"THE SINGULAR AND THE PLURAL in the Sciences.'

My topic today has arisen from immediate practical experience in science, law, theology and sociology, with which ${\bf I}$ had to deal either in politics or in teaching or in research, or in founding scientific institutions.

And I shall try to persist on my practical experience as far as possible. They seem eminently logical and epistemological methods or questions: the Singular and Plural of Concepts, and for that reason the fact of their being treated in an introductory paragraph of logic is apt to destroy them in their importance. And I am. today at least, not so much interested in their structure in abstract as in their tremendous bearing scientific, political and religious thinking.

Science, law, sociology, history, I said, were fields where the puzzle made itself felt./ I shall try to give an example -5-

in every one of the fields.

In Science we may take the term - nature. Before 1400, there were many natures, nature of God, nature of man, nature of diamonds, nature of animals. The universe itself was not one, but according to the mystics and many saints, to the Cabbala there were nine heavens, there was at least one other world, could only be defined as totally different from our universe. The presocratic attempt of creating one science of physics broke down practically since antiquity never obeyed either Plato or Aristotle in every day practice of thought or science. The only practical heir of Plato and Aristotle with regard to the problem of unity in nature, the church, attacked the problem of the nature of the Gods and left alone the nature of the world. The of nature, then, never became the working hypothesis of all/ the sciences before 1400. From 1400 till today's more -6or less accepted Monism the unity of nature, as a working hypothesis, pervaded all the sciences, one after the other, in their daily practice, especially in the 17th century. We seem to have here a clear turn from polyphysics to monophysics, i.e. from a pluralistic world to a uni-verse in this word's litteral meaning of unus as oneness. However this is not longer quite correct. Whitehead's philosophy, Schelling's growing influence, distinctly changes the concept of nature. They bring back the idea of cosmic comprehensiveness in which Whitehead may speak of God and man. beauty, ideas, love, truth as elements of this nature. Now the unity of the concept of nature is no longer tenable when the elements that destroyed it once: an extramundane soul and a transcendental God are suddenly carried back/ into its midst.-7-The same might be said about Bergson. Like Whitehead, he is, to say the least, no longer interested in the unity of nature, and tries to open up the previous complex notion that it was impossible to keep as a unity: the cosmos. The unity of nature the result of modern science was bought for a certain price: the concept had to be emptied of all elements that made for disunion, and it is sais to say that all attempts to refill the bottle labelled nature with all the spiritual and social ingredients

adain will not work for one simple reason. establishment, means obedient acceptance of objective facts, respect for anything in the world as acceptable: axiologically, nature forbids the existence within it, of anything that higher than anything else. Nature denies high and low, to put it mildly / Unified Nature may not comprehend transcendentals. -8-This is the price of its singular. Nature may not discriminate against anything communicated to us as objects. Of course, all doctrines in the special sciences that were applying the new concept of nature to law, society, religion, laboured hard to bring back this power of discrimination between the high, the revealing, the superior, the real, and the appearing, evil, beclouding or mean. However, the concept of one unified nature remains distinctly hostile to any such enterprise. So, days, where the question of hierarchy and value comes to the fore, nature seems to be less in demand. The Monism of Nature is attacked by pluralism in philosophy and in politics.

So here we see a Singular running its course doing a splendid job for some centuries, finally being overwrought and ceasing to function. We must ask ourselves what made it work for

a time?

In turning now to Jurisprudence, we find another plural becoming a singular, and by being made into a singular turning into the stumbling block in all the doctrines of internalial (= international) relations, constitutional history and public law./ This stumbling block in political science is a recent wae, not older than the year 1576. Antiquity used the word kingdom or city, polis, for the state and as late as Augustine one could use the plural cities, kingdoms in matters of political doctrine. The famous sentence regna sine iusticia magna latrocinia, recognises no singular the State. It deals with the kingdoms of this earth in the contemptious plural. The plural kingdoms, no doubt, has an axiological effect like Gentiles; it deprives every one of them of being final, or perfect. The plural is a means of putting them in their place. The Roman Empire, for a very short period, after 212 A.D. when all cities gave up their particular citizenship, claimed to be the last word in history and usurped the Singular of the final political home of mankind. The century, in which Rome tried that, the third, finished its usefullness for mankind. Augustine's City of God was written against this fatal monism in which the tension between the many cities and the one no longer functioned. When Gregory VII. revived St. Augustine in the eleventh century and defeated the emperor, he never used this singular of the emperor in his programmatic letters. He called him the king of/ the Teutons. Ever since 1100, the Augustinian devaluation of kingdoms by pluralism seemed the guarantee of freedom in the Western World. The Popes, Luther and Kant represent a unified front of Catholics and Lutherans to this effect. Any positive and actual government was a particular government, everyone of them was bound together with all the rest by principles of faith and religion not derived from within this government's territory or empire. Their common obligation far outweighed any antagonistic aspirations:

This whole theory sounds like a dream today, but with

remarkable clarity, I find this defense of the essentially pluralistic character as late as 1850 in the Memoirs of Metternich./In attacking so-called philosophers, Metternich -11aattacked practically all political science from Bodin till today, including Hobbes. Locke, Hume, Hegel, and Woodrow Wilson. The singular government, state, politics, is the naive obsession of political science since France broke away from the League of Christian princes in the system of Jean Bodin. Bodin, the of the 16th century is the monistic revolutionary of e. With good reason, his book is called de la Antiluther his science. republique. He renews the pagan notion of the State as a hopeless singular or more correctly as a singular when it is as at its best./ Hobbes of course, Hegel and Wilson followed in his wake. Their personal views make no difference. They may be great humanitarians, adherents of the League of Nations. Methodically, they never get over their first sentence which may run: the state is the organisation of a group of people in a particular part of the globe. With this one fallacy they are committed to all its consequences however they may differ in their wishful thinking about what such a simple state should or should not do./ They all agree in the starting point that we may understand a state when you talk about "the" State in the Singular. Wilson, of course, was filled with the hope that this one state will behave nicely. Still with all his ethical restrictions, he defeats his own aims because he begins with the Singular. Now in all my lectures on Government - and I lectured on Staatslehre beginning in 1912 - I felt at a loss to produce a work(e)able system of international relations once I had first allowed myself to let it be preceded by a doctrine about the state in the singular. Here you see. I hope, that it is a question of intrinsic scientific method. not of ethics, that I have in mind when I speak about singular and method. A method using the/singular "the state",-13-"government", in the beginning, is driven to all the maximum of sovereignty, all the utopianism of a best state, which mars our political science and makes all our talks about international relations a sterile afterthought, a kind of pious protective colouring after having pictured the world of the many states as the hell of mutually impenetrable monads. My book on revolutions is devoted to the task to break down the methodical abuse of the Singular and to state, at the outset, as the only fact of which we know: that there are many states. From this principle, I was able to draw a line to all the different European Constitutions and to show their mutual jealousy. Each particular Government in one part of the globe is a variation of one common government. It is a dialect/ in politics. The idiom or dialect in politics -14may be compared to a dialect in a language. There is no best dialect in a language. Any language asserts itself by branching out into dialects. Dialects don't differ axiologically in being better or worse. They do not compete in the direction of an ideal. They actualize, in the time of centuries, all the various potentialities of a given language. They are its realisation. This process becomes even more clear when we observe the species in the animal kingdom: Any species like the apecies dog, apreads into thousands of varieties. There is no best dog. There is self

assertion of doggishness by spreading and straggling into spaniel and badger dog and bulldog, setter, Newfoundland, St. Bernard./ The important thing, then, is that the plural is the only -15-way of realising the singular. If you allow me the term 'idiomatisation', I would say any realisation of living matter is carried out not in the idealistic method of one that is the best, realisation is idiomatisation. Unity is the realisation between many actualisations of one rich potentiality. In the church, the old proverb said: oportet esse haereses. There must be heresies because the church lives.

The relation between singular and plural, then, is more complex than that of an optimum and many poor attempts to achieve that optimum. Any unity of creation is represented by realising all the varieties within the circumference of this creation./-16-Singular and plural are two aspects of the same thing, and they

are coordinate.

A pure singular, on the other hand, taken idealistically, leads not to Monism, but what might be called, by a loan from the old theological term 'Henism'. You remember that Monotheism and Henotheism often are contrasted. Monotheism teaching one God

only, Henism teaching one God to any given group only.

Modern political science, by dealing with government in an idealistic way, tries to ascribe to any one particular state the duty of reaching out for the ideal. By this false pretense, the simple singular, one state among many, and the axiological Superlative 'the best state' get confused, and this leads all kind of quacks to try their air born/ fancies of idealistic -17-Henism on a solid creature that is a variety within a kind, and is allright because it is one variety, and one variety only of a monistic type. I shall come back to this depravation of the concrete singular one into the abstract Henism of the in a later part of this paper.

Here, I wish to complete my report on the situation in political science. If there are dialects or idioms in politics because there is the one vital creation of the polis that is embodied and realised by "idiomatisation", we need not wonder, to use an example from current events, why the nation of the Dreyfus affair, France, was able to satisfy herself with Mr. Blum, a Jew, as head of her government. Political/ varieties of the kind -18-are not chance variations, they are dialectical variations, supported, that is to say, by the consciousness of the groups at variance. Mr. Blum head (=had) no prospect in France for fifteen years. He was the refuse of French politics. When Hitler came into power in Germany, Mr. Blum's chance came. Antisemitism now being the German religion, a man who would have been shot dead ten years ago, is now tolerated by the people of the Action Française, the camelots du roi etc. I don't claim that they like him. However Hitler frustrates their outbreaks. The antisemitic disc may not be exploited to the limit because it bears the German trademark distinctly. It is idiomatic of Nazi Germany. This is producing a margin sufficiently large/ to overcome -19-the mutiny that otherwise would have sealed the doom of his government which now, as you know, surpasses most French governments by its lasting more than six months./

Of course this is an example just taken from contemporaneity. The task of my Revolutions covers ninehundred years of history. The dialectics between great powers for their inner national life are of overwhelming importance. As Russia by going Communist saved the rest of the World from doing the same. In other words, the vitality and the aim of a single state depends on its dialectical position in the family of nations. Pluralism of States precedes, then, logically, the single government as much as the many States precede the one actually on the map of the world.

However when I open the books on political science, they all trap us by the same one fallacy that they begin with the conditions for government in the singular first and wish for peaceful relations with other governments later. Much more could be said on this fallacy. May I simply/ read once more -21-

Metternich's verdict?

Now the astonishing fact in the history of science, is, of course, the incessant use of the singular in modern times. Bodin was made into a kind of Saint of Political Science, because he enabled the idealists of all nations to deal with 'the' state! The World War is the outcome of this doctrine of Sovereignty. Lutheran Germany withstood his doctrine longest from all countries. When it swallowed this idea under Bismarck, the last dyke broke. Bismarck applied Bodin's ideas of sovereignty of the single state to the heart of Europe. He destroyed the Protestant league of high Magistrates which upheld the common interest of rulers against Bodin's idea "de la/ grande et souveraine —22-monarchie de France."

This same problem exists by the way in the natural sciences. Darwinism partly suffers from the same handicap as political science. Its concept of the struggle for life does not recognise the selfassertion of the one life by its many variations. It thinks of antagonism only as the mother of variation. In his own days, the explanation of a higher unity beyond singular and plural was put forth by Theodor Eitner, a German zoologist, under the name epigenestase, and a number of the most recent monographs in biology deal with the area of possibility filled out by actual variations as the true evolutionary scheme. Since I have not done any research in this field myself, I only register this view as interesting./ It litterally means that a race in the animal -23-kingdom branches out into families and variations because the one in creation may be expressed or embodied by the many only. It may help to clarify the issue in the deadlock created by the Henism of political science./

I don't think that I exaggerate in saying that the future of political science largely depends on a revision of the singular notion: Government, state, and trying to deal with the plurality of states as the fundamental problem for each individual state

from the beginning.

The opposite remedy offers itself in sociology. You may often hear catholic theologians (pointing to) Thomas Aquinas or political scientists pointing to Machiavell or Hegel saying: Well this is good sociology. We need no other science/ with the -25-brand new title 966161869; We are provided for picklyfully: To prove the sociological interest of scholasticism a Jesuite quoted

the medieval sentence Ecclesia societas perfecta est. Don't you see how much thought we gave to social life. We even call the

church a perfect society.

Here you see the use of the word society in the plural. The church is a perfect society. There are many societies, one of them being the church. When we analyse the debates between the schools of sociology today we shall find the party lines drawn very much on the ground of plural and singular. Liberals, catholics, Protestants will deal with Societas and social problems. The great, radical idea of St. Simon, Marx and Comte was to eraze the plural completely and to deal with the Great Society, in which, by implication, all associations,/ -26-groups. denominations, classes, nations are simply parts of one whole.

In the Oxford Dictionary, the liberal view only is admitted: quote: "Society the customs and organisation of a civilized nation." As an example they give: "The progress of society is an evolution. Obviously the quotation allows the opposite interpretation as well. The society which is progress, may just progress through many national civilisations, and thereby prove

its singular.

The weakness of sociological methodology springs from the confusion about Singular and plural. And I personally prefer Thomas Aquinas or Hobbes to a liberal sociology that adds up Chinese, Hindoo, Peruvian, African/ societies into one —27-concoction. But when a man tells me that the hour has come where all partial forms of human social life should be considered as elements in the one and single pattern of the society that mankind tends to establish, I listen carefully. A methodical starting point, a date is given to me from which we may arrive at criteria of social and antisocial. And so, the singular endows science with the power of negation. And without negation no scientific affirmation is possible./

Our last example is taken from theology. This rather archaic example will help to elucidate the difficulties of our modern

difficulties.

It is the oldest, and it is the only one, as we shall see, where the problem has been lived through completely and consciously till a real solution was found. As we see it now, this solution took two thousand years to find, from the days of Homer and Mose to the 9 and 10th century of our era. Some of it is narrated in the fascinating volumes of Neumark Philosophy of the Jewish Middle Ages which is in fact a comperative history of Greek and Hebrew ideas about the one and the many. His interpretations of Plato, especially of Parmenides, as to/ -29-the one and the many, read like a drama. Unfortunately, Neumark leaves off where the solution was found, and is therefore incomplete.

Neumark, nevertheless, succeeded to prove that Plato's plurality of ideas and the Hebrew prophet's problem of the angels, as particularly illustrated by Ezechiel, coincided. Both wished to reconcile the rich unfolding of the various qualities

or attributes of realities with the singular of reality:

We will leave aside this issue of the plural of ideas and angels, and concentrate on the main thing; monotheism. I wish to recall to you, briefly/as the great experience of mankind's-30-thinking in this matter, the battle between polytheism, monotheism and henism as a real mental battle. The fact that this dilemma is lived by the Jews with tremendous passibility, by Islam and Christianity, should not obscure the fundamentally scientific process that makes out the evolution of theology as a

method of thought.

known, the fact is little utilised, that Though it is well the oldest name the Jews thought fit to use for the One God they discovered in all the myths of the heathen, was a Plural, Elohim. This means the Sum of all the Gods, God of Gods. And when they started consciously on their historical calling of fighting the myth. / they chose a name that was not so much opposed to the Babylonian or Egyptian Polytheism, as its very summation. Very soon, with the pressure of many different tribal religions upon them, to this summary of one polytheistic totality there was added a second name, that expressed instead of a summation of all the deities of one system, the summation of all the tribal Gods of different systems. As far as the experts seem able to ascertain, this was the role of the name Elschadday. It probably means the God who ist the same here and there, in Egypt, Canaan and Assyria. This, too is a name which is double faced. It opposes the plural of Gods who/ are local or regional Gods. -32-Those are either here or there where their temple fixes and forces them. El Schadday is everywhere. However, it still is a dialectical term, the negation of local gods, as Elohim is negating the singular existence of the many powers of God . In Elohim and Schadday, the fighting battle front is kept alive, by retaining the pagan idea in the form of negation. A third stage was reached in the name of Jahve. What kind of word is Jahve? Jahve is the God who carries out what he promised, or who shall be, is and has been. It is well to look up/ the prophets that revel in his explanation when the name was relatively new. Particularly clear is Deuterojesaja's definition: I am he; I am the first and the last (48,12) or in chapter 41 I the Lord, the first and with the last, I am he. The words that later became I am the Alpha and Omega.

The logical process then was that as in El Schadday identity through space was expressed, in Jahve identity through time found a first expression. This is scientifically the first philosophy of identity, the first attempt of carry(ing) the idea of one

universe to its limits.

Now it deserves our attention that all these name(s) are polemical. Obviously, a temptation is implied for separating the first/ divine agent and the last, the God here and the God -34-there. The Bible is not a dogmatic statement. It is really and simply the life of the idea of a singular through all its temptations, the battle of the living god against the many. In the book of Judges 11,24 a certain god Chamosh of Ammon is mentioned. More than one Psalm speaks of gods in the plural. And as I said before, in the later parts of the Bible, the lasting interest of man's heart in ideas like justice, truth, mercy, imperiled pure

monotheism again and again by admitting eternal angels as substitutes of the old gods./

Since a very serious aspect of reality is protected by the plural. Jewish monotheism did not proselytize the world as the Jews expected and expect it would in the end. For the world, the Jewish monotheism appeared more or less as Henism. Any mere singular is slated for this degeneration. How does such decay happen? The concept Jahve as we saw before was dialectical in origin. At the end of the Jewish era, this radically spiritual concept was degraded into the tetragrammaton. The four letters which nobody was allowed to pronounce except the Highpriest the sanctuary, became a magic charm, an isolated, unrelated sound of awe and witchcraft./The Cabbala and medieval superstition -36are filled with applications of the mysterious tetragrammaton to sorcery which for similar reason was called grammary. To me, this depravation is not incidental. When Jahve ceased to be a Singular fighting a Plural, he became inefficient as a mental power of expansion, as a spiritual force for the world. Two ways were to retain the victory, and to preserve it, so to against the germs of infectious new life, in a open: One was speak, immune state of pasteurisation. Islam did this by sterilising the notion of/ the Divinity. Islam is a second rate religion for that reason, that it has inherited a result of previous spiritual battles which it must repeat perpetually, without the capacity of growth or increase. Allah is Allah, God is God is the final singular. And it is true, A equals A. A is A. Logically this is very satisfactory. Axiologically and as a working hypothesis for a movement of the Spirit through the centuries God is God does not work. The State is the State, Nature is Nature, would not work either. I think, it is open to rational and scientific proof that Islam castrated its power for internal/ growth by process between singular and giving up the inner dialectical plural.

The petrefactions of Monotheism into Henism of a magic name, the sterilisation of monotheism by the tautology of A equals A, show the adventurous character of human thought. It is easy to

slip for us all.

What was the scientific or dynamic way out of this dilemma, the royal way between petrifaction and sterilisation? Well, the arch was vaulted between the dialectical result and the perpetual origin of the conception God. God is the first and the last: Jahve. However He is in our/ midst too, and that gives rise -39to thinking, conceiving, and believing him as incarnated from generation to generation. Jahve, Elohim were results of many experiences of many generations. Being results, they were correct but no longer encouraging research. Was it not possible, to begin the process all over again?/ The Mind in process is much vital to mankind than any merely logical statement. Singular that had swallowed up all the plurals involved in the The God of Gods, process as their axiological Maximum. then. could not remain the last word. It had to lead on to combination with that ignition by which the whole process to a marching from plurals to the singular originates. Before the many gods compelled man to discover god, there was the first thesis,

the first fact of "a God". A God and the God had to be combined to save the result Jahve, God as nothing but a Singular, from becoming valueless. As a working hypothesis the concept of 'the' One God had to prove its power of receiving into itself any one God. Christianity took up the Jewish problem and conceived such a synthesis between the accomplished result/ 'God equals all Gods' and man's discovery of a God as the perpetual origin of the whole pedigree of deities. The triunity of the apostolic creed is the first solution of this problem. Here we have the first instance, in which the perpetual problem of scientific research itself was tackled and solved. For the perpetual repetitive process of human thinking was overtaken in action and formulated. When the result the creation, Jahve and the origin, the God living in Jesus were brought together in a synthesis, this synthesis conceives of singular plus plural as united. This is litterally a synthesis to the square. I can't go into details tonight. I wish to say only, that this synthesis was completed not before the end of the first/ millennium of our era. For -41the relationship between the result of all previous experience and the new ignition so to speak was attacked by the gnostics. Finally the perpetual process set in motion between the accomplished synthesis, and the newly originating thesis, between Jahve. Elohim. El Schadday, the first and the last, and the passible, the suffering martyr or witness in any given moment of time, found expression in the formula that makes human inspiration a process that is repetitive and regenerative, old and new both: I am alluding here to the definite addition of filioque in the minth century to the definition of the Spirit. According to this ultimate solution, our mental processes proceed lawfully from creation and yet are a new revelation. The Spirit proceeds from the Father and the Son.

These details must not turn our attention from the fact that here for the first/ time in the history of science, we see the possibility of comprehending singular and plural in a higher unity and thereby surpassing the temporal usefullness of either singular or plural./ When a century ago Unitarianism sought -43a compromise between Christianity and natural philosophy, it tried to help in building up the singular Nature, however it destroyed the one safeguard of religion against polytheism. Today/ Polytheism is around the corner. When Brightman spoke -44-about his empirical god in Cambridge, I immedialtely turned to Thomas with the question: How does he know about one God? Empirically we don't know any God except our own. This is just the trouble. Any God limited by our personal empiricism is God among the many. Of course Brightman simply lives on the fact of the Jewish and Christian tradition when he does not discuss the Singular - Plural issue. He is not really self-supporting in this matter. And I don't blame him. Wright is doing the same in defending a God who did not create the world. I think this is all to the good. Polytheism serves the purpose of setting free energies in the fields where the fight is raging more fiercely. In Natural and/ Social Science, the problem is vital. The language of Christian theology is dead. Our mental processes will be clothed in new terms and a language from natural and social

sources. However I believe that the trinitarian solution has actual validity and importance for all times. The achievements of theology are real scientific achievements, which have to be rediscovered by and within our modern sciences of nature and society. The monism of nature leads into sterile positivism in politics as well as in physics or biology. The monism of society leads into dictator/ship. Positivism and Communism are the -46-abuses of a wrong singular which is turned from a result into an idee fixe, a Henism. Pluralism of many natures or many societies defeats its own ends which are unity.

Let me end here by drawing the following conclusions. —47—Polytheism, then, with Brightman's empiricism, is around the corner, and in our own midst, Wright is paving the road for the same revival. I think it is all to the good. I do not believe that the real fight is raging today on the theological battlefront. I believe that the trinitarian solution has actual importance today in our problems about nature and society. The language of theology is dead. Its solutions, however, have to be rediscovered by the natural and social sciences, for the singular Nature and the singular Society. Both singulars are results.

The alternative of singular and plural is the history of science itself. Neither the singular nor the plural alone is able to become universal for all. The singular tends to turn into an appellative name and herewith/it is in danger of losing its -48-universal charracter. A Name might be invalidated by the stubborn resistance of those who hear the name from the outside, as the Gentiles from the Jews. A plural has an accidental character and therefore every science tries to replace it by a singular.

The Singular and the Plural both are logically valuable categories, correcting each other, and even presupposing each other. The Christian dogma, in trying to keep the values of both singular and plural in a synthesis, was not wrong. The Fathers showed full insight into the spiritual process of human thought.

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The original manuscript has as a crossed out title: The axiological significance of Singular and Plural in the Sciences. The lecture must be from 1936/37 according to p. 19 where Leon Blum is said to be prime minister of France for six months, which he was for the first time from 1936 till june 1937. Cf. the manuscript The One and the Many, Febr. 8, 1937. My guess is January 1937. The Volumes of Neumark, mentioned on p. 28f. are D. Neumark, Die jüdische Philosophie des MA, 2 Bde (unvollendet) 1907/ 1910. The manuscript has 46 pp. (4-48 with two inserted pp., p. 11b and p. 39a) It was found in Four Wells May 19, 1993 and transcribed July 2 and 3 1993 by Lise van der Molen, Winsum, The Netherlands. The ends of the pages are marked with the sign / . The new page is indicated at the end of the line, e.g. -4- In brackets () some typing faults are indicated.