionable hypothetical constructs ⁽¹¹⁾, but which are used by the lawyer, without any complex or problem. Without discussing this situation nor its desirability, we only observe that in legal science the behaviourist katharsis has not yet taken place.

Besides this first category of concepts, that the Germans call *Tatbestandsbegriffe*, we have then other legal terms, which, according to the development of legal thinking, become more frequent. We mean terms such as 'pledge, ownership, mortgage, personal right, subjective right, corporation, ...' ⁽¹²⁾. They specify no longer the circumstances, under which certain legal consequences must appear, but they denote legal institutions, i.e. a group of norms regulating a certain situation; so the norms regulating the situation where A transfers to B the property of his house, at a certain price, are called the rules of the contract of sale.

In this context, we must emphasize a very important point, and draw the attention, at the same time, to a serious limitation of this study. Indeed, the reader will perhaps have observed that, among the given examples, there are two different species of legal concepts. On the one hand we have terms such as 'ownership'; on the other we have 'right, duty,' and so on. The latter are called by J. COHEN ⁽¹³⁾ *framework* concepts. Whereas it is very senseful to ask: What is exactly ownership according to American

(10) It must be observed however that, even in empirical science, V_B is not clearly delimited. Carnap (*Testability and Meaning*, pp. 454-455) proposes the following definition: A predicate 'P' of a language L is called observable for an organism (e.g. a person) N, if, for suitable arguments, e.g. 'b', N is able under suitable circumstances to come to a decision with the help of few observations about a full sentence, say 'P(b)', i.e. to a confirmation of either 'P(b)' or ' $\sim P(b)$ ' of such a high degree that he will either accept or reject 'P(b).'

(11) K. Maccorquodale & P. E. Meehl, On a distinction between hypothetical constructs and intervening variables, in *Psych. Rev.* 1948, 55, 95-107, reprinted in M. H. Marx, ed., *Psychological Theory*, New York, 1951.

(12) This example (and all the following ones) is based on the Belgian legal order; let us remark however that, in so far as civil law is concerned, there is a very great similarity between Belgium and France: in both countries, the Code Napoleon has acquired (and still has, apart from some slight modifications) the force of law.

It was sometimes difficult to find English words, exactly corresponding to the (French) legal terms.

(13) Symposium: Theory and Definition in Jurisprudence, by Mr. Jonathan Cohen and Prof. H. L. A. Hart, in *Problems in Psychotherapy and Jurisprudence*, Supplementary Volume XXIX of the Aristotelian Society, 1955, p. 242.

law (an intelligent question, that is answered by the comparatists), it makes absolutely no sense to ask: What are the characteristics, in American law, of 'right, duty....'? For these concepts are like the frame of reference, that locates all particular rights or duties. The same concepts are studied also by HOHFELD, who has enumerated and analysed what he called the *fundamental legal conceptions* (14). We know however that the list of Hohfeld is too complicated, and can be simplified substantially. We know too, and this is important for us, that all these fundamental legal conceptions can be defined as certain characteristic positions in which the norm-addressees find themselves, and which are indicated by the form of the norm in question: if a norm commands to A to do X in favour of B, A has a duty, a legal obligation, and B correspondingly a right. In this article however, we are not dealing with the different forms that norms can have, nor with the different positions that, according to the form under consideration, belongs to a given person. Our unique concern is the relation of certain observational predicates to other predicates, which are not observational (theoretical ones, *sensu latissimo*). So we shall neglect these "fundamental concepts," and limit ourselves to the non-fundamental ones.

Legal concepts as mere Abbreviations

I. If we remember how the early methodologists reduced all scientific terms to the observational vocabulary, we feel inclined to see a striking similarity in the following discussion, inspired by Alf Ross (15), of the term 'owner' taken as prototype of a legal concept.

According to Ross then, we have a whole series of norms, stating the conditions under which a person can become owner: in the situations F_1 ,

(14) *The Fundamental legal conceptions, and other legal Essays*, 1919. See also D. J. Hislop, *The Hohfeldian System of fundamental legal Conceptions*, in *Archiv für Rechts- und Sozialphilosophie*, 1967, 53-89.

(15) Alf Ross, *Tû-Tû* in *Scandinavian Studies in Law*, 1957, 139-153; id. *Definition in legal language*, in *Log. et Anal.*, 1958, 1, 139-149.

The analysis of Ross is really not an isolated phenomenon, but a rather improved and sophisticated version of some ideas and positions which are held also by other Scandinavian thinkers, such as K. Olivecrona and Hägerström (See e.g., K. Olivecrona, *Legal Language and Reality*, in R. A. Newman, ed., *Essays in Jurisprudence in Honor of Rescou Pound*, New York, 1962, pp. 151-190).

It is even possible to find an analysis, analogous to Ross, in the penetrating redefinitions of some fundamental concepts in H. Kelsen's *Reine Rechtslehre*; and also in the so-called *Imperativentheorie*, or rather, in the efforts of this theory to adapt itself to the legal reality, where, indeed rather few norms directly correspond to the ideal type of a simple command.

$F_2, F_3 \dots F_n$, one becomes owner. Next, we have a series of norms, stating all that happens, when a person has become owner (*uti, frui, abuti*): $C_1, C_2, C_3 \dots C_n$. Well, the concept *O* connects to each other the class of the *F*'s, and the class of the *C*'s. More precisely, "by means of the concept *O* a cumulative plurality of legal consequences is connected with a disjunctive plurality of conditioning facts" (16).

This means that *O* refers to the presence of one of the conditioning facts, or to the presence of all the legal consequences. The sentence 'X is *O*' would be true, if and only if one can confirm the disjunction of the conditioning facts (which amounts to the presence of at least one of those facts, which normally exclude each other), or if one can confirm the presence of all the legal consequences, or both.

$$(F_1 \vee F_2 \vee F_3 \dots \vee F_n) = O = (C_1. C_2. C_3. \dots .C_n)$$

Neglecting for the time being the definition of *O* by means of the *C*'s, *O* must be qualified as a *disjunctive concept* (17). And this will permit us to answer to an objection of H. L. A. HART (18). According to him, the sentence 'X is *O*' refers neither to the class of the conditioning facts, nor to the class of the consequences, nor to a conjunction of both classes, since such a conception obscures the essential function which this sentence has to accomplish, and that consists in being a conclusion from a general statement, affirming e.g. that all people who have found a treasure, become owner of that treasure, and from the singular observation statement that X has really found a treasure (19). But in fact, both opinions which Hart apparently takes for inconsistent, are easily compatible.

For, introducing a concept amounts to specifying the conditions and criteria which the elements of a given universe must fulfil, in order to be a member of the extensio of the concept under consideration. And so the attribution of a predicate *f* to an object *x* (or the incorporation of *x* in the class of the *f*'s), supposes always a very elementary reasoning, the conclusion of which is the attribution of *f* to *x*, and the premises of which are the appeal to the criteria, and the assessment that the object to be incorporated really fulfils the criteria.

(16) *Tû-Tû*, p. 147.

(17) For some illuminating data about disjunctive concepts, see Jerome S. Bruner, Jacqueline J. Goodnow and George A. Austin, *A Study of Thinking*, New-York, 1956, p. 157 et seq.

(18) H. L. A. Hart, *Definition and Theory in Jurisprudence. An inaugural Lecture*, Oxford, 1953, p. 21.

(19) This example reflects, in a very simplified version, art. 716 of the Code Napoleon.

But when the task consists only in applying a *conjunctive* concept, — with very simple criteria of application (e.g. all red objects) — to certain facts or situations, one has, because of the immediate character of the application procedure (a consequence of the simplicity of the criterion), no awareness of such a reasoning. With disjunctive concepts on the contrary, which are moreover somewhat artificial, people know very well that they are following a certain rule, and that the attribution of the disjunctive concept *f* to situation *x* is in fact the conclusion of a relatively simple reasoning. But when the disjunctive concepts have, into the bargain, only unprecise criteria of application, — a hypothesis which will often be realized when *f* is a legal concept — it will become especially clear that it is really a reasoning that dictates the incorporation of the situation *x* in the class defined by *f*.

We have thus identified *O* with two classes, the class of the *F*'s, and that of the *C*'s. And such a presentation meets another difficulty, developed in a suggestive way by Ross himself. For according to Ross, although the legal concepts are of a great utility — because they permit to represent conveniently a large number of norms — and although the sentences in which they function are meaningful, the concepts themselves have no semantical reference: they are mere connectors, “logical terms whose meaning can only be specified by giving the rules that govern their use” (20).

Apart from the fact that this argument is not satisfying; if our analysis is correct, the analysis of Alf Ross can't be so.

A. Indeed, on the one hand, we have identified *O* with a disjunction of conditioning facts, or — stating it more precisely, since these facts are considered as general patterns of facts, denoted by concepts — with a disjunction of a number of classes. As a disjunctive concept, *O*, — when we approach it, for the time being, from an extensional standpoint (21) — is not an (atomic) classname, but a class of classes, viz. the class of all *Tatbestände*, which are connected with certain legal consequences. And because of the vague way in which the conditioning facts (or subclasses) are specified, *O*, the logical sum of the subclasses, will have an area of indetermination that is a function of the area of indetermination of its constituents.

All this shows at any rate clearly that legal concepts, such as *O*, have indeed a referent in the objective, empirical world. Admittedly, because of the disjunctive character of most legal concepts, this anchoring in what

(20) Definition in legal Language, p. 154.

(21) We'll discuss later on the adequacy of this viewpoint.

is "directly" observable, is not so immediate, and can only be indicated by way of one of their constituent classes. But surely, this can't be a reason to deny them any empirical import: otherwise all disjunctive concepts would be devoid of meaning.

Perhaps Ross attacked so eagerly a certain metaphysical viewpoint⁽²²⁾, according to which legal concepts are mysterious entities, with a special mode of being, that he thought the only way of avoiding this metaphysical illusion is the qualification of a legal concept, considered in itself, as meaningless.

Finally we must remark that the above analysis is one-sided, as it represents all legal concepts as disjunctive ones, although, evidently, there are also many conjunctive concepts: a thief is anyone who takes away an object which does not belong to him (1°), and who has the intention to appropriate it to his own use (2°).

To this objection, which is well-founded, we can only answer that there seems to be no sufficient reason to highlight conjunctive concepts, by separating them from the legal V_B . Moreover, as will be argued later on, these conjunctive concepts do not seem to have to fulfil the same function in legal reasoning as the disjunctive ones.

B. On the other hand then, we have identified O with a series of legal consequences.

A person is owner if, with regard to certain actions, he has some rights and duties, i.e. certain characteristic positions assigned to him by the norms. As mentioned above, we will not insist on this aspect, although the double definition of a concept, on the one hand by given, "material" facts, and on the other by given fundamental legal positions with respect to certain actions (if A is owner, he *can* uti-, frui et abuti) is a curious 'phenomenon' that posits many logical problems which are obscured rather than indicated by the naive equivalence, ' $O = C_1. C_2. C_3. \dots C_n$.'

But if we would ignore, for the time being, these characteristic positions, — which, at any rate, could be denoted unambiguously by means of the *deontic operations*⁽²³⁾, — in order to pay attention only to the actions which are permitted, or forbidden..., we could, with regard to the concepts denoting these actions, repeat, m.m., what has been said about the concepts denoting the conditioning facts.

(22) Incidentally, Ross rejects also the so-called jurisprudence of concepts (Begriffs-jurisprudenz).

(23) For a very easy introduction to deontic logic, see G. H. von Wright, *Deontic Logic*, in *Logical Studies*, London, 1957.

II. We have thus far defined *O* by means of the conditioning facts, the *F*'s, and of the legal consequences, the *C*'s. But evidently, in a concrete legal reasoning, *O* can never be identified at the same time with the *F*'s and the *C*'s; for, by doing so, one would arrive at the tautology $O = O$, which, as an example of the famous principle of identity, would, it is true, inspire some people to very profound logical and metaphysical speculations, but which is of no utility for the practical lawyer. The conclusion must then be that only one of the classes, either the *F*'s or the *C*'s, but not both at the same time, will define *O*.

A. The case where *O* takes the place of one of the *F*'s, is very frequent: in these circumstances, says the judge, the plaintiff is owner, and therefore he may vindicate his right. One interprets certain facts as *O*; and concludes then to *C*. (The emphasis is upon the *F*'s which "cause" *C*).

Perhaps it is, in this context, of some use to insist somewhat an *O* as a disjunctive concept. We are starting from a series of rules:

$$\begin{array}{ll} F_1 \longrightarrow C & \text{(We suppose that } C \text{ is the unique conse-} \\ F_2 \longrightarrow C & \text{quence of the conditioning facts; and neg-} \\ F_3 \longrightarrow C & \text{lect the deontic aspect).} \\ \dots\dots & \\ F_n \longrightarrow C & \end{array}$$

From

$$F_1 \longrightarrow C. F_2 \longrightarrow C. F_3 \longrightarrow C \dots F_n \longrightarrow C$$

we infer

$$(F_1 \vee F_2 \vee F_3 \dots \vee F_n) \longrightarrow C;$$

and we introduce

$$O = (F_1 \vee F_2 \vee F_3 \dots \vee F_n),$$

which gives us

$$O \longrightarrow C.$$

This will permit us now to see the real advantage of introducing *O*. Suppose there is a general norm $F_1 \longrightarrow C$, and that we want to explain that norm, by deducing it from a "higher order generalization." We think of

$$\begin{array}{l} F_1 \longrightarrow (F_1 \vee F_2 \vee F_3 \dots \vee F_n) = O. \\ O \longrightarrow C \end{array}$$

$$F_1 \longrightarrow C$$

But every one sees how the first premise is a logical truth, so that the whole reasoning amounts to nothing more than to the (very elementary)

reasoning, necessitated by the very application of all disjunctive concepts: we have a class of cases, where C appears; and we remark that F is one of these cases. Furthermore, the effect obtained by a certain formal analogy (24) of the above specimen to a real, genuine explanation, is destroyed for ever, when one considers that our would-be-explanation is not able at all to suggest new F-C connections; yet this ability is a constitutive attribute of a genuine explanation (25).

We must say then that the introduction of O has no explanatory power at all, but only a pedagogical value, by remembering us of certain F-C connections, and by permitting us to isolate the F's from the C's.

After this analysis, one could even ask oneself if the appeal to O is not superfluous, if not pernicious! Why do we not immediately pass from F_1 to C; why that detour from F_1 , via $(F_1 \vee F_2 \vee F_3 \dots \vee F_n) = O$ to C, since we *have already*

$$\begin{array}{l} F_1 \longrightarrow C \\ F_2 \longrightarrow C \\ F_3 \longrightarrow C? \end{array}$$

This detour would indeed be incomprehensible, if the class F_1 were precisely defined. But, since this is not the case, it is necessary to examine explicitly if a certain, concrete, *individual* fact f_1 , that the plaintiff introduces as an example of F_1 , in order to get C, can really be *qualified* as F_1 . But it is also possible that f_1 can't be considered as F_1 , but ev. well as F_2 ; and in the latter case too, C follows (26). The introduction of

(24) Generally spoken, a scientific explanation of a concrete fact has this structure:

$$\begin{array}{l} \text{(Explanans) } Ax \text{ (} fx \longrightarrow gx \text{) (law)} \\ \quad \quad \quad fa \quad \quad \quad \text{(initial condition)} \\ \hline \end{array}$$

(Explicatum) ga

(25) C. G. Hempel has emphasized the structural identity (symmetry) of explanation and prediction: the difference between both standpoints is only pragmatic, not logical. (Aspects of scientific Explanation, p. 367).

(26) Ross too has seen the problem of qualification, and the manner to facilitate its solution. But his interpretation is not correct, since he concludes to the meaninglessness of O. According to Ross, in order to conclude to C, we need two syllogisms:

$$\begin{array}{l} (1) \quad (x) (F_1x \longrightarrow Ox) \\ \quad \quad F_1 a \\ \hline \end{array}$$

O a.

$$\begin{array}{l} (2) \quad (x) (Ox \longrightarrow Cx) \\ \quad \quad O a \\ \hline \end{array}$$

C a.

O is therefore useful, in so far as a certain constellation of facts, exhibiting always multiple aspects, must be qualified in such a way that the desired legal consequences can be deduced. The real process of reasoning would then be so: first, one would highlight C, and then, by way of $C = O = F_1 \vee F_2 \dots \vee F_n$, one would try to interpret f_1 as $F_1 \vee F_2 \vee \dots \vee F_n$.

B. A second possibility then is the situation where O takes the place of the legal consequences. So, one argues that the drawing of a bill can't be conceived of as an assignment of debt (*délégation*), because certain consequences of such a drawing do not appear in the case of a mere assignment. So here (and if, for argument's sake, we suppose that the example had led to a positive result), we can ev. observe the presence of certain legal consequences, which permits us to conclude to O; and from this we deduce that the class of the F's must be enlarged with one element, viz. the circumstance that is connected by the legal order with a series of consequences, typical for O.

So we can conclude that O is used in order to establish either that a legal consequence should appear, or that the class of the conditioning facts, which "cause" a given conjunction of legal consequences, must be enlarged with one or more members. But in neither of both cases, we can say that O plays a genuinely explanatory role; it only reminds us of the sometimes complicated F-C-connections.

Legal Concepts as theoretical Terms

The above analysis suggests that the lawyer introduces his concepts only for the sake of commodity: by referring to the F's and the C's, they show in an illustrative manner the different parts of a reasoning, i.e. a conclusion from certain premises establishing certain facts, to certain norms, imposing certain legal consequences. Nevertheless it seems that in law too, there are theories, or, at least, foreshadowings of theories; and an adequate analysis of legal concepts should not ignore this circumstance.

Let us start again from an example, very shortly, incompletely and unprecisely.

It is, in Belgian (and in French) civil law, a very general principle that every debtor guarantees the performance of his engagement with his whole

Now strictly spoken, one syllogism, viz.

(1') (x) ($F_1 x \longrightarrow Cx$)

$F_1 a$

Ca

suffices; but the qualification-problem is better seen, if one uses two syllogisms.

fortune. This involves that, if he would default to pay, his creditor can find a compensation in the proceeds of the public sale of the goods of the debtor, and well in this way that he can choose what goods he will confiscate. The whole patrimony and all its parts, constitute the creditor's security.

There are however many exceptions on this general principle; there are a lot of situations in which certain groups of creditors are favoured in some way above other groups, who are correspondingly prejudiced⁽²⁷⁾. The real import of such an advantage will naturally appear only when several creditors assert themselves, and when the fortune of the debtor is not sufficient to give them all their due. The "free competition" between the different creditors will then be falsified, because an important part of the debtor's fortune will be reserved for the favoured creditor A, whereas the remaining creditors will have to content themselves with the surplus. Third parties, i.e. other (present and future) creditors of the same debtor, are therefore strongly interested in knowing if one of the other creditors of their debtor has the disposal of some *privilege*; for, if so, the creditworthiness of the debtor under consideration will diminish substantially. And so we understand the necessity to make public any deviation of the principle of free competition. And we get the quite general principle: each advantage (in a still unspecified sense) implies some publicity (in an unspecified sense too).

From the principle, we can now "deduce" a series of applications. *Mortgage* is the privilege of which a given creditor has the disposal, and which permits him to confiscate a realty before all other creditors. But this privilege only produces effect against third parties, i.e. the creditor only preceeds them efficaciously, when his privilege has received the publicity, adequate for realties. *Security* is a privilege that concerns personal properties; but, in order to be effective, it must be in the hands of the creditor (*epossessio*), because, with respect to personal estate, possession has the same value as a deed (*Possession vaut titre*). Yet, when one gives a business concern (which is considered as a personal estate) in pledge, an inscription, i.e. the regulation enacted for realties, is again necessary, because an *epossessio* is here practically impossible.

The following enlargement of the theory too is very illuminating. The landlord of a house (who is, as such, creditor of the tenant) has a privilege, for the payment of the house-rent, on all the household-effects. This privilege is now explained by the idea of a tacit pledge: the tenant, who in-

(27) Cfr. Fred Speeth, *La divisibilité du patrimoine et l'entreprise d'une personne*, Brussels, 1957.

roduces in the house some household-effects, is considered to transfer these things to the landlord, who thus becomes at the same time a secured creditor. And so we understand why the privilege of the landlord loses its effect, as soon as the objects are removed from the house, for, in this case, it becomes impossible to argue that he possesses through the tenant's intermediary; but also why, on the other hand, the privilege concerns even goods of third parties which are found by a coincidence in the tenant's house (at the condition however that the landlord ignores the real state of affairs).

We find thus a series of general norms, F-C-connections, which can all be explained by deducing them from one general, basic principle according to which any advantage must be made public. And perhaps one could try to deduce the basic principle itself from the still more basic one that a deviation from the normal (the common law) is never presumed, but must be proved by the plaintiff who invokes it.

When we call "Favoured Situation" the juristic act, which, in the intention of the parties, must procure one of them an advantage (in the quite general sense) or which, apart from this intention, procures one of them such an advantage, immediately *ex lege*, we could formulate as follows our basic principle

(Favoured Situation. Publicity) → Advantage
Fs. P → Ad.

The temptation is now very great (especially in our position) to consider 'Fs,' 'P' and 'Ad' as (quasi-) theoretical terms, with which we would then connect, by means of rules of correspondence, "empirical" terms, such as 'security, mortgage,' and so on...

Provided some additional theorems about the nature of real and personal publicity, one could even try to deduce the precise characteristics of the required publicity and of the procured advantage (the right of confiscating the good, even if it has passed in other hands e.g.).

I.a. The explanatory value of such a procedure is clear. A series of norms, imposing, in different situations, rather different duties, is unified by approaching them all from a unique perspective. A new light is thrown on certain regulations. For it is possible to extend the theory also to the law of corporations: most companies, which are incorporated, are, from the standpoint of the companions, exceptions on the principle that they are liable with all their property; and in all these cases a certain form of publicity is required.

b. The question if our mini-theory has also a heuristic value, and could suggest new hypotheses, is a more delicate one. We have seen how the

theory organizes and explains a series of norms, of F-C connections. Admittedly, such a systematization can throw a new light on certain up to now 'isolated' F-C connections. But the possibility that, through a new interpretation of the theoretical terms, one meets a surprising F-C-linkage that one ignored before, will be rather theoretical, because the F-C-connections are created by an explicit enactment of Parliament. Whereas an empirical theory can thus suggest new empirical regularities, which, admittedly, have to be seriously tested, a legal theory can only put in a new perspective known "legal regularities", the existence of which every one was conscious of long before. The only thing that could be expected, is that the theory calls attention to certain general norms, which are not enacted by an explicit declaration, viz. on the rules created by the courts. Unhappily however, at least in continental Europe, the latter are binding theoretically only inter partes, and are therefore only individual norms. In the countries of stare decisis, this limitation is naturally no longer true.

But perhaps, this relative infertility in the field of the science of law can be compensated by a heuristic fertility in the field of the creation of law. New regulations will be enacted, by interpreting the conditioning facts of the new norms as 'Fs' e.g., whereafter one shall have to seek immediately after a specification for 'P.' Yet the problem is that each new empirical specification of the theoretical term amounts to the introduction of a new F-C connection, i.e. to the introduction of a new norm. But this can't be the task of the scientist. Or, expressing the same idea in a different way, the new F-C-connection can only have the status of a hypothesis. And it is possible that this hypothesis contradicts some rules or standards of positive law; and then it will have to be revised. But it is also possible, — and this eventuality is very important for us — that the legislator prefers to ratify the norm, the science of law has conceived of as a hypothesis, and, by doing so, "verifies" the hypothesis. As an example, we mention the (Belgian) law of 25th october, 1919, regulating precisely the modalities of giving in pledge a business concern already referred to, and in which the consideration that this pledge procures a privilege in favour of the creditor, necessitated the organisation of an adequate publicity.

c. In this context, it can be interesting to point to two tendencies in jurisprudence⁽²⁸⁾. *Conceptualism* (or essentialism) thinks that certain facts must necessarily be interpreted, on the ground of their "intrinsic meaning,"

(28) Marcel Waline, *Empirisme et conceptualisme dans la méthode juridique : faut-il tuer les catégories juridiques?* in *Mélanges Jean Dabin*, Brussels-Paris, 1962, I, p. 359-372.

as examples of a certain theoretical term, and at the same time, that the situation which is interpreted as a case of the concept, is regulated by all the legal consequences that the theory associates with the concept under consideration, even if these consequences may be a little shocking.

A very nice illustration of such an attitude might be found in the traditional moral-theological discussion of the birth regulation problem. One starts from the vague idea that man has received his body and his physical powers from God, and that he can't use them therefore arbitrarily. This idea is then expressed in a text, stemming from the Romans, and warning the subjects of the *pater familias* that they are not the *domini membrorum suorum*, but only the usufructuaries. Now, since the usufructuary doesn't have the disposal of the object of his usufruct, and since the use of contraceptives is interpreted as being an act of disposition, it follows that he, who uses contraceptives, goes beyond his competence.

Quite the opposite is the position of *functionalism*. Legal theoretical concepts, and especially the concepts appearing in the premises, are, so to speak, meaningless forms, with which certain F's will be associated, in so far as the consequences of the theoretical terms are favourably judged.

So one qualifies as a synallagmatic contract (convention synallagmatique) the donation in favour of a concubine; yet the donation is the archetype of the unilateral contract. For when one argues that the obligation of the concubine consists in satisfying the needs of the donor, and the obligation of the latter to pay a price (*viz.* the gift) for the services of the former (*pretium stupri*), one can annul the whole operation, by declaring that the obligation of the donor has an illicit "cause." What would be impossible, (or, at any rate, more difficult) if one had qualified the situation as a unilateral convention.

II. In the preceding sections, we have supposed uncritically that terms such as 'Fs, P, Ad...' are indeed theoretical ones. (By a theoretical term, we mean, for the time being, a term whose meaning is not exhausted by the reference to the class of the F's and the C's). But — and this is rather alarming for me — in so far as I know, not a single book or article have been published up to now, dealing with the problem. And this proves more than sufficiently that the problem of the empirical meaningfulness of their concepts, is ignored by the lawyers. Let us try to explain this negligence.

A. First of all, although it is undeniable that a norm must have an empirical content, in order to fulfil his function efficaciously, it is not its task to *explain* phenomena. The job of a norm is to prescribe, although, incidentally, and in function of this job of prescription, it describes the facts that are to be done in certain circumstances. All this involves that

the non-observable entities, which the theory of law ev. introduces in order to explain and to organize the whole of the more particular norms (the "Hypothetical Constructs," so to speak), will not be treated with the same circumspection, as in a descriptive language, the *unique* task of which is to describe, and to explain, and where a non-observational vocabulary will have to defend its good right.

B. Secondly, the problem of the empirical content of legal concepts has been constantly obscured by the confusion of two functions that are nevertheless wholly different from each other. On the one hand we have the legislator, or the judge, i.e. an authority whose task it is to solve a conflict of interests by enacting a general or individual norm, and who can't take the risk of a first, simplified approach to the problem, by settling it with a very simple and elementary norm, but reserving to himself the possibility to correct eventually this first approach by a second, more complicated one. DESCARTES already warned us: Et ainsi, les choses de la vie ne souffrant souvent aucun délai, c'est une vérité très certaine que, lorsqu'il n'est pas en notre pouvoir de discerner les plus vraies opinions, nous devons suivre les plus probables⁽²⁹⁾. And so we can understand why the legislator is not primarily anxious about precise observational terms, and about the puzzling problem of the theoretical ones.

On the other hand however, we have the scientist, who has to organize the totality of all norms in an ordered system; whose function is thus wholly theoretical, and not practical, and who has not the excuse of the urgency of the social conflicts for his ignoring the problem of theoretical terms. This confusion between these two roles, the latter observing and explaining the former, is due perhaps to the secret desire of many scientists of law of taking part, in a modest and hidden way, in the work of the Legislator; but also to the style of the Legislator himself. Indeed, he does not express his regulations in the 'atomic' or 'molecular' form of a series of F-C-connections, but organizes himself these connections by means of a conceptual network.

III. So we understand why theoretical legal concepts do not interest the lawyer. Yet this doesn't mean that no demands are made on legal concepts; but these demands are of another type than the type we have here in mind, viz. a certain relation of observables (or basic terms) to theoretical terms.

Art. 1108 of the code Napoleon enumerates four requirements for the validity of a contract: the parties must agree, and be capable, and the obligation resulting from the convention, must have a (licit) object, and

(29) Discours de la Méthode, III^e partie.

a "cause." The import of article 1108 is very great, and one could consider it as a first and tentative formulation of a theory:

(Capacity. Object. Agreement. Cause) → Validity of the act.

But, according to the anticausalists⁽³⁰⁾, in the above sentence, the word 'cause' is wholly superfluous, because the facts this word refers to are already covered by the word 'object' or ev. 'agreement.'

We infer then that, insofar the legal concepts must satisfy certain requirements, the latter are of the following nature: when the same situation is associated with two concepts, one of them must be dropped as superfluous. Apparently, one strives to the limitation of the number of theoretical terms which are coordinated with observation terms; "one aims at the improvement of the conceptual system in order to facilitate the job of logical inference and implication"⁽³¹⁾.

One could see here an analogue to the *principle of parsimony* that plays an important role in behaviourist psychology e.g. And certainly it might be interesting to examine in some detail the relationship and the difference between the legal and the psychological version of it.

We must add however that lawyers do not always agree about the elimination of so called superfluous terms. At present e.g., the causalist movement, under the direction of MAURY and CAPITANT, has again many supporters, arguing that the term 'cause' is really indispensable, since, without it, it would be impossible to deduce certain legal consequences, because its meaning would be much more extended than the anticausalists suppose. And so this controverse warns us that the question of parsimony depends on the degree of preciseness and meaningfulness of the concepts.

IV. After having explained why the problem of the ev. theoretical character of his concepts does not interest the lawyer, let us try to suggest a possible approach to it, although we may not forget its perhaps limited importance. As an introductory remark, it must be said that the notion "theoretical term" will be much looser in law than in psychology e.g.. Terms such as 'the content of a will, intention,' highly problematic hypothetical constructs in psychology, are considered by the lawyer, without any scruple or complex, as a term of the lowest possible degree (V_p).

Let us then adopt this criterion: a theoretical concept is a concept that can't be defined adequately by an analysis such as this of part I.

(30) For more details, one can consult two basic works out of a very abundant (and perhaps redundant!) literature: the causalist H. Capitant, *De la cause des Obligations*, Paris, 1930, and the anticausalist Jean Dabin, *La Théorie de la Cause*, Liège, 1919.

(31) Samuel J. Stoljar, *The logical Status of a legal Principle*, in *Chicago Law Review*, 1953, XX, p. 191.

A non — theoretical concept is equivalent to a disjunction of classes of F's, and, (in the indicated sense), to a conjunction of C's. For a theoretical concept, on the contrary, such a disjunction (or conjunction) couldn't be considered as a definition, but only as an empirical specification.

So the question becomes: When does the lawyer consider a given F-C analysis as a definition of a certain concept, and when does he consider this same F-C-analysis only as an empirical specification? We'll see that, at present, no clear-cut response can be given to this problem.

A. In one of the preceding sections, we have briefly mentioned *functionalism*. It is now evident that functionalism is much closer to the theoretical attitude than essentialism. Indeed, for the functionalist, legal concepts are quasi-meaningless forms, which become associated with empirical situations (F's and C's); and naturally, these situations can't be called definitions of the concept under consideration.

We have seen however that conceptualism is a controverted matter, so that it is not very useful to circumscribe a theoretical concept as a concept which is treated from a functional (i.e. a non-conceptual) viewpoint.

B. One could also try a *genetic* approach. It is well known indeed that many (quasi—) theories are developed in connection with a reasoning per *analogiam*. LARENZ describes as follows such an argument⁽³²⁾: Die Uebertragung der für einen Tatbestand (A) oder für mehrere, untereinander ähnliche Tatbestände (A¹ bis A^x) im Gesetz gegebenen Regel auf den im Gesetz nicht geregelten, erst von dem Beurteiler (meist im Hinblick auf einen zu entscheidenden Einzelfall) gebildeten, A "ähnlichen," Tatbestand.

One distinguishes traditionally two kinds of analogy, the *Einzelanalogie* or *Gesetzanalogie* on the one hand, and the *Gesamt-* or *Rechtsanalogie* on the other hand⁽³³⁾. By *Gesetzanalogie*, one would have under the premises only one rule of law: starting from one particular rule, but ignoring all its unessential elements, one would apply this rule, as it is purged of all its contingent aspects, to new cases. In the *Rechtsanalogie* however, one

(32) Die Methodenlehre der Rechtswissenschaft, p. 287.

(33) These terms are borrowed from Ennecerus Nipperdey and Ulrich Klug, Juristische Logik, Berlin, Heidelberg, Göttingen, 1966³. Unhappily, the distinction between these two kinds is again rather psychological than logical, since the *Einzelanalogie*, as analysed, is logically invalid! I can't apply the rule of case A to case B, unless (1°) I formulate, at least implicitly, the general principle that A has some relevant aspect (f); and that the regulation under consideration holds for all f's; and (2°) I establish that B too is an f. Otherwise, the equalization of A and B would be a pure subjective association of ideas (Comp. S. Stoljar, a.c., p. 187).

would have more than one rule of law under the premises: from different particular regulations, one would deduce one general principle, in order to apply it to a new situation.

Considering this distinction, one is inclined to raise objections to the position, qualifying certain legal concepts as theoretical ones. For when a certain concept (say O) has first been associated with a fact A, and becomes then associated, in connection with a certain case, by an argument per analogiam, with B, we should have an undeniable example of a successive meaning-extension of an empirical term, and not of a further empirical specification of a theoretical one. In the case of a *Gesetzanalogie*, this seems indeed the most reasonable solution, but if we have a *Rechtsanalogie*, the opposite solution doesn't seem too foolish! But, since the distinction between the two kinds of analogies is itself far from clear, (see note 33) we surely have not succeeded in specifying the criterion.

C. KLUG has given an analysis of the analogy-argument⁽³⁴⁾, based on formal logic, and more particularly on the notion of an *Aehnlichkeitskreis* (area of similarity), introduced by R. CARNAP. A similarity-relation is each relation which is symmetric and reflexive, but antitransitive (e.g. nearly so great as...)

Each similarity-relation R constitutes an area of similarity A relatively to R, and defined as follows:

- 1° all possible pairs in A are R-couples;
- 2° there is no element outside A (or: no element of A's complement) that bears the relation R to *all* A-elements.

So the area of similarity A relatively to R would contain all the poles of R, for which R is still transitive, but only these poles.

The relationship with the argument per analogiam is as follows. To certain cases C (sale e.g.) a certain regulation D is applied. D however is applied also to A (the transference of a business concern), a case analogous to C, because it belongs to B (the conventions having the same legal structure as the contract of sale)⁽³⁵⁾. Let us express the situation in the logic of classes:

$$[(A \subset B) \ \& \ (B \vee C \subset D)] \longrightarrow A \subset D$$

The problem then is: can $B \vee C$ be considered as an empirical specification of a certain theoretical concept?

(34) *Juristische Logik*, pp. 97-123.

(35) B is a area of similarity, with respect to a special similarity-relation: having a \pm interchangeable legal structure.

Let us first remark that $B \vee C$, the area of similarity, is a *class*, which, like each class, can be approached from two points of view. One could think now ⁽³⁶⁾ that one of these viewpoints, viz. the extensional one, is inadequate, since terms such as *O* cover all possible, past, present and future situations, showing certain characteristics. We would have to define then these terms by their content, and not by their extension, or, in other words, we would have to replace our extensional area of similarity by its intensional corollary. But (1°) this objection supposes that the extension of a term contains only actual exemplars, and not past or future ones. (2°) It must be stressed also that the essential infinity of a legal term is rather characteristic for first-order terms, which directly indicate the situations, where certain norms are effective (*F*'s), but not for the second-order theoretical terms (which directly refer to the first-order ones), and concerning which one could better speak of their openness instead of their infinity. And (3°) finally — and this is the reason why we include the objection in this article—one can't deduce the theoretical character of the area of similarity (after having reinterpreted it in an intensional manner), from an ev. more adequate intensional approach, for, if one did so, then *all* legal concepts would be theoretical ones!

This however does not mean that STOLJAR's remark is of no importance for us: it invites us to reformulate our paraphrase of a theoretical concept tentatively as follows: a theoretical concept is a concept, whose meaning is not exhausted by giving the conditions of its application, concerning which one can specify characteristics, which are either necessary or sufficient for its application to a certain object (or situation), but not necessary and sufficient at the same time; — whereas for a non-theoretical concept on the contrary, it is possible to specify conditions, which are both necessary and sufficient ⁽³⁷⁾.

In such a perspective, terms such as '*F*s,' e.g. would show a certain similarity with '*Stimulus, Response, discriminative stimulus, reinforcement, conditioning...*' in psychology, which are also very general forms, with the help of which concrete, empirical situations are approached and interpreted, dynamic a priori schemata, under which the phenomena are subsumed, and which have got an empirical specification, because different series of sufficient conditions of application are given for these "categories," but the meaning of which is not exhausted by these conditions. For a legal

(36) S. J. Stoljar, a.c.

(37) Note that, since a non-theoretical concept will be probably a disjunctive one, these necessary conditions of applicability will have to be formulated as a disjunction too: $O \longrightarrow F_1 \vee F_2 \vee F_3 \dots \vee F_n$.

term however, the "surplus-meaning" will be particularly unclear: for 'Fs' e.g., it could be: each deviation of the principle of free competition.

D. Let us sum up the data of this section.

1. It seems clear that certain areas of similarity are better interpreted as a gradual meaning-extension of a genuinely empirical term. Art. 373 of the Belgian Penal Code punishes indecent assault, committed by main force; but mostly (and notwithstanding *Odiosa sunt restringenda*), one sanctions also the case, where the assault is committed not by main force, but by surprise, although the latter situation is not explicitly mentioned in the Code. This equalization is well-founded, because in people's moral feelings, both cases are usually considered as equally reprehensible, and because, "objectively" spoken, there is not too great a difference between them.

2. Other terms on the contrary are similar to such open and dynamic categories, as we have described above. As an example, we think of the (already mentioned) equalization of the landlord to a secured creditor. Naturally, there is no physical similarity between both cases, nor can one really posit the problem of the ethical equivalence between them, because of the highly technical nature of the regulation, and because our ethical feeling does not longer react on such highly technical stimuli.

Other examples are 'delegation, subrogation, ...' in the law of contracts; the latter terms are considered by the lawyer as very general concepts, which are associated in a 'second' moment, with more particular, empirical ones.

3. Admittedly, our position would be consolidated, if the vague surplus-meaning of terms such as 'Fs' could become more precise, by enumerating the relations they bear to other theoretical terms. And correspondingly, the possibility of considering them only as abbreviations of empirical phenomena would diminish, if one could perform a series of complicated operations on them, in the same manner as the functional relationships that define HULL's⁽³⁸⁾ Drive-concept e.g., make the position implausible, according to which the Drive-concept could be replaced by the empirical situations constituting its (partial) meaning.

V. So, very naturally, we are led to the idea of an *axiomatizability* of law: for, just as in the behavioral sciences, the status of the theoretical terms remains somewhat uncertain, because these sciences have not yet been presented in the form of a theory *stricto sensu*, so, in legal science

(38) C. L. Hull, *Principles of Behaviour*. New-York, 1943. It is, perhaps permitted to mention here the book of C. Sanchez del Rio, *El Derecho del Porvenir*, Madrid, 1964 trying to put some parts of the law in an algebraic form

too, we would have genuinely theoretical terms, if we had an axiomatic system for the legal order, or, at any rate, for certain parts of it.

A. Let us say first of all that the idea of an axiomatization may not be confused with the much more extended idea of law as a *system*, which is older too. Considering law as a system consists in approaching the very numerous concrete rules of law as forming one whole, one ordered totality. The unity of all the concrete rules appears already, although in a very loose manner, in the circumstance that a series of norms, and precisely this series, governs certain persons, in a certain country, and at a certain moment. The unity of foundation however is a more interesting manifestation of the unity of law: we know that, according to KELSEN, the basic norm (Grundnorm) is the ultimate and constitutive reason of the unity of a given legal order, and that there are as many different legal orders, as there are different basic norms. One sees the difference with the idea of an axiomatization. Admittedly, the latter presupposes that the class of norms which will be presented in an axiomatic form, is clearly delimited; but within that class, a still more radical systematization will take place: some of the norms will obtain the status of an axiom, and some of the concepts the status of primitives; and from these axioms and primitives, all other theorems (norms) and concepts have to follow, per viam deductionis.

B. It is possible now, (with some simplifications) to summarize in three types the different attitudes adopted versus the idea of the axiomatizability of law.

1. A first group rejects the idea (K. ENGISCH, K. LARENZ, T. VIEHWEG, C. PERELMAN) ⁽³⁹⁾, mainly because 1° the fundamental notions of such an axiomatic system would be purely formal, without any material content (but this opinion reveals a characteristic misconception of the very nature of a theory, since each theory consists, strictly spoken, of statement-forms, without semantical meaning! This misconception is probably due to a naïve identification of a theory *stricto sensu* with R. STAMMLER's table of categories, which is indeed rather void) or 2° because the decisions of the courts couldn't be predicted, on the account of the impossibility to foresee all the situations that will have to be regulated (PERELMAN).

2. Another group on the contrary thinks that it is certainly possible to axiomatize the legal order. According to Ulrich KLUG ⁽⁴⁰⁾, there is no objection on principle against axiomatizability, notwithstanding a lot of

(39) The ideas of this group are discussed also by R. Raes, *Une Systématique du Droit*, in *Studia Philosophica Gandensia*, 1965, p. 69-88.

(40) Klug, o.c., pp. 172-176.

practical difficulties; and, as the legal vocabulary becomes more sophisticated, law itself is becoming a quasi-axiomatic system.

Rupert SCHREIBER⁽⁴¹⁾ is still more optimistic: he considers all the general norms of a legal system as its axioms, from which it would be possible to *deduce* all the individual decisions. And an analogous view is held by Felix E. OPPENHEIM⁽⁴²⁾, who would reserve the status of an axiom not only to all the general norms, but also to the individual decisions of the courts, (which, according to him, do *not* follow deductively from the general norms), and to the singular factual statements. (e.g. On the 1th of January 1967, X has killed Y in Brussels). But it will be easily admitted how disastrous OPPENHEIM's position is, for it permits only to deduce unimportant, trivial theorems, such as: if X is not punished with S, he hasn't done A (follows from $A \rightarrow S$). It seems then that this second position (KLUG excepted) is as unfavourable for the axiomatizability as the first one, which rejects it openly and immediately; for an axiomatization, in the way of OPPENHEIM, will never be taken seriously.

3. Happily, we have some *actual* (approximative) realizations of the axiomatic ideal. W. J. DE LANGEN⁽⁴³⁾ e.g. has reduced the (Dutch) fiscal law to six fundamental principles, which, according to him, are hypotheses, able to suggest themselves new concrete solutions. Although these principles do not have a sufficient precision in order to be considered as genuine axioms, and although they do not permit to explain all the different concrete regulations, DE LANGEN's work is certainly a valuable and actual contribution to the axiomatization.

C. Let us add to this survey the following four very brief remarks.

1. If one wants to give to the legal order an axiomatic form, the purpose can only be to systematize the general norms, and not the individual decisions, nor the concrete, factual statements, informing us that certain facts have taken place. Indeed, a scientific theory never permits us to deduce that a contingent, isolated fact will happen; the only thing that it predicts is that, if the contingent fact happens, then certain other, related facts

(41) R. Schreiber, *Die Logik des Rechts*, Berlin, Göttingen, Heidelberg, 1962, p. 40.

(42) Felix E. Oppenheim, *Outline of a logical Analysis of Law*, in *Philosophy of Science*, 11, 1944, pp. 142-160.

(43) W. J. De Langen, *De Grondbeginselen van het Nederlands Belastingrecht*, Alphen a.d. Rijn, 1954-1958, 710 p.; W. J. De Langen & R. A. G. van Haersolte, *De Bruikbaarheid van de zgn. empirisch-analytische methode van de Rechtswetenschap. Handelingen van de Vereniging van de Wijsbegeerte des Rechts*, XXXIV, 2 dln, 1959-1961, Zwolle, 73 + 57 p.

will happen too; but the *initial conditions* (see note 24) always remain contingent.

But we should exclude also from the system the decisions of the courts, because it seems at present very difficult to predict them. The latter exclusion however is not a dogmatic one; and if one could present a reliable theory, allowing to predict adequately the behaviour of the judges⁽⁴⁴⁾, the basic principles of that theory could be added to a legal axiomatic system.

2. OPPENHEIM & SCHREIBER point to the discouraging number of axioms that the legal theory would contain. Although their systems would be in a large measure dependant, (and therefore could be improved substantially, especially after the limitations mentioned sub 1^o), the number of axioms, I am afraid, will have to be very great. But such a state of affairs is far from being surprising. Indeed, most theories are dealing with relatively small fields, whereas law must, in principle, settle all social problems and conflicts. Instead of speaking of *the* axiomatization of *the* legal order, one should therefore only speak about an axiomatization of the law of contracts, e.g., or of the law of torts.

A first glance at the axiomatization in other fields, in biology e.g.⁽⁴⁵⁾, will be sufficient to warn us that an axiomatization, even of a severely limited field, will only have a theoretical interest: the axioms are not easily comprehensible, and the deductions very complicated and sophisticated. The practically minded lawyer will perhaps reject the system, condemning it as "Much ado about nothing"; but the theoretically minded one should enjoy the strong and powerful ordering of his previously disconnected knowledge.

3^o Furthermore, if one takes seriously the axiomatization of law, it is no longer permitted to raise certain frequently heard objections, such as: it is impossible to deduce from the axioms all the details of a particular regulation (e.g. that the incomes beneath 30.000 fr., and not those beneath 35.000 fr. are tax-free). For in *each* science, axiomatizability presupposes a radical simplification. Admittedly, as noted above, the *lawyer* is not allowed, because of the urgency of the social needs, to perform such a simplification; but if the legal *science* wants to present its sentences in the form of a theory, it must accept, certainly in the beginning, this simplification.

(44) For a first outline of such a theory, in very limited cases, see H. Baade, ed, *Jurimetrics*, New York, 1965.

(45) J. H. Woodger, *The Technique of Theory Construction*, *Internat. Encyclop. of Unified Science*, vol. II, 5, Chicago.

4. And finally, it is clear that, even from a theoretical point of view (for the practical difficulties, see nrs 2 and 3), an axiomatization will only have a limited import, since law is relative to a certain period of time and to a certain country. And especially the national character of the different legal systems is a serious obstacle for an international collaboration. But precisely this international collaboration is necessary in order to attain, within a reasonably short period, the theoretical ideal. So that he who wishes seriously and consequently axiomatization of law, should aim at the legal unification of the world.

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