ABSTRACT

Legal positivism is succumbing in ethical neutrality, being based on formal procedures only. Criteria for judging procedures are based on further procedures, leading to ever increasing complexity and decreasing content. This long term development in legal positivism is based first on the development of dogmatic positivism linked to the empiricism in the natural sciences, during the eighteenth century, and secondly on the development of dynamic positivism in the empirical social sciences, during the second half of the nineteenth century. Together, these have led to dynamism in legal positivism, not linked any more to basic constants - in society and human nature or ethics and religion - as were present in natural law. Legal positivism will only have a future in shaping long term development of society if, antithetically, it succeeds to disentangle itself from its present inherent dynamism. This will enhance a new theory about the durability and stability of human relations i.e. about a new concept of natural law. The basic outline of this new natural law emerges from the qualitative analysis of main patterns in society, not as empiricist analysis but as idealised ordering principles, reducing endless empirical variation to structured, manageable lines of reasoning.

Key words: Legal positivism. Theory of society. Dymanism. New natural law.

RESUMO

O positivismo jurídico deriva para a neutralidade ética, formalizando-se. Os critérios dos procedimentos de julgamento fundam-se em procedimentos adicionais, levando a cada vez maior complexidade - mas tornando-se cada vez mais escassos em conteúdo. Este desenvolvimento do positivismo jurídico tem suas raízes, em primeiro lugar, no positivismo dogmático ligado ao empirismo nas ciências naturais do século XVIII, e, em segundo lugar, nas ciências sociais empíricas da segunda metade do século XIX. Juntos, eles conduziram ao “dinamismo” característico do positivismo jurídico, em que o critério de validade não se liga mais a constantes básicas - na sociedade, na natureza humana, na ética e na religião – que estiveram presentes na lei natural. O artigo defende, no entanto, que o positivismo jurídico só

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Poderá ter uma influência duradoura, na definição da sociedade, se, paradoxalmente, conseguir separar-se do “dinamismo” que lhe tem sido inerente. Isto lhe permitirá uma nova teoria sobre a durabilidade e a estabilidade das relações humanas – ou seja, um novo conceito de direito natural. O esquema básico desta nova lei natural emerge da análise qualitativa dos principais padrões da sociedade, não como análise empírica mas como ordenação idealizada, por princípios – reduzindo a infinita variação empírica a linhas de raciocínio estruturadas e manejáveis.


**INTRODUCTION**

Legal positivism assumes that law is made by man and not by God. As a product of human action law is part of the observable world and can be described in a more or less neutral way. Legal positivism entails thus a descriptive theory of law, aiming at a comprehensive system of general rules, under which every special case can be subsumed.

As a descriptive theory legal positivism has to be sensitive to the theoretical developments in the empirical sciences concerning descriptive analysis. The theory of legal positivism indeed has developed by adapting itself to the changing conceptions in the empirical sciences concerning descriptive analysis: at first the dogmatic positivism of essential meanings, followed by the dynamic positivism of behavioural regularities and resulting in the linguistic positivism of cultural meanings.

At some point in this development however legal positivism has stopped to be a descriptive theory of legal norms and has transformed into an theory about the procedural techniques and institutional measures that can bring about an open communication between the different perspectives of individuals and interest-groups. Legal positivism has lost its normative content in this transformation, offering merely a public arena in which the different actors use normative arguments strategically to manipulate communicative processes.

I believe that legal positivism only has a future when it again becomes a descriptive theory of law. Such a descriptive theory has to be of a qualitative nature, and in accordance with discussions about the problematic nature of qualitative description in the rest of the sciences, especially the social sciences. Central in these discussions is the problem of classification i.e. the problematic relation between the generality of rules and theories on the

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one hand, and the contextuality of meaning and action, on the other. Hence, the theory of positivism should be in line with the scientific practices of classification.

THE PROBLEM OF CLASSIFICATION

No apple-tree flowers every year at exactly the same time, nor do all its flowers open up at the same time. Certainly, most flowers open up during a certain period, yet some flowers start to open up even long after that period. This condition of the tree has potentially beneficial effects, for instance when it suddenly begins to freeze, some flowers of the apple-tree luckily have not opened, while other flowers already have started to develop into fruit-beginnings. It may be said that all living beings have this same condition: there is regularity in their growth, but this regularity always has exceptions for it only refers to a certain spreading over time and place. Indeed, this fact of individual variability is a highly efficient condition of nature, because it enables living beings to adjust to their surroundings to a certain extent.

The fact of individual variability constitutes however a problem. The individuality of a context cannot be described, because a description necessarily is in general terms. So, the individual context can only be described by naming the characteristics that it shares with other contexts. Yet, these characteristics of other contexts also contain individual differences, which cannot be denoted by the general concepts in question. Therefore, the individual make-up of a situation can only be known in direct contact, while the knowledge thus obtained of that situation cannot be stored or communicated by linguistic means. As concepts or words can only denote the general aspects of a situation, the individual aspects cannot be treated in a linguistic or scientific approach. Any description in general terms presupposes a classification that abstracts and consciously negates certain aspects. Hence, a complete correspondence between description and reality is not possible.

Still, it is fairly easy to recognize similarities and patterns of sensory input in reality. And although it is extremely difficult to determine these similarities and patterns in a strict sense, general terms refer in a rough way to these similarities and patterns. That’s why a rough correspondence between description and reality is certainly possible as far as law-like relations between things are concerned.

Even in the most primitive forms of life people do in fact make classifications. Such classifications refer consequently to the abstractions that are incorporated in human understanding and at the same time to law-like relations between things in reality.
QUESTIONING THE PRAGMATIC SOLUTION OF THE PROBLEM OF CLASSIFICATION

From the second half of the eighteenth century until the end of the nineteenth century a new practice of scientific classification came into being. During this period nearly every aspect of the world was classified and documented in dictionaries, encyclopaedias, and scientific classification systems. This is also the period in which law was conceived of as a system of meanings\(^3\) and was codified accordingly – the age of dogmatic positivism.

In the field of epistemology and the philosophy of science the classificatory method of dogmatic positivism did not get much attention\(^4\), even though the well developed classification systems were the starting point for the further development of science in the period that followed. The general accepted view is nowadays that dogmatic positivism held the untenable position that the classification systems were representing the true nature of things.\(^5\)

The present vision on classification still follows the lead of important pragmatists like Peirce and Dewey. It is believed that it is impossible for scientific description to gather a set of meanings that mirror the essential features of reality. Classifications refer only to a selection of elements of reality that are relevant for human action. The imagination produces according to pragmatism images that enable human beings to recognize in their normal daily life varying things as the same. These images are seen as tacit, unformulated, hypotheses about the law-like relations between the characteristics of certain conditions and the consequences of actions that are performed under them. In a process of trial and error the images change according to the success of actions guided by them. When this method of daily

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\(^3\) John Austin explains this method in the following way: “Of Laws or Rules there are various classes. Now these classes ought to be carefully distinguished. For the confusion of them under a common name, and the consequent tendency to confound Law and Morals, is one of the most prolific source of jargon, darkness and perplexity. By a careful analysis of leading terms, law is detached from morals, and the attention of the student of jurisprudence is confined to the distinctions and divisions which relate to law exclusively. But in order to distinguish the various classes of laws, it is necessary to proceed thus: - To exhibit, first, the resemblance between them, and, then, their specific differences; to state why they are ranked under a common expression, and then to explain the marks by which they are distinguished. Till this is accomplished, the appropriate subject of Jurisprudence is not discernable precisely. It does not stand out. It is not sufficiently detached from the resembling or analogous objects with which it is liable to be confounded.”. *The Uses of the Study of Jurisprudence* (1863), Weidenfeld and Nicolson, London, 1954, p. 371.

\(^4\) One of the few examples is an article of R. Sokal in Science in 1974 (Vol. 185, Number 4157)

\(^5\) The theory-dependency of scientific methodology is even not contested by a leadings realist as Boyd in the introduction to *The Philosophy of Science*, ed. R. Boyd, P. Gasper and J.D. Trout, Cambridge, Massachusetts, London, 1991, p. 11
practice is scientifically represented, the hypotheses are formulated in operational terms. These hypotheses are then tested by conclusive predictions that are deduced from them. In the pragmatist vision classifications made in daily practice are thus more or less the same as the classifications made in scientific research.

I strongly question this pragmatist vision on classification, and I would like to distinguish principally between daily individual action and scientific rationalised action. The pragmatist solution of the problem of classification refers only to rationalised action i.e. action that either aims at results that can be formulated in general operational terms such as state policies indicating a certain percentage of change in general conditions or involves the deliberations that precede the choice between conflicting interests, that are presented in general terms. For individual action however general meanings can only have a very limited guiding function. If individual action has to be adequately adapted to the specific characteristics of an individual context normal daily practice cannot be portrayed as a trial and error to test general hypotheses. This means that the relation between meaning and action is much more complex then portrayed by pragmatism.

THE THEORY OF INDIVIDUAL DETERMINISM

The theory of new natural law I defend in this paper is based on an understanding of classification as part of a communicative practice. In a communicative practice classification should not primarily be instrumental to successful rationalised action, but should serve the communication of people of whom the conditions of action are quite different. In this regard, legal positivism is defended as the theory of the public ordering of communicative practices by positing official meanings. Crucial for this concept of new natural law is the thesis of individual determinism which centers upon the notion that communicative practices do not determine individual action. From the perspective of individual determinism classifications therefore represent idealisations that have a purely descriptive value and contain no imperatives.

As Aristotle already stressed, to act adequately an individual has to adapt to the characteristics of the individual context. This means that deliberation is impossible, as deliberation entails reasoning in general terms. Individual action is best described as a kind of

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assessing To understand individual action one has to conclude that human beings do not only have intelligence in the sense that they can write and speak, but also a kind of intelligence that they share with animals. This is an intuitive action-intelligence that empowers man as well as the animal to judge individual situations adequately, for instance, in order to jump just far enough or to time well. As the intentions of the actor arise in the specific context of a situation and form part of this context, it is impossible for the actor to conceive of the action situation as something external to him.

Stressing the biological and moral relevance of the individual variety of things thus entails a theory of individual determinism. When for example a child is drowning it is not the norm that prompts the action of the bystander, but the very judgment of the capacities the bystander has and the requirements of the situation this entails. The bystander has to ask himself in a split second: “considering my experience, where lies the balance between recklessness and cowardice?” This ‘asking-oneself’ is not a form of deliberating in terms of reasons, but a form of assessing. Although one can train and thereby enlarge ones capacities, the action is more or less fixed by the situation in which the reaction is prompted.

According to the theory of individual determinism it is quite important to distinguish between the dispositional state of a person and his actions. Teaching and moral training should pertain to the dispositional state and not to the actual behaviour of the individual. Training one’s dispositions is like packing suitcases for a journey with an unknown destiny. A selection is necessary and can be utterly wrong-chosen. Even afterwards it is difficult to judge an action. The action will have consequences that will influence certain occurrences in the future. As nobody can foresee the context in which these occurrences will happen, nobody knows if the result of the action will turn out to be good or bad. It is Gods foresight in the Calvinistic teaching or just good luck in the Platonic tale of Er7 that makes a human action good.

The theory of individual determinism recalls a very old and fierce discussion in the early Dutch Enlightment. Individual determinism not only has its roots in the Classical era, but has a lot in common with the idea of predestination, as well. It is the idea that actions cannot be controlled by reason and that it is only possible to enlarge one’s capacities by taking care of ones dispositions. It rejects the idea that people can morally learn of the consequences of their behaviour, and morally improve their lives this way. Norms are not

technical knowledge according to individual determinism. There is no way to ‘know’ how to live a life well. Put differently, a life conceived in terms of rule-following is a life that is not lived; it is a life that denies the pure individuality of action-situations. Hence, one cannot improve nor worsen the world in a moral sense. Of course, one can strive for a world that is a better place to live in, in the sense of the existing living conditions. This has however more to do with technical knowledge and power-relations than with moral sentiments.

The belief in moral growth by experience analogous to the growth of technical knowledge by experience is false. Technical knowledge presupposes the possibility to formulate a wished for result in operational terms and thus to distinguish the action as a means to an end. Under these conditions it is possible to acquire knowledge by trial and error about actions that generate on average the best results. This is empirical knowledge of a technical nature, acquired and used in the field of productive behaviour. Yet, even in this productive field it has to be accompanied with a ‘feeling’ for situational characteristics to be well executed or applied in particular situations. State laws can be used as technical means in order to produce certain wished for effects in the behaviour of the citizens. This has however nothing to do with moral norms as a guidance for good conduct.

Norms then refer to a kind of general knowledge in those fields of action where the goal cannot be clearly defined, where it is impossible to distinguish between means and ends, where the action cannot be chosen but is prompted as an intelligent reaction, where it is impossible to store the knowledge that is obtained in contact with reality because the linguistic means cannot refer to the individuality of the situation. Thus norms do not contain lessons or imperatives that answer the question “what am I to do”, but descriptive knowledge about the general meaning of things. In this respect, legal positivism is a theory about the official authorisation of these descriptions.

COMMUNICATIVE PRACTICES DO NOT DETERMINE INDIVIDUAL ACTION

Individual determinism is only in a very restricted sense compatible with the theory that the observation or judging of situations is determined by theories, norms or other cultural ideas. Only in situations of rationalised action, that is, situations in which deliberation is possible, beliefs can have an influence. Individual action, however, will be prompted by the ‘real’ aspects of the action-context as they are perceived in direct contact, not by beliefs, theories and norms that may accompany individual action. Beliefs, theories and norms can
only play an indirect role in individual action, namely by forming the dispositions of the individual.

Because of this indirect role of dispositions individual determinism is perfectly compatible with the probabilistic nature of social mechanisms. In spite of the differences between individual actions there are clearly regularities to be observed, like for example the fact that economic growth leads to less children per family, or the fact that the death rate of small children is higher among certain minorities. These regularities can be denoted adequately by general concepts. A public policy can quite usefully interfere with these processes. This public steering of individual behaviour will influence the context of individual behaviour by adding certain elements to the action-situation such as the promise of money or punishment.

I will give now an example\(^8\) to explain that cultural ideas or practices do not determine the perception of the individual action-context. Instead they only have an indirect role by forming individual dispositions. In 1933 the case Rex v Mmombela was decided by the Appellate Division, which was at that moment South Africa’s highest court. The facts of the case as recorded by the anthropologist J.B.Shephard\(^9\) are as follows. One day, two boys were playing near a hut when they noticed a small pair of feet behind the dark doorway. Frightened, they ran to Dhumi, recounting what they had seen and concluding that the figure must be a tikkoloshe, a spirit that takes the form of a little man with small feet, widely believed by Xhosas to be mischievous or malevolent. Duty-bound to destroy this evil presence, Dhumi advanced into the hut, brandishing an axe that he had taken from his mother’s trading store. Averting his face from the creature – receiving a glance from a tikkoloshe would, according to local religious belief, mean death – Dhumi dealt it several blows. He had been mistaken – the object of his violence had been his small cousin, whom he had decapitated. The Appellate Division rejected Dhumi’s defence that his actions should be excused by his mistake of fact. The Court held that a mistake of fact, to be a successful defence in criminal law, must not only be a bona fide belief, but must also be a belief that would have been held by a ‘reasonable man’ in the circumstances of the accused.

Now the first question to ask is if Dhumi’s socialization and education determined his perception of the situation and dictated his actions accordingly. If this path of reasoning is chosen the judge has to decide between two types of cultural beliefs, “either the rationalistic

\(^8\) See the film A Reasonable Man made by Gavin Hood and the review of this film “The Tikkoloshe and the Reasonable Man, Transgressing South African Legal Fictions” by Patrick Lenta in Law and Literature 353.

Western beliefs” or “the superstitions of the Africans.” 10 The mother of the murdered child however shares the belief in tikkoloshes but certainly will not have thought her own child to be a tikkolosh. It will be very difficult for her to understand why Dhumi did not recognise immediately the little feet of her child. The fact moreover that Dhumi defended himself by acknowledging that he made a mistake, shows with hindsight – and probably shared by all the members of his community – that he defined the situation as ‘acting on false belief’. By defining his own behaviour as a mistake, however, he anticipates and accepts possible questions about the ways in which he could have avoided his mistake. So, we may conclude from this that a belief does not determine the perception of a situation, but that it only determines the way in which the perception of the situation is communicated after it has taken place – in terms of tikkoloshes or in terms of fears that have other names.

Every belief is necessarily general and can only relate to reality in the form of conditionals, or as a prediction about possible results that one might want to avoid, e.g. “if these elements are present, it probably will be a tikkoloshe”, “if this is a tikkolosh, it might kill you.” A belief therefore can neither dictate an action, nor the perception of a situation. The concept of ‘reasonable man’ is a theoretical concept. The question how a reasonable man would have acted is also a theoretical question and can only be answered in terms of conditionals. The careful consideration of the question how one could have avoided this mistake, will certainly have a dispositional effect in increasing ones caution, but will never lead to a conclusive answer to the question how this person could have acted in this specific situation.

The second question is how communicative practices can have dispositional value. It could be true that people who belief in tikkoloshes are more anxious than people who do not believe in tikkoloshes. If so, the belief in tikkoloshes has dispositional value. This dispositional value refers to regularities and mechanisms about which knowledge – although necessarily rather speculative and rough – is possible. This knowledge could determine certain perceptions of useful public steering.

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10 Judge de Villiers ruled that “by the law of this country there is only one standard of ‘reasonable man’….. the man of ordinary knowledge and intelligence….. the race, or the idiosyncrasies, or the superstitions, or the intelligence of the person do not enter into the question”. Patrick Lenta concludes “The Court implied that this ‘reasonable man’—an ideal figure, bleached of the cultural and religious traits of the accused and (although not conceded by the Court to be so) reanimated with those of the colonial official – would not have shared the belief in the tikkoloshe underpinning Dhumi’s mistake(see note 7).
Recent discussions about cultural defences\textsuperscript{11} treat cases like the above as if one has to choose between Western rationalistic beliefs and Non-Western superstitious beliefs. According to this view the scientific discourse is part of the Western culture on the same level as a discourse in terms of “tikkoloshes” is part of the African culture. To defend the position that the scientific discourse is fundamentally different and stands on a ‘higher’ level, is understood as a form of misplaced feelings of Western superiority.

This paper does also defend the opinion that scientific descriptions in clearly defined terms are fundamentally different from descriptions in cultural terms that are tacitly known. Not only in Africa, however, but also in the Western countries cultural meanings are being superseded by scientific meanings. This is caused by the fact that the relation between cultural descriptions and scientific descriptions is misunderstood.

Scientific descriptions are formal and abstract. Because of these characteristics they can only be connected to reality by pictures. These pictures are produced by communicative practices and form the substance of cultural descriptions. The pictures contain – as will be explained in the next paragraph - natural laws i.e. the idealised ways in which people portray the general law-like relations between things in their environment.

To have a future legal positivism must find ways to connect the scientific terms of law with the patterns of meaning incorporated in the communicative practices that are under its domain of application. In the next paragraph I will show how communicative practices produce cultural descriptions.

\textbf{THE METHOD OF CULTURAL DESCRIPTION}

When I have a buttercup in a box that I want to describe to people that can see the box, but not the buttercup within, I will have great difficulty in describing the colour or the special curve of the leaves etc. The more detailed my description becomes, the less my audience will be able to visualise the flower. It is clear that there is not a problem about ‘what exists in reality’ but a problem of communicating experiences, because I can show my audience after some time the flower in the box.

Now it is possible to create a system of representation by a continuous cooperation. To make such a system one has to employ the inductive method: make collections of specimens, make comparisons, determine by consensus which specimens are of the same

\textsuperscript{11} Like the one by Patrick Lenta, see note 7.
type, analyse the different characteristics these specimens have, determine which characteristics are contingent and which are defining. After such a system is made, a description can start by calling the name of the species. The audience will know now immediately in a rough way what the flower looks like. Subsequently one can start describing individual differences. As long as one can refer to commonly shared well documented cases, the audience will still more or less follow the lead. Without documented cases the audience will only have a vague and general picture of the flower.

Noticeable in these systems of description is the important role of pictures. Sometimes photographs are used, much better, however, are books in which drawings are used, for everybody knows that no real specimen will be exactly the same as the picture. The picture is an idealisation of reality. Not only will those books contain the idealised pictures of the fully developed buttercup, they also will show the idealised pictures of the development of a buttercup, from seed to decay. A drawing is better fitted for expressing such idealisation.

When you give a flower-book to somebody who is not trained, he will not be able to use it. It needs a lot of training to be able to understand a certain flower in reality as a specimen of a certain species. The trained person, moreover, can see a lot more detail in the world of plants. He knows how easily one mistakes certain specimens for others. He is aware that some plants might look the same, yet develop in a very different way. Hence, a descriptive task requires two kinds of interpretative activity at the same time: to visualise unity in a plurality, but at the same time visualise plurality in a unity. Exercising these activities makes a person conscious of the rough and speculative nature of these systems, on the one hand, yet receptive to details of individual situations by comparing individual specimens with the idealised pictures, as well.

Now, when the naturalistic description of a buttercup is compared with the moral description of cowardice the difference between both descriptions is especially one of perspective: the description of the general meaning of cowardice is made from the inner feeling of what is important for a morally good life, while the description of a buttercup is made from the way one is struck by the observation of law-like relations between things. However both methods of type description have a lot of analogies. To be sure, it is not possible to put ‘cowardice’ in a box, for this concept only has an existence in the mind. Still it is possible to describe the inner feelings that the term ‘cowardice’ denotes in more or less the same way as it is possible to describe the external sensation of similarity that the buttercup
arouses. To be able to make a kind of inductive comparison one has to start assembling cases, or inventing cases that somehow arouse the same kind of internal feeling. In other words, not pictures, but narratives form the leading symbols of such a communicative practice.

Since idealised pictures are in no sense real and since they refer to reality in only a very rough sense, there is a constant pressure in two directions: Firstly there is the constant pressure to split up categories and make new ones. In reality all individuals are different, and therefore this pressure of renewed categorisation will not stop till the system is broken down. Importantly, however, when the system is broken down communication is only possible as far as experiences are directly shared. Secondly, there is a constant pressure to enable communication independent from the actual sharing of experiences. This is done by what I call ‘demonstrative authoritative action’. Such a demonstrative authoritative action is the official statement that this specimen belongs to that category, as symbolised by this picture or narrative. In the course of time these official meanings lose their connection with the real world of experience in which people are struck by the law-like relations between things. Official meanings therefore may easily lose their meaning or become dogmatic. Hence, cultural descriptions of communities are normally oscillating between the reality of the individual experiences on the one hand, and the official styling of idealised pictures and narratives, on the other. This is why cultural descriptions can never be understood as clearly defined and unified systems of meanings. On the contrary, they are locally fragmented and very loosely connected to reality by way of idealised pictures and narratives.

THE METHOD OF SCIENTIFIC DESCRIPTION I.E. DOGMATIC POSITIVISM

To understand the enormous accomplishment of dogmatic positivism, we need to look at the earlier attempts to describe and categorise reality. Indeed, since Aristotle the inductive method of description was known, and the very possibility to build a logical system of definitions as well. The question is therefore: Why did it last till the eighteenth century before the scientific systems came into being?

To understand this, take for example the book on plants of Dodoens (1554). His main problem is that he has different criteria of classification between which he cannot choose. He changes from one criterion to another: from an alphabetical ordering of their names to a classification according to their fragrance, then to the way they are used for food etc. Lobelius (1581) seems more systematic and tries to use one criterion i.e. the external similarity. But
with a lot of plants he doesn’t know how to do this and decides to put them in categories according to their ‘habitat’. In the domain of law one could take as an example the ‘tables’ Grotius made in his introduction. Also Grotius’ classification misses a clear criterion. These classification systems are like the way most people arrange their books in a bookcase, making different clusters. The problem with this way of ordering is that most items can be found in several different places.

The great discovery of dogmatic positivism has been its combination of the inductive method of empiricism with the deductive method of rationalism. This combination became possible by the pragmatic turn of rationalism. The one and only ‘true’ classificatory principles could be found by way of aiming at the fulfilment of certain expectations. Kant\textsuperscript{12} explains the quintessence of this pragmatic turn in the introduction to his 	extit{Kritik der Reinen Vernunft}. He states that the natural scientists know from the works of Gallilei, Torricelli and Stahl that the mind can only understand what it first produces according to its own design. The natural scientist should not look for regularities, but should be like a judge asking the witnesses questions.

Hume and Kant, the founding fathers of dogmatic positivism, see cultural descriptions as a natural language containing presumptions about the possible consequences of things. If people give a collection of eggs the same name, they presume that they will taste the same or that the animals born from them will look the same. Scientific research will test the natural hypotheses contained in natural language. Linnaeus invented ‘sexuality’ as the true and only principle of all living things that reproduce. By this unifying classification principle it was clear at which characteristics comparisons would have to concentrate. The beautiful ordering systems that were developed had thus combined two aspects of classification: on the one hand the cultural descriptions of the plants with their folk names and pictures, with the folk knowledge about their use, with their specific symbolic features; and on the other hand the Latin names, the abstract definitions in terms like ‘stamen’ and ‘stamper’.

It is tempting to use the scientific systems as autonomous, and thus in a dogmatic way: if this looks like category A, but has more defining characteristics of category B, than its true nature is B. By treating descriptive systems in such a way they lose their contact with the field of individual experience and with the imaginative activity these experiences produce when they are communicated. This way these systems lose their expressiveness. For this very reason, from 1861 onwards, the famous theorist of law Von Jhering wrote anonymous letters.

\textsuperscript{12} Vorrede zur zweiter Auflage, 	extit{Kritik der reinen Vernunft}, Reclam, Stuttgart, 1975 (orgin. 1787), p. 28.
to attack the ‘civilist zoologists’ of his days who were construing systematic differences which had no other value then could be explained in terms of the system itself.

The point is that the scientific systems of dogmatic positivism derive their unifying effect from their formal, abstract, clear and specific definitions, and at the same time their pragmatic value from the way in which they are linked to cultural meanings by narratives and pictures.

So, we must distinguish two very different practices:

- A communicative practice that has individual experiences as object, pictures and narratives as method, and with no clear definitions as a result;
- A scientific practice that has pictures and narratives as object, experimental testing as its method, and with clear and specific definitions as a result.

My contention is that these two practices have to be guarded as more or less autonomous practices that are mediated in the deliberative practice of organising and coordinating human actions.

RECASTING DOGMATIC POSITIVISM

There are two features of dogmatic positivism that can be characterised as mistakes from the perspective of present epistemology. To recast dogmatic positivism in a successful way, these mistakes have to be repaired: 1. the idea of a natural language; 2. the idea of determinism.

The idea of a natural language

From the linguistic turn onwards (introduced by Avicenna (980-1037) and Averroes (1126-1198) ) the medieval scientists believed that words could supposit for things. For Aristotle this idea would have been absurd. According to Aristotle the stars and the other celestial bodies could be observed by all people in the same way and thus could be signified by a name. ‘Mouse’ or ‘dog’, however, are names of species, and though genus is immutable for Aristotle, the individual instances of species vary enormously so that the differences between species are gradual. For a creationist however things are instances of the image God
had in Mind when he created things. The essence of dogs or mice is their relation of likeness with this image.

The medieval scientist – whether being a realist or a nominalist – understands cultural description as a natural language. Hobbes believed that God showed Adam the key-model of every creature and taught him the names of it. Hume and Kant, the founding fathers of the method of dogmatic positivism, believed that concepts are formed in a natural way in all human beings alike. They are all blind to the nature of the communicative practice from which cultural meanings are generating.

*The idea of determinism*

Pictures and narratives are the object of the scientific practice. These pictures and narratives are understood as the intuitive tacit common sense understanding of the real nature of things. These pictures and narratives are brought into a higher order by systematic comparison of many specimens called by the same name. These comparisons are made with a selective criterion in mind. This selective criterion is a hypothesis about the law-like relations between things. The higher order of things with clear definitions, systematically ordered, can lead to criticism of the common sense notions like the criticism that a whale is not a fish. But it is also possible that it is the other way round. Very strong common-sense notions – for example directly linked to beliefs that are authorized by the church – can hold back the formulation of certain scientific hypotheses, such as ‘that other animals than man are rational and social beings’. The careful connection of cultural and scientific meanings by the changing of common sense via scientific reasoning and the changing of scientific beliefs via common sense can create the vision of an immutable world. This is the idea of determinism.

Darwin attacked in his *Origin of Species* the fact that “the great majority of naturalists believed that species were immutable productions, and had been separately created.”¹³ He developed a totally different kind of descriptive theory. Dogmatic positivism with its empirical characterisations of the true immutable nature of every species is refuted and exchanged for a statistical analysis of the differences between categories of species that live in different environmental conditions. The discovery of the evolutionary capacity of species has had major effects on political theory. It created an ethic of social responsibility.

Since it has become possible to change the living conditions of the lower classes there has been a political striving for social equality by the use of technical knowledge of social mechanisms. This public policy of monitoring the living conditions of the human race gives the new positivism an inherent dynamism.

This dynamic positivism poses however the problem how the common values can be known which can supply the goals for public policy. In the beginning of the twentieth century the social sciences fulfil this need. These social sciences gather knowledge about the societal processes that generate common values. At the second half of the twentieth century, however, it becomes clear that this knowledge of the social sciences is all but neutral, as it is gathered from a certain perspective that has its roots in the very same societal processes. The solution this paper offers is to recast dogmatic positivism in the following way:

- to understand it as the mediation of two practices.
- to see scientific construction as a production of clear definitions that differs in a fundamental way from the social constructions
- to see the social practice as fragmented, guided by idealised pictures to which the individuals are linked in a way that is never fully clear.
- to support the need for a unifying, abstract and formal discourse as a necessary means for people with different cultural beliefs to live together peacefully and highly organised.
- to support the need of the linkage of the abstract and formal discourse with the pictures and narratives of the different social practices.

This last requisite means that dogmatic positivism has to keep its inductive mode: not telling people what to believe, but to take the different beliefs people develop in communicative practices as a point of departure.