Abstract
Our analysis of the phrase ‘social space’ first of all concentrates on the modal or functional nature of the different aspects of reality, including the social and spatial aspects. Subsequently this leads to an analysis of the problem of modal analogies – one way in which an answer is given to the perennial philosophical problem concerning the coherence of irreducibles. In this account both the core meaning of diverse aspects surfaced as well as the way in which they display their meaning through their coherence with all the other aspects of reality. In addition we shall argue that a distinction must be drawn between the internal and the external coherence between the social aspect and the other aspects of reality. This points in the direction of acknowledging that all societal collectivities in principle function in all the aspects of reality, including the spatial aspect. Finally a plea is formulated for the internal space (sphere-sovereignty) of every distinct social form of life found within a differentiated society on the basis of rejecting an overestimation of the whole-parts scheme (also found in system theory), while keeping in mind that the whole-parts relation has its original (modal, functional) ‘seat’ within the aspect of space. This plea includes a brief analysis of the concept of an Umwelt and the term autopoiesis as well as the social space required by educational and academic institutions within a differentiated society. Finally the social space of universities within a differentiated society is assessed with special reference to the task of ‘community service’ and ‘affirmative action’.

ORIENTATION
Each of the terms constituting the subject matter of this analysis has a rich history of scholarly reflection behind it. A number of questions immediately surfaces, such as:
1. What is unique about the ‘social’ and about ‘space’?
2. Is there something unique to both, does that mean that they cannot be related in some or other way?
3. If the answer to the previous question is affirmative there must be a connection, a coherence between the ‘social’ and ‘space’ – but what kind of relationship do we have in mind?
4. Moreover, if the social and the spatial do cohere, can this coherence be established without taking into account other features of reality as well?
5. What are the implications of the notion of social space for educational institutions within a differentiated society?

In the course of our argumentation we shall attempt to find answers to these questions.

THE SOCIAL AND THE NON-SOCIAL

One may be tempted to associate the social with a specific kind of human actions, namely those in which fellow human beings are involved, as they function in diverse societal collectivities, such as schools, universities, lingual communities, business enterprises, clubs, states and families. However, as soon as one starts to analyze these societal entities it becomes clear that they exhibit features exceeding the scope of the social properties they display. Schools, universities, business enterprises, clubs, states and families all have to face economic considerations; they all have to observe moral standards; they all have to give a concrete historical form or shape to the way in which they organize themselves and in which they position themselves within highly differentiated societies. Of course all of them also function in a social manner, displaying typical ways in which the social inter-action that takes place within them is structured. The crucial point to be observed is that although all the mentioned collectivities certainly do have a social side, they just as certainly display non-social functions as well, such as the economic, the cultural-historical and so on.

When we use the term social as an adjective we have something different in mind than when we speak of society. In the latter case we refer to the multiplicity of differently structured societal entities in their multi-aspectual nature. The picture becomes more complicated when we focus on the social aspect of anyone of these entities, because we are used to combine the adjective ‘social’ with a number of non-social features as well. Consider, for example, compound expressions such as: social order, social stratification, social distance, social persistence, social change, social differentiation, social integration, social sensitivity, social awareness, social consciousness, social desires, social consensus, social conflict, social control, social power, social expression, social interpretation, social frugality, social harmony, social justice, social integrity, social convincingness, social reliability.

Closer scrutiny reveals that every one of these compound expressions actually represents a reference to the social aspect and at the same time to some or other non-social aspect of our experiential world. Suddenly the scope of interconnections between the social and the non-social expands significantly. Which non-social aspects are involved in these compound expressions? In order to provide an answer to this question we will consider the first two in some detail, while merely listing the others in Endnote 2.3

The phrase social order contains the familiar term order, which is here qualified as a social order. The reason why the term order is familiar is because it is found in different (non-social) contexts. For example, the discipline of physics defines its law of non-decreasing entropy in terms of an increase in dis-order – where the concept
disorder presumes the concept of order. Within mathematics the concept of an ordinal number represents the numerical order of succession.

Within any societal form of life, such as the state, the church, the club, or the firm, to the extent in which one is justified to speak of a social order prevailing within it, this mode of speech entails that the rules of conduct obtaining within such a societal form of life are united and therefore constitute an order—the opposite of chaos. Order is always of some or other kind, but it cannot be separated from a multiplicity brought into a unity. Clearly, unity-in-the-multiplicity reflects the quantitative meaning of the one and the many. The digital culture in which we live underscores the foundational role of the numerical aspect of reality. However, it may also mislead us to think that everything can be explained in terms of the one and the many.4

Although the sociologist Leopold von Wiese does acknowledge, in his Beziehungssoziologie (relational sociology), that the ‘relationship of the one to the many’ is the last abstraction (Von Wiese 1959, 19), he subscribes to a dualistic view in which the one and the many is opposed to uniqueness and plurality. According to Von Wiese the fusion of unity and multiplicity indeed forms a presupposition of all civilization and culture. Unfortunately his over-estimation of this relation causes him to deny any reality to social forms of life in the sense of supra-individual totalities. Anyone who attempts to do this is accused of subscribing to a universalistic or holistic view (Von Wiese 1959, 25; cf. 1966, 114–117). The alternative option in this context is to restrict an explanation of societal phenomena to the individuals (atoms) involved in social processes, without concluding to the real existence of any societal whole or totality. This theoretical stance is known as an individualistic or atomistic approach. A representative statement of a prominent sociologist advancing this view is found in the following words of Max Weber:

Concepts such as “state”, “club”... signify specific kinds of communal human actions..., that could be reduced to “understandable” (“verständliches”) actions, and that means that they can, without an exception, be reduced to the actions of the individual human beings (Einzelmenschen) concerned (Weber 1973, 439).5

More recently prominent thinkers started to advance a view designated as methodological individualism. For the logical positivist, A.J. Ayer, ‘the English state, for example... is a logical construction out of individual people’ (Ayer 1967, 63). Karl Popper also characterizes his own approach as ‘methodological individualism, ‘It rightly insists that the ‘behavior’ and ‘actions’ of collectives, such as states or social groups, must be reduced to the behaviour and to the action of human individuals’ (Popper 1966-II, 91). As opposed to methodological collectivism he believes ‘that institutions (and traditions) must be analyzed in individualistic terms – that is to say, in terms of the relations of individuals acting in certain situations, and of the unintended consequences of their actions’ (Popper 1966-II, 324).6
THE DISTINCTION BETWEEN A-SOCIAL AND UN-SOCIAL

In our discussion of the connections between the social and the non-social we have provisionally enumerated a number of aspects distinct from the social. Through this enumeration we have implicitly highlighted an important insight, namely that the meaning of the social aspect can only reveal itself through its coherence with all the non-social aspects of reality. The phrase non-social can also be designated as a-social because it equally refers to those aspects of reality distinct from the social.

Moreover, in addition to the distinction between the social and the a-social (non-social) we have to acknowledge what should be labeled as un-social. The connection between the social and the moral aspects reveals the meaning of social morality, that is, of showing the necessary respect in the course of social interaction. Someone who violates this requirement of social morality is considered to be impolite. Impolite social behaviour remains situated within the sphere of the social, it does not turn into something a-social (non-social). The contrary polite-impolite therefore still belongs to the domain of the social aspect. If I personally pay an outstanding municipality bill but do it in an impolite way, I violated a social norm, but not an economic one.

In other words, the distinction social-un-social brings to expression the fact that this aspect is normed, that one can act by obeying, for example, the requirements of social respect (such norm-conformative social acts could take on various shapes), and that one can violate such normative standards, in which case one acts socially antinormative. In more serious cases sociologists (and criminologists) speak of deviant behaviour.

Of course people (and societies) may differ about what should count as social norm-conforming and socially antinormative – but in all such differences of opinion the underlying agreement is that we are confronted with an aspect of reality that norms human behaviour. Whenever socially antinormative human actions are identified it is done on the basis of (implicitly or explicitly) applying some or other social principle or norm. Violating social principles do not transform such actions into something a-social for they remain bound to those social principles to which they are factually subjected. This entails that we have to acknowledge that within the social aspect of reality there is both a distinction and a strict correlation between social principles (norms) and social facts – actions are always determined and delimited by social principles and can either be performed in obedience to or in violation of social principles. This norming feature of the social aspect is shared by the last nine aspects identified in Endnote 2. The logical-analytical aspect – with its familiar contrary: logical-illogical – serves as the foundation of all the other normative aspects.

We are slowly making headway, for we have established a number of things in connection with the social:

a. The adjectival use of the term social does not refer to any many-sided societal entity on the whole, but merely to a distinct aspect of reality displayed by all societal entities. In other words, such societal entities inevitably function
within the social aspect of reality, but at the same time they also function within all the other aspects of reality.

b. As an aspect of reality the *social mode* (*function*) ought to be distinguished from all the non-social aspects of reality.

c. The meaning of the social aspect only comes to expression in its coherence with all these non-social aspects – exemplified in the above-mentioned compound phrases that we have briefly listed.

d. The social aspect has a *norming structure* in the sense that it requires obedience from social actors (individuals or societal entities according to their social aspect), but also leaves open the possibility of antinormative social actions.

### THE UNIQUENESS OF THE SOCIAL ASPECT

The way in which the initial compound expressions were formulated in each instance applied the term *social* as a qualifying term. This means that it could have been substituted by a different qualifier. For example, when we consider the phrase ‘social space’ one can imagine a number of other qualifying terms, found in expressions like *biotic* space (*Umwelt*), *emotional* space, *physical* space, and so on. Interconnections such as these pertain to the coherence between various aspects but at the same time they demonstrate the uniqueness of the cohering aspects. If every aspect does not display something distinct and unique it would be meaningless to speak of the *coherence* between aspects. It is only when the uniqueness of all the aspects is recognized that one can start to analyze their interconnections. Phrased in its most general and most basic form, this philosophical issue concerns the coherence of what is irreducible, that is, the *coherence of irreducibles*.

What is truly unique and irreducible is also *indefinable*, that is, it is *primitive*. Every attempt to define what is irreducible results in the elimination of an aspect or in its (antinomic theoretical) reduction to that irreducible aspect from which the ‘defining terms’ is derived. There are actually two options: (i) attempt to define what is irreducible in terms of another irreducible aspect and (ii) define the indefinable in synonymous terms. Option (i) results in (antinomic) *reduction* and option (ii) leads to a mere *tautology*. (We shall return to the alternative, third option, namely to acknowledge both the *uniqueness* and the *unbreakable coherence* between all aspects of reality.)

The history of social theory knows many reductionist approaches, that is, attempts to define the social in non-social terms. In following Gumplowics, Oppenheimer claims, in his *System der Soziologie* (1922, 1926), that human society is nothing but a species manifestation of ‘life’. However, his contemporary, Piterim Sorokin, clearly saw through the emptiness of reductionistic ‘all-claims,’ such as *everything is instinct*. He asserts that such a reductionism is not only useless, but that it is also *tautological* (Sorokin 1928, 607). If everything could be reduced to instinct, asserted in statements such as ‘love is nothing but instinct’, scientific judgments would all
result in the meaningless tautology: \textit{instinct is instinct!} In reaction to the ‘definition’ of Max Weber option (ii) is pin-pointed by Othmar Spann who noticed its tautological character: ‘the social relation exists . . . (in), that . . . social actions are performed’ (Spann 1934, 132).

During the 19th and 20th centuries sociological thinking wrestled with the (ontological) issue of uniqueness and coherence. Initially Comte and Spencer pursued the path of organicism,\textsuperscript{11} and particularly social system theory continued key elements of this legacy during the subsequent century. Yet, during the second half of the 20th century more sociologists became critical of using biotical analogies at all, while being wary of the extreme claim that human society is ‘nothing but’ an organism. Giddens remarks: ‘There are few today who, as Durkheim, Spencer and many other in nineteenth-century social thought were prone to do, use direct organic analogies in describing social systems’ (Giddens 1986, 163). Remarkably enough he never hesitated to frequently use phrases such as social life, social differentiation, social integration and even social adaptation. What he did not realize is that no single sociological paradigm could side-step the use of terms reflecting the (inter-modal) coherence between the social and the biotic aspects of reality. The mentioned terms – life, differentiation, integration and adaptation – are all derived from the primitive meaning of the biotic aspect.\textsuperscript{12}

\textbf{SPACE AND ITS ANALOGIES WITHIN THE SOCIAL ASPECT}

At this point it is natural to enter into a closer analysis of the interconnections between the social and spatial aspects of reality. First of all the spatial is also an aspect of reality and as such it furnishes us with structural elements appearing as analogies within other aspects. Our provisional circumscription of an analogy given above stated that it concerns a partial similarity and a partial difference. This characterization needs a more precise explanation.

Consider an example that proved to be very fruitful in explaining the nature of an analogy, namely that of the president of a country and its bodyguard. Wherever they are seen they are always in close proximity, viewed from a spatial perspective. However, in terms of a social perspective it is immediately clear that they are far apart (in terms of the positions they occupy within society)! This sounds like a contradiction – being close-by and far apart at the same time!

An understanding of this state of affairs is dependent upon penetrating further into the issue of uniqueness and coherence. In the context of our current discussion this problem is primarily focused on the diverse modal aspects of reality. However, the nature of an analogy encompasses four different kinds of similarities and differences.\textsuperscript{13} Whenever a similarity shows itself within the element of difference – or vice versa – an analogy is met. What is at stake in our just mentioned example of the President of a country and its bodyguard is what should be designated as the difference between spatial distance and social distance.\textsuperscript{14}
Obviously the element of *similarity* is represented by the term ‘distance’. Interestingly, it is precisely in this element of similarity that the *difference* between social distance and spatial distance comes to expression, for in ‘social distance’ distance means ‘far apart’ and in ‘spatial distance’ distance means ‘close-by’! In other words, *within* the element of similarity, the difference is shown. In general terms it can be said that an analogy always exhibits the following feature: in the moment of similarity the difference shows itself, or in what is different the similarity surfaces.

It is also possible to say that what is originally given as spatial distance analogically appears within the social aspect as social distance. Yet the phenomenon of inter-aspectual analogies presupposes an insight into the original – that is, *non-analogical* – meaning of space.

**The original meaning of space**

The spatial aspect succeeds the numerical aspect, but nonetheless presupposes the meaning of the one and the many. How else will it be possible to understand the meaning of one or more *dimensions* (such as length, width and height) or different *magnitudes* (such as 9 centimeters, 5 square meters or 3 liters)?

Our awareness of space is always related to an understanding of *extension*. Extension in any dimension – such as that of a straight line (one-dimensional extension), that of a surface (two-dimensional), etc. – is at once attached to an awareness of the connectedness of whatever is spatially extended. What is connected *hangs together*, that is, *coheres*, and this entails that extension that coheres in such a way embraces every connected part. But when every *part* is given, it is understood as a *whole*, a *continuous* whole.

This shows that the relation between a *whole* and its *parts* originally belongs to the modal aspect of space. Still it seems quite difficult to define the meaning of continuous extension. Interchanging ‘continuity’ with terms like ‘uninterrupted’, ‘connected’, ‘coherent’, and so on, simply repeat what is meant with the term continuity, instead of really defining it! In connection with a purported implicit definition, Shapiro mentions the feature of being coherent, but adds that ‘coherence is not a rigorously defined mathematical concept, and there is no noncircular way to characterize it’ (Shapiro 1997, 13).15

Without entering into a more extensive investigation of the interconnections between number and space, at least one outstanding feature of the spatial aspect ought to be mentioned, namely the fact that continuity allows for an endless (sub) division. Aristotle, in following up certain insights by Anaxagoras, holds it to be self-evident that ‘everything continuous is divisible into divisible parts which are
infinitely divisible’ (*Physica* 231, 5 ff.). Already the way in which Parmenides has characterized being, illuminates important features of continuity and the whole-parts relation. He holds that being ‘... was not and will never be because it is connected in the present as an indivisible whole, unified, coherent’ (Diels and Kranz 1959–60, B Fragment 8, 3–6).

Modern intuitionistic mathematics made an appeal to these insights of Greek thinking in developing their alternative to the atomism, entailed in the thought of Cantor, and the formalism of Hilbert. The intuitionist Hermann Weyl, for example, points out that the fact that it ‘... has parts, is a basic property of the continuum’, and adds: ‘... it belongs to the very essence of the continuum that every one of its parts admits a limitless divisibility’ (Weyl 1921, 77).

To summarize: the core meaning of space is found in continuous extension. The terms coherence and being connected are synonymous to continuous extension and this entails that the whole-parts relation is original within the spatial aspect.

In view of the fact that the meaning of an aspect comes to expression in its coherence with other aspects, we give a brief indication of the implications flowing from the position of the spatial aspect – situated between the numerical aspect (foundational to it) and the kinematic and physical aspects (for which it is foundational).

**The position of the aspect of space**

Whereas the awareness of succession is primary within our intuition of number, our understanding of space is connected to simultaneity, to what is given at once. From Einstein’s theory of relativity we know that movement relativizes simultaneity. It also attaches a new (and different) meaning to addition.

Within the context of numerical addition one can say that two plus two equals four (2+2=4). Within the spatial aspect an instance of a vector sum (constituting geometrical addition) may provide us with the fact that that ‘2+2=√8’. Suppose one walks 2 miles north and afterwards 2 miles east, then that person will be √8 miles away from the initial point of departure. The fact that numerical values within space appear as distances this needs a distinct indication, which can be given by underscoring the number symbols to show that we are dealing with vectors: $2+2=\sqrt{8}$.
What is the case with kinematic addition? Suppose two particles move in opposite directions -- each with a velocity of 0.9c (where c is the ‘vacuum-velocity’ of light). A normal (numerical) addition of these velocities will yield a value contradicting Einstein’s postulate that nothing can exceed the (vacuum) speed of light, for it adds up to 1.80c which is larger than c (see Einstein 1982, 41, note 1). However, if the Lorentz transformation is applied the speed actually turns out to be 1.80c/1.80 which is still smaller than c.17

The meaning of the spatial aspect therefore presupposes the meaning of the quantitative mode inasmuch as both the number of dimensions (one, two, three, and so on) and the factual extension of spatial figures analogically reflect the meaning of number within the sphere of space. At the factual side of the spatial aspect the general term magnitude illustrates the connection with the foundational numerical aspect. Depending upon which order of extension (dimension) is considered, magnitude acquires alternative specifications: in one dimension as distance, in two as surface and in three as volume. Owing to the irreducibility of the spatial aspect the familiar ‘definition’ of a straight line as the ‘shortest distance between two points’ is incorrect. The term line in geometry is a primitive term. Therefore it cannot be defined merely by specifying a number that actually solely serves to designate the measure of extension. A line as a one-dimensional spatial subject is extended and the measure of its extension is given by specifying its distance, which invariably represents a numerical analogy at the factual side of the spatial aspect.

Bertrand Russell gave the mentioned definition of a line as the distance between two points a twist, without escaping from the basic shortcoming of this definition: ‘A straight line, then,’ he claims, ‘is not the shortest distance, but is simply the distance between two points’ (Russell 1897, 18). When the German mathematician, David Hilbert, published his axiomatic foundation of geometry (Grundlagen der Geometrie) two years later in 1899, he employed three undefined terms, namely ‘point,’ ‘lies on,’ and ‘line’. Suddenly the term ‘distance’ disappeared.18 This choice of words completely avoids the traditional view, even found in the work of a contemporary mathematician like Mac Lane who continues to believe that a ‘straight line is the shortest distance between two points’ (Mac Lane 1986, 17).

Similar to the way in which the arithmetical aspect serves as the foundation for the spatial and post-spatial aspects the spatial aspect also serves as the foundation of the post-spatial aspects. From the perspective of these post-spatial aspects space always appears within them pointing (analogically) back to the original meaning of space. Within the kinematic aspect space appears analogically as the path of a moving entity (speed is calculated by dividing distance by time). Likewise the expression physical space points at the spatial analogy within the physical aspect. Physical space and mathematical space are similar in that are both extended, but they differ because while spatial extension is continuous in allowing for an infinite divisibility, physical space is not continuous (since it is determined by the quantum-structure of energy) and therefore it is not infinitely divisible.19 Bernays also distinguishes between physical space and mathematical space.20 Sensitive space, for example
the sensitivity for distinct sensations on the human skin, may be experienced as continuous in spite of the fact that the stimuli are physically discontinuous (distinct) (see Gosztonyi 1976 Vol I, 13).

We are now in a better position to account for the nature of social space.

**SOCIAL SPACE**

The idea of modalities, which is also captured by referring to modal functions, facets, sides or aspects, entails that within any aspect one can distinguishing between a core meaning and analogical structural moments referring to other unique (and irreducible) modal aspects. Because these aspects are fitted into a cosmic order of succession some of their analogies will be pointing backward and others forward, respectively also known as retrocipatory and anticipatory analogies. In addition we have made a distinction between the law side (norm side) of an aspect and its correlated factual side. At the factual side one finds both subject-subject relations and subject-object relations. The three primitive terms introduced by Hilbert in his axiomatization of geometry are ‘point’ (a spatial object – dependent upon an extended spatial subject), ‘line’ (the required spatial subject) and ‘lies on’ (the embodiment of the spatial subject-object relation). In general all these structural features of an aspect can be presented in the concise Sketch 1.

![Sketch 1]

In order to *situate* the phrase *social space* this spatial analogy within the structure of the social aspect may be portrayed alongside all the other (retrocipatory and anticipatory) analogies (see Table 1) present within this aspect – as already provisionally enumerated in the first list of compound phrases mentioned in Endnote 2.
Aspects | Social Retricipations and anticipations  
--- | ---  
Faith aspect | Social certainty / reliability / confidence  
Ethical aspect | Social morality / integrity  
Jural aspect | Social justice  
Aesthetic aspect | Social harmony  
Economic aspect | Social economy (avoiding excesses)  
Social aspect | Core meaning: (as)sociation  
Lingual aspect | Social signification and interpretation  
Cultural-historical aspect | Social power, control, competence  
Logical-analytical aspect | Social identification and distinguishing  
Sensitive aspect | Social feeling (desire, will, consciousness)  
Biotical aspect | Social life (differentiation, integration, adaptation)  
Physical aspect | Social dynamics (causality / change)  
Kinematical aspect | Social constancy (endurance, persistence)  
Spatial aspect | Social sphere, domain, distance, above and below (super- and sub-ordination), next-to-each other, the whole-parts relation  
Arithmetical aspect | Social order (unity and multiplicity)  

Table 1

Against this background we can now focus on the internal coherence between the social aspect and the spatial aspect. We begin by noticing that we are actually familiar with many terms derived from the core meaning of space, such as the terms sphere, domain, area and context. Since every modal aspect finds its unifying and qualifying feature in its meaning-nucleus (core meaning) that stamps or characterizes all structural moments present within its domain (sphere), and since within every aspect we find distinct laws (or norms), we may also designate each aspect as a law sphere (norm sphere in the case of the last nine in which we have normative contraries, founded in the logical contrary of logical-ilogical). Consider now the subheading below in which the term ‘sphere’ is employed alongside terms such as validity, social and norms.

The sphere of validity of social norms

On the norm side of the social aspect the analogy of space is seen in the concept of a specific sphere of validity of social norms. Within the typical sphere of each identifiable social form of life one can always encounter the prevalent socially positivized norms (that is, norms that are given shape or form in specific, unique historical circumstances). The concept social order captures the (non-contradicting) unity of the social norms made valid (positivized) within that social sphere. In terms of the numerical analogy societal entities are therefore combining a multiplicity of social actors into a social unity. Defined in terms of the spatial analogy, every societal
unity receives an additional specification, namely when it is identified as a (supra-individual) social whole. As such, any social whole is to be seen as the (collective) subjective human response to the norms delimiting this specific social sphere. The spatial analogy in the social aspect, according to its norm side, therefore concerns the mentioned elementary concept of the social sphere of validity of social norms – as positivized by the social organs competent to do that.

**Misunderstanding the spatial analogy: sociological holism (universalism)**

In a differentiated society every social subject has a specific communal function (‘social space’) within various societal spheres, without being totally absorbed by any one of them – as it is claimed by some of the typical forms of sociological holism or universalism. Sociological individualism takes as its starting point an overestimation of the discreteness of the numerical aspect. Sometimes it is connected with the numerical analogy within the physical aspect, in which case it is known as atomism. By contrast, sociological universalism, on the other hand, elevates the spatial whole-parts relation to the rank of a basic denominator for the entire cosmic diversity (mostly connected with its biotical analogy in biologistic or organicistic universalism).

The fundamental thesis of universalism is given in the classic formulation of Aristotle, ‘Therefore, according to its nature (phusei) the state (polis) precedes the family and the individual, because the whole must be prior to its parts’ (Politica 1253a, 19–20). Throughout the history of Western thought both individualism (atomism) and universalism (holism) played an important (even dominating) part in the analysis of human society. Today it is still as prominent in sociological theorizing as ever. Particularly through the influence of organismic system theory, as it was developed by Ludwig Von Bertalanffy, sociological holism upheld its presence in many different humanities (such as psychology, psychiatry, sociology, and political science), sometimes captured in the opposition of order and action.

Since all views of reality proceeding from (supposedly) basic elements, however much they are considered to be interrelated, eventually are faced with genuine wholes or totalities, modern system theory wants to take as its starting point wholes such as these. The fear for a ‘static’ approach may sometimes cause the qualification that system theory is concerned with dynamic systems. The crucial feature of system theory, however, is given in its emphasis on the interdependence existing between the different parts of the system as a whole. In their mutual interrelationships these parts dynamically constitute the whole.

The key-concept of all prominent variants of system theory is therefore given in the concept of a whole with its parts – irrespective of the way in which the interaction between these parts are conceived of, or concerning how the interaction between the whole and its (external) environment is visualized.28
Social super- and subordination, next-to-each-other and social distance

Whereas the original spatial whole-parts relation has its foundation in the numerical time-order of succession (in the undisclosed sense of endlessness which guarantees the endless divisibility of spatial continuity – evidently a retrocipation at the factual side of the spatial aspect to the law side of the numerical aspect), dimensionality is a numerical analogy on the law side of the spatial aspect finding, in metric spaces, its correlate in magnitude as an analogy at the factual side of the spatial aspect, referring back to the factual side of the numerical aspect. A number is used to indicate the actual distance, area or volume of any extended spatial subject. The elementary concept social stratification reflects the factual spatial moment of magnitude in the specified concept social distance. The concept of a social ordering surely implies social stratification – as correctly pointed out by Van der Heydte (1956, 828). One important implication of this insight is that an elite belongs to the nature of social stratification and ordering (Van der Heydte 1956, 829). Without this elementary basic concept, no class concept or concept of ranking could be formulated by sociology.

At the same time the notion of social ordering signifies the normative structuration (to borrow a term from Giddens) of social relationships. In itself this precludes an identification of social distance with spatial (or: physical) distance. For example, the status of a person occupying the office of president is structurally determined by the nature of the state as a public legal institution – explaining why the spatial proximity of a bodyguard (briefly discussed above) differs from the social distance present between the president and his/her bodyguard (see Sketch 3).

Sketch 2
Some sociologists even find it meaningful to distinguish between two modes of social status: social status as *position* and social status as *rank*. The former concerns the social positions one may occupy – such as *brother* or *sister*, *professor* or *student*, and so on – while the latter aims at a relative evaluative comparison of people in particular positions (for example *poor* and *rich*, *educated* or *uneducated*) (cf. Labowitz 1977, 134). From this distinction it is clear that the nature of social distance may be specified in different ways – and that it should not be identified, per se, with the distinction between authority and subordination. To be sure, the rank difference of rich and poor does not imply any super- or subordination.

**The one-sidedness in Von Wiese’s sociology of relationships**

Von Wiese realized that his theory of social relations needs basic concepts. The first one introduced by him is the concept *distance* (Von Wiese 1959, 75). However, according to him distance should immediately be related to a *change* in distance (*Distanzveränderung*). Von Wiese explicitly rejects a purely spatial understanding of the concept of distance as he uses it in his sociology. His intention is to capture the degree of spiritually being apart or the or being close-by that may exist between human beings. This could only be assessed when a form of social interaction takes place between human beings: A on B and B on A. The difference between spatial distance and social distance shows itself, according to Von Wiese, inasmuch as the path of the interactive effect from A to B normally is different from the path of the interactive effect from B to A (Von Wiese 1959, 75).

To this basic concept of social distance he merely adds the concepts of *social processes*, *social relations* and *social structures* or ‘Gebilde’. Von Wiese then discusses the basic concept of *social distance* in such a way that the real analogical nature of it is clearly revealed. Social distance, he argues, differs from spatial distance – it indicates the measure of human spiritual (*seelisch-geistiger*) nearness or estrangement that occurs in the interaction of two persons or social structures. The difference between spatial distance and social distance is also seen from the
mentioned fact that the action-road from person A to person B is not the same as that from B to A. The similarity between spatial and social distance is still evident – but precisely in this moment of similarity we encounter the (modal) difference: social distance differs from spatial distance. This is constitutive of the very nature of an analogy: two aspects reveal their difference in their structural moment of similarity (or vice versa).

When Von Wiese furthermore claims that the next-to-each-other of people is the most fundamental trait of the social, then it is clear, not only that injustice is done to other analogical moments in the social aspect, but also that the spatial analogy is presented in a reduced and distorted way. The (dimensional) vertical analogy of above and beneath (super- and subordination) is reduced by him to the (dimensional) horizontal analogy of the next-to-each-other. For him the former is implied in the concept of social distance. Given the existence of relations without any super- and subordination, he defends the opinion that the vertical structuring can never serve as the basis for sociological analysis (Von Wiese 1959, 76–77).

Although it is true that the next-to-each-other cannot be identified with the above and beneath, it is wrong to look for the real nature of the social in one of these two moments – to the exclusion of the other one. Both moments simultaneously represent the full meaning of the spatial analogy in the social aspect and must be acknowledged as such.

Clearly the directional motivation of the modern dogma of the autonomy of humankind determines this inability to acknowledge the spatial analogy within the social aspect correctly.29 According to this conviction every authority structure (the spatial analogy mediated by the historical analogy) is an offence to the pretended self-sufficiency and autonomy of humankind. Therefore this relation must be reduced and ‘equalized’ to the next-to-each-other of (inter-individual) relationships!

Although Von Wiese aids us in our understanding of the similarities and differences between the spatial and the social aspects, this prejudice in his thinking distorts our understanding of the fullness of this interrelation. Moreover, the fact that Von Wiese, without any further justification juxtaposes the basic concept of social distance alongside concepts such as social processes and social structures which actually belong to the domain of complex and typical basic concepts,30 testifies to an additional methodological weakness in his general method of sociological concept formation. Seen from the social aspect, one may say that the ‘element’-relation represents a numerical analogy colored by the spatial analogy of the whole-parts relation, whereas the ‘inclusion’ relation analogically reflects the spatial whole-parts relation as such.31

Social extension (sphere)
The concept of social distance is implied by the elementary basic concept social extension. According to the norm side it refers to the typical sphere within which positivized social norms are made valid. In all those societal institutions and
organizations where one may find a relation of super and subordination (an authority-structure), it is appropriate to specify the domain of authority of office bearers by employing the term jurisdiction. This term has a twofold connotation: on the one hand it refers to the mentioned domain of authority – an obvious spatial analogy, and on the other hand it alludes to the internal legal competence of office bearers to legitimately control, direct and organize the lives of the participating members of the social form of life concerned, in conformity with the concrete shape given to the underlying structural principles guiding the duties they perform in exercising their authority – including conflict handling and the implementation of sanctions where and when needed.

According to the factual side, the elementary basic concept social extension refers to the factual domain of social relationships between social subjects participating in specific social collectivities. The concept of social participation presupposes the reciprocal relation between a social whole and social part(icipant)s. By using the term participation acknowledgement is given to the reality of an active engagement. To participate in the existence and the functioning of a social whole, furthermore, presupposes a reality transcending any one of the multiplicity of social functions an individual may have. Only an extreme holism can claim that the entire existence of a human being could be fully absorbed by one differentiated role of participation.

THE EXTERNAL COHERENCE BETWEEN THE SOCIAL ASPECT AND THE SPATIAL ASPECT

Although distinct societal entities in principle function in every aspect of reality, there is a difference between analogical moments and original modal functions. For example, the aesthetic aspect of a work of art reveals its internal coherence with the other cosmic aspects through its retrocipatory and anticipatory analogies. Consider the difference between the original sensory function of an art work – one sees a sculpture, reads a book or listens to music – and the aesthetic sensitivity displayed by a work of art for the many-sidedness of reality (a retrocipation within the aesthetic aspect referring to the sensory mode). The history of such an art work concerns its original function within the historical aspect of reality, while the aesthetic form and style reflect the historical analogy within the aesthetic aspect. A work of art ought to do aesthetic justice to what it portrays, it ought to evince aesthetic integrity and it ought to be aesthetically convincing – showing that there is also an anticipatory coherence between the aesthetic aspect and the jural, moral, and certitudinal aspects of reality – once again to be distinguished from the original function of art within these aspects, such as being a legal object, as something worthy of admiration (moral object-function) and as something trustworthy in its own right (as a certitudinal object) – the external coherence.

Distinct from all the analogies of space within the social aspect – such as social distance, social super- and subordination, social sphere (domain), social next-to-each other and social coherence (cohesion) – each societal entity has an original function
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within the aspect of space. The legal institution of property right reflects, from a juridical perspective, the way in which societal entities function within the spatial aspect. Ponder the space occupied by the house of a particular (nuclear) family, the property of a firm, a school, and even a local congregation – the location of the Church building. The existence of all these societal collectivities is dependent upon their required living space.

BIO-MILIEU AND HUMAN EXPERIENCE

The idea that different social forms of life may serve as the environment of others reminds us of the German term Umwelt (ambient or bio-milieu) that was given prominence within the discipline of biology by Von Uexküll during the first half of the 20th century. An account of the first employment of the term Umwelt shows that it arose during the 19th century and subsequently developed in close connection to the notion of a milieu. Müller refers to the contribution of Spitzer regarding ‘Milieu and Ambience,’ which appeared in his work on ‘Essays in historical semantics’ (1948, 1968), where he points out that up to the first decades of the 19th century the term Umwelt emerged as a newly formed (undefined and concept-free) word, predominantly related to human beings in a topographical sense. The relevant phrases are: the ‘surrounding world,’ ‘environment,’ ‘outer world’ and ‘surrounding neighborhood’ (Müller 2001, 99). Haeckel introduced the term ‘ecology’ in 1866 (Müller 2001, 100). During the 19th century, biologists mainly used the term ‘milieu’. Related terms apparently intending the same reality are ‘environment’ and ‘habitat’.

However, it was Jakob von Uexküll in particular who explored the concept of an Umwelt in his biological thought. His general work on ‘Theoretical Biology’ explains his views, and they are also articulated in a very accessible way in his work ‘Streifzüge durch die Umwelten von Tieren und Menschen: Bedeutungslehre’. The traditional scene of academic disciplines dealing with various aspects of living entities encompasses special sciences such as physics, chemistry, physiology, anatomy, the study of animal behavior (ethology), and even sociology. Yet, as Thure von Uexküll remarks, no one of these disciplines answered the question of how the individual living being experiences its environment, how it orders these entities into its own world, and how this world is connected to the worlds of other living subjects. The greater the distance between human beings and animals, the more problematic the answers provided by psychology become (Thure von Uexküll 1970, XXIV).

In order to penetrate to the ‘inner’ side of what animals experience (erleben), quantitative methods fall short. Suddenly the world of colors, forms, sound tones, and odors, with their joys and pleasures appears as the worthwhile ‘object’ of scientific biological research (cf. Portmann 1970, XII). With great care, Jakob von Uexküll describes the introduction of the subject in biological research. He points out that, although we do not know the experiencing tone (Erlebniston) of things from the environment according to the subjective quality they have for animal subjectivity, we can deduce their effects from the actions of animals. By lifting out
this *toning* (*Tönung*) of ‘objects,’ biological thought is brought to its limits in the acknowledgement of an inner mood. Portmann remarks that the theory of Jakob von Uexküll regarding the peculiar *Umwelt* of every animal species indeed became a chapter of modern biology (1970, XIII). Whereas the science of ethology and physiology treat living organisms as ‘objects,’ the *Umweltforschung* (*Umwelt* research) of Jakob von Uexküll focuses on animals as *subjects*.

Jakob von Uexküll constantly argues that we as human beings are never able to see, hear, smell or feel what a foreign subject sees, hears, smells or feels (Thure von Uexküll 1970, XXV). The relationship with the environment is given in an intricate and intimate connectedness, which causes Jakob von Uexküll to consider this reality in terms of a true totality (*Ganzheit*).

His classical example concerns the way in which an oak tree at once functions as the central reference point for different kinds of animals (and humans) that respectively disclose specific parts of the tree as constitutive for their life-world (*Umwelt*). In Chapter 13 of *Streifzüge*, he discusses this issue under the heading: ‘The same subject as object in different Umwelten’ (Von Uexküll 1970, 94–103). The fox explores the roots of the oak tree in order to build its hiding place, safely underneath the oak tree, which functions as its roof. The tree only acquires a protective tone for the fox, which is similar to that of the owl. For the squirrel the tree has a climb tone, for the bird that builds its nest in the tree it has a supporting tone. Jakob von Uexküll writes:

*Each Umwelt* isolates out of the oak tree a particular part whose characteristics are appropriate to be the bearer both of the properties and activities of their functional circle. In the *Umwelt* of the ant the whole of the oak tree diminishes in its crack-rich bark which, with its valleys and heights, becomes the hunting field of the ant. . . . In all the various *Umwelten* of its various inhabitants the same oak plays a widely diverging role, sometimes with particular and then again with none of its parts. The same part can be large or small, the same wood hard and soft, it can serve as a means of shelter or attack (Von Uexküll 1970, 98, 99, 100).

The human experience of an oak tree participates in this many-sided reality of the oak tree. Yet the human experience of the tree transcends the natural aspects to which the animal experience of it is restricted. For the natural scientist the tree is an object of analytical scrutiny, the hiker observes it as something with a particular aesthetic attraction, the criminal as a hiding place from the law, the woodworker as material from which to make furniture, and so forth.

This human experiential perspective with its rich variety is linked to a person’s cultural calling which enables a person to be variably settled in any environment by means of cultural formation. Yet, as Portmann correctly points out, there is a fundamental difference between animal *Umwelten* (milieus) and human experience, for although distinguishable, the diverse human perspectives are not mutually exclusive as it is the case with animal *Umwelten*. Within the many different human
views of the world, in which the same thing acquires within the mode of living of different people a totally distinct tone, it is still possible to ‘understand’ these different Umwelten because it enables the possibility of communicative interaction in respect of opposing views.33

AUTOPOIESIS AND THE SOCIAL ENVIRONMENTS OF FORMS OF HUMAN LIFE

A different dimension of the concept social space emerges when the nature of a differentiated society is considered. Every distinct social form of life appears to be surrounded by a number of others, serving as its ‘environment’ – and this situation generated the term autopoeisis. Maturana acknowledges Francisco Varela as the co-author of this idea of autopoeisis (introduced in 1973). In general Maturana gives the following circumscription:

Living systems are autonomous entities, even though they depend on a medium for their concrete existence and material interchange; all the phenomena related to them depend on the way their autonomy is realized. A perusal of present-day biochemical knowledge reveals that this autonomy is the result of their organization as systems in continuous self-production (Maturana 1978, 36).

According to the German sociologist Münch the notion autopoeisis is used by Luhmann as an indication that society ‘is compartmentalized into a growing number of autopoeitical – that is, self-regulating – systems which treat each other as environments to which they have to adapt actively’ (Münch 1990, 444).

Of course Münch continues to adhere to the whole-parts scheme entailed in system theory. When he discusses the increasing complexity of the process of differentiation, he argues that its complexity causes decision-making to differentiate and be confined to ‘ever smaller systems of interaction’ (Münch 1990, 443). Yet he does use the example of the sphere of intellectual reflection and political procedures and decisions: ‘they can only be dealt with as environmental facts that have to be processed within the political system according to its own inner laws of effective decision-making’ (Münch 1990, 444). In this explanation Münch surprisingly introduces the idea of the ‘political system’ with its ‘own inner laws’. This mode of speech creates a tension between the idea of differentiating subsystems (that is, the whole-parts scheme) on the one hand, and the claim that they ‘have their own rules’ on the other. If rationalization means ‘the development of ever more sharply differentiated spheres of life which are guided by their own inner laws’ (I am emphasizing – DFMS), then it seems internally contradictory to subject anyone of these ‘differentiated spheres of life’ to the ‘own inner laws’ of some overarching ‘system’!
SPHERE SOVEREIGNTY VERSUS THE WHOLE-PARTS SCHEME

The effect of this whole-parts scheme upon an understanding of human society is that justice cannot be done to the true inner nature of distinct societal collectivities. What Münk calls the ‘own inner laws’ of the state represents an alternative understanding of societal life altogether.

Perhaps the first scholar who effectively questioned the whole-parts scheme inherent in universalist theories of society was the German legal scholar Johannes Althusius. He realized that not every societal entity (such as families, churches etc.) is part of the state – true parts are solely provinces and municipalities (see Althusius 1603, 16). This insight was accompanied by a clear understanding of the inner structural principles governing distinct societal collectivities – Althusius holds that there are proper laws (leges propriae), according to which ‘particular associations are ruled,’ required by their nature (Althusius as translated in Carney 1965, 16). Two 19th century Dutch politicians explored this idea further by designating it as sphere-sovereignty, namely Groen van Prinsterer and Abraham Kuyper. Within the context of contemporary political theory, it reminds one immediately of Walzer’s ‘spheres of justice’ (see Kuyper 1880; Walzer 1983). Prominent modern political theorists, such as Habermas and Rawls, also stumbled upon this insight. Habermas refers to ‘own private spheres of life’ (Habermas 2001, 81) and of the ‘own laws’ of ‘specific social spheres’. Rawls explicitly states: ‘Indeed, it seems natural to suppose that the distinctive character and autonomy of the various elements of society requires that, within some sphere, they act from their own principles designed to fit their peculiar nature’ (Rawls 1996, 262).

When the principle of sphere-sovereignty is accepted every sphere of a differentiated society receives its proper social space – without being subsumed to another societal sphere. However, in its misunderstanding of the own inner laws of societal collectivities holism (sociological universalism) elevates the spatial whole parts relation (or analogies of this relation in cosmic later aspects) to the level of an encompassing mode of explanation. The only safe-guard against this kind of theoretical one-sidedness is given in the application of the principle of sphere-sovereignty to the modal aspects themselves, for then it is realized that every modal aspect provides us with a partial but legitimate angle of approach as a distinct mode of explanation. Moreover, reifying any aspect not only results in a reductionist approach which attempts to reduce the irreducible, for the reified aspect itself looses its meaning as well.

THE INNER SPACE OF THE UNIVERSITY AS ACADEMIC INSTITUTION

When modern universities emerged during the late 12th century the academic podium immediately developed into an important societal power, alongside the church and the kingdom. Soon the differentiation of church and university opened up a new domain of freedom for intellectual pursuits in which intellectual endeavours increasingly liberated themselves from the dominance of the church and the state.
Concurrent with this process the modern state emancipated itself from the church. Of course the early universities faced a dual burden, because they had to free themselves both from the church and the state.

Unfortunately the long struggle to obtain the typical academic freedom, constitutive for the university as an institution during the second half of the 20th century, eventually was challenged by what became known as community service. Stellingwerf points out that the oldest idea of the university is that of an *universitas magistrorum et scholarium*, that is, a community of teachers and students (Stellingwerf 1971, 35). This perspective shows an element of continuity with the Greek legacy of *episteme* and with the Latin *scientia* that subsequently resulted in the broad ideal of *Wissenschaft* as it was called by the Germans.

Unfortunately the modernist faith in the rationality of human intellectual activities generated an expectation that entails a new threat to the basic freedoms (‘social space’) of other societal collectivities, because for many scientific thought is supposed to guide all of life – a new enslavement analogous to the medieval unified ecclesiastical culture. Already in 1970 Hazel Branes wrote a book mocking this situation: *The University as the New Church*.

When Kuyper, in his (above-mentioned) famous oration on sphere-sovereignty, delivered in 1880 on the occasion of the inauguration of the Free University of Amsterdam, made a plea for the internal autonomy of the university (its *sphere-sovereignty*), what he had in mind was a university that should be free from interference by both the state and the church. It stands to reason that implicitly he also at once rejected the universalistic view in which the university is elevated to become the new all-encompassing whole of society. This does not mean that we should not acknowledge the typical function of the university in the various aspects of reality. We close this subsection by briefly analyzing some of them.

Consider for a moment of the nature of the *credo* of an academic institution – the formulation of its *vision* and *mission*. One can compare it with the confession of a faith-community, for in both cases we encounter the way in which a university and a church function within the certitudinal aspect of reality. But as little as one can identify a political party with a church merely on the basis of its political convictions (*credo*), is it possible to identify a university and a church merely because they both have a function within the faith aspect of reality. This coherence between the logical-analytical function and the certitudinal (faith) function of a university is external and should therefore be distinguished from the inner connection between these two aspects, manifested in the *logical trust* (*logical certainty*) guiding scientific thinking in various contexts (an anticipation from the logical aspect to the faith aspect). In a similar way, one can distinguish between an internal and external coherence between the logical and the historical aspect of a university. The former is observed in the *logical mastery* or *logical control* over a given field of study (knowledge-material – internal anticipatory coherence), while the latter is found in the concrete function of the university within the historical aspect (its actual *history*). The logical principle of *thought-economy*, known as Occam’s razor, displays the inner connection between
the logical and the economic aspects of reality. It ought to be distinguished from the original function of the university within the economic aspect (the external coherence – consider the university budget).

During the late Medieval period, the emerging universities manifested their ‘sphere-sovereignty’ in an extremely independent way, simply because in these institutions, lecturers and learners did not have any assets. They were strong because they were not bound to any place or to possessions (Stellingwerf 1971, 143). This phase soon passed. Buildings, capital and libraries proved to be cultural objects, essential for a structured functioning of the university. Even in those cases where the government does make a contribution to the functioning and continued existence of universities, it does not mean that the state can prescribe to a university what its scientific orientation ought to be. At most, the state can apply a general formal yardstick, stipulating the minimal formal requirements for an acceptable university (or university subject). The directional choice of a university, however, as it is manifested in its statement of vision and mission, in principle lies beyond the grasp of governmental interference and control. If the state transgresses in this regard, it has irrevocably set foot on the path of a totalitarian practice, disregarding the original social space (sphere-sovereignty) not only of the university, but in principle of all non-political societal collectivities.

The fact that the government of a constitutional state under the rule of law (a just state) has to integrate and harmonize a multiplicity of legal interests within its territory, does not entail that these legal interests emerge or derive from the state or are created by the state. Much rather in order for the state to be a state a differentiated society is presupposed, with its original spheres of competence that are not reducible to state law. For this reason, a university, once erected, has the right to determine its own character (its directional choice) – a right not granted by the state, but merely acknowledged (and to be legally respected) by it. Therefore, in spite of the fact that both the state and the university function within the legal aspect of reality, they still maintain their respective juridical sphere-sovereignty.

THE SOCIAL SPACE OF SOUTH AFRICAN UNIVERSITIES

The fact that we have identified the inner sphere of competence of the university, by discerning its academic character, does have implications for the way in which contemporary universities function within South Africa. Before we conclude our discussion a brief analysis of the challenge of (a) ‘community service’ and (b) a legally responsible way to implement affirmative action.

(a) Community service

When it is said that the university if an academic institution, in the sense that it is qualified by teaching and research, the implication is clear: when good teaching and proper research is done the university renders its primary and most basic service to society. Already during the sixties and seventies of the previous century Professor
Gerrit Viljoen (the then Rector of what was known as the ‘Randse Afrikaanse Universiteit’), in following overseas trends, started to speak of the third task of universities, namely community service.

The crucial question is whether or not this so-called community service is intrinsic to being-a-university? In other words, is it possible to envisage a university not engaging in community service while still continuing to be a good university, one true to its academic nature?

One way to get around these questions may be to contemplate the option that community service must be seen as one of the legitimate aims or goals of universities. Of course, in the light of peculiar circumstances any university may pursue various, sometimes widely diverging goals. Moreover, these purposes, aims or goals do not necessarily have to fall outside the social space of the university, that is, outside its typical sphere of competence. Yet it is often the case that they in fact may do precisely that.

However, what now emerges is a new problem: if one can distinguish between aims that are typical of the university and aims that are not typical, then the assessment of aims requires a yardstick transcending the nature of aims – they simply cannot tell the difference between what is typical and what is a-typical. In order to be able to draw such a distinction, the sole judge can only be the characteristic nature of the university – and we have argued that it is qualified as an academic institution. The idea of having a distinct nature by itself already entails that certain tasks and functions ought to be performed by universities if they want to conform to the conditions for being an academic institution.

Whatever aim or goals may be formulated, they therefore will never be able to serve as a defining feature of being-a-university. Just as little as erecting a Post Office, Railway Network or Steel Industry (Yskor) implies that a state by definition ought to be involved in typically economic activities such as these, does it imply that universities by definition have to engage in various a-typical tasks of serving the community. Without an intrinsic, sphere-sovereign structural nature, that is, within being a university with its own social space, it would simply be impossible to pursue any goals, neither typical ones, nor a-typical ones. Consequently no single aim or goal can ever serve to qualify the university. Even if a university abstains from engaging any kind a-typical activities, it may still be a good university. The type law for each distinct social collectivity delimits its social space, that is, its inner sphere of operation, guided by its typical qualifying modal function. In the case of the university this qualifying function (the logical-analytical mode of reality) entails that the typical service rendered to the ‘community’ is by maintaining a high standard of research and teaching.

Given the unique situation of South Africa it is clear that the legacy of inequality caused such a huge backlog that universities for quite some time will be called upon to engage in a-typical tasks, helping various societal sectors in need to eventually get onto their own legs, in which case such a-typical tasks could be terminated by universities. The overarching, general yardstick is given in the principle guiding

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meaning historical development and the unfolding of society, namely the principles of cultural-historical continuity, differentiation and integration. In terms of a world-historical perspective one can say that these principles guided the meaningful development of civilizations.

This background is important for an assessment of the way in which South African universities should position themselves within the social space required by affirmative action.

(b) Affirmative Action

The legal order of any modern constitutional state (just state) requires building blocks, constitutive elements applying equally to all citizens. However, in various respects the Dutch Roman legacy exceeded the limits of a purely constitutive legal order. What has been called the disclosure or the deepening of the meaning of the jural aspect of reality in the course of legal history emerged as legal-ethical principles (also known as principles of juridical morality), such as the fault principle in criminal law, the personality principle in public (constitutional) law, the bona fides principle in contract law and the general meaning of equity. Collectively these deepened legal ethical principles are designated as principles of justice.

Particularly the principle of equity has a long history. Its basic thrust can be summarized as follows. Once a law is in force it cuts across board, without an exception. Yet, suppose a unique situation occurs such that it is realized that when the law that holds for such cases is applied an injustice will be done – what can then be done to rectify the situation? By virtue of the nature of constitutive legal principles no solution appears to be possible. It is precisely at this point that equity comes into play. In order to prevent an injustice the applicable law has to be set aside, on behalf of equity (ex equitate). Applying equity as an effect of the occurrence of an exception to the rule essentially amounts to a rectification of the law. This modified statement should be what the lawgiver would have done if the special circumstances had been known.36

It is important to realize that when the deepened legal principle of equity is invoked the general form of the applicable law as such is not set aside – it is only its application to the occurring unique situation that that is set aside. The constitutive general meaning of the law remains intact, for if it was set aside the legal order will turn in chaos.

The current problem in South Africa in this regard is that there is an implicit confusion in the Constitution in respect of the difference between what we have called constitutive and regulative legal principles. This problem is found in section 9(5) which reads: ‘Discrimination on one or more of the grounds listed in subsection (3) is unfair unless it is established that the discrimination is fair’. The statement that ‘[D]iscrimination on one or more of the grounds listed in subsection (3) is unfair’ reveals the constitutive thrust of the general scope of a legal order, which means that the term ‘unfair’ actually was in need of being substituted by a term derived from the domain of constitutive legal principles, such as ‘unlawful’. Since this has not been
done, the second statement (entailing that ‘discrimination’ may be ‘fair’), contradicts the first one by literally asserting that discrimination can both be fair and unfair.

The only way to get around this inherent tension is to invoke the distinction between constitutive and regulative legal principles, for then the first part of Section 9(5) may be seen in constitutive terms, whereas the last part embodies a regulative meaning. This will eliminate the tension.

Academic institutions should understand this distinction in carrying out the challenge to redress the inequalities of the past through affirmative action. On the one hand accepting the constitutive meaning of equality (part and parcel of any modern Bill of Rights), universities should safe-guard themselves against sexist, racist and discriminatory practices. On the other hand, in every unique situation where the conditions are met to set aside this constitutive meaning of equality on behalf equity.

On behalf of equity academic institutions in South Africa should positively explore the task of redressing injustices of the past within their institutional social space – but always done ex equitate. The moment it would be interpreted in a constitutive (instead of regulative) sense, it will turn into a constitutive legal principle that causes a serious contradiction within the Constitution, because then both discrimination and non-discrimination will be sanctioned at the same time.

CONCLUDING REMARKS

In the course of our analysis answers were formulated to the five questions raised at the beginning of our discussion. The proper meaning of the concept social space depends on an account of the inter-modal coherence between the social aspect and the spatial aspect of reality. Yet an analysis of the spatial retrocipation within the functional structure of the social aspect cannot be accomplished without employing analogical terms reflecting the inter-modal coherence between the social aspect and other modes different from the spatial aspect. In order to comprehend the nature of distinct societal spheres additional analogical terms immediately enter the scene. Consider the following circumscription:

The social order found within a specific social sphere – be it that of the state, the firm, university or social club – presupposes the relevant competent organs who are capable of giving a positive shape to the ‘own inner laws’ (the structural principle) of such a sphere and in doing that they enforce (make valid) these underlying principles.

The term ‘competent’ (competency) is derived from the cultural-historical aspect – it concerns power of persons over persons (a subject-subject relation) and is normally specified by the idea of an office. Giving a positive shape to principles – that is, positivizing them – is an expression that is also derived from the cultural-historical aspect. In the phrase ‘competent organ’ the second element analogically reflects a term derived from the biotic aspect, while the idea that principles hold, that they are enforced or made valid, draws terms from the physical aspect of energy-operation.
In other words, while we are talking of social space (a specific social sphere in this example), we inevitably need other analogical terms in order to explain what a social sphere is all about. The individual (retrocipatory) analogical moments within the social aspect are actually captured in the elementary basic concepts of sociology as a special science. But as soon as any one of them is analyzed, it turns out that a complex or compound analysis ensues – one in which it is unavoidable to employ analogical terms stemming from different modal aspects. One can write a full history of the discipline of sociology merely by showing how alternative analogical structural moments within the social aspect successively became elevated and reified into assumed all-encompassing modes of explanation. Just think of sociological atomism (individualism) which over-emphasizes the discrete meaning of number; sociological holism (over-emphasizing the spatial whole-parts relation); social conservatism (clinging to the mere continuation of the status quo – a distorted use of the meaning of social constancy); radical theories of social change (abusing the physical analogy); organicistic theories, viewing society as an organism); social psychologism; consensus and conflict theories (distorting the analytical analogy – social identification and social distinction); historicistic orientations emphasizing historical change at the cost of historical constancy and equating the idea of an office with an abuse of power (Dahrendorff); and variations of symbolic interactionism, over-extending the meaning of the sign analogy within the social aspect.37

Only when educational and academic institutions and all the other societal collectivities (such as the state, the churches, the business enterprises, and so on) acknowledge and conform to the fundamental principle of sphere-sovereignty, will it be possible to provide the social space required by all of them in order to function properly – free from unlawful interference by any societal entity distinct from these educational and academic institutions. From the perspective of the state and its public legal order social space is secured when respect is shown for the basic structure of the peculiar legal spheres operative within a differentiated society. What is at stake is the social space required by the domain of public law (including constitutional law, penal law, criminal process law, administrative law and international public law, the ‘law of nations’), civil private law (the domain of personal freedom of each individual) and non-civil private law (the societal freedoms of all the non-state societal collectivities, that is, the internal spheres of law, with their original competencies to form non-state law, of all the forms of social life distinct from the state).38
NOTES

1 Paper presented at the HES Conference, Rhodes University, Grahamstown (November 30 to December 3, 2008).

2 Persistence represents the kinematic aspect of uniform motion; change represents physical energy-operation; differentiation and integration are vital phenomena representing the biotic aspect; sensitivity, awareness and consciousness are derived from the sensory aspect; consensus and conflict exhibits the meaning of logical aspect; control and power belong to the cultural-historical aspect; expression and interpretation have their seat in the sign mode; frugality refers to the economic aspect; harmony to the aesthetic aspect; justice to the jural; integrity to the moral and convincingness and reliability to the certitudinal aspect.

3 The normative appeal requiring that a multiplicity of social actors should conform to a consistent social behavioral pattern (ordering) such as to prevent a specific societal context from disintegrating and falling apart, may be concretized in the (more or less) orderly way in which social subjects behave.

4 The Pythagoreans believed that the essence of everything can be represented by the relationship between two integers, that is, by fractions – and this conviction inspired their famous claim: ‘everything is number’ (see Fowler 1999, 358 ff.; Riedweg 2005, 106 ff.).

5 Another example is Georg Simmel, one of the founders of the formal school of thought in 20th century sociology, who views society as the sum of all the relational forms existing between individuals as a result of the process of Vergesellschaftung (sociation). He considers only these inter-individual relational forms as real and sees in the concept society a fatal reification of a mere abstraction (cf. Simmel 1908, 10 ff.; Ziegenfuss 1954, 14–15).


7 In passing we may reflect for a moment on two modes of speech just used. We referred to ‘the domain of the social aspect’ and ‘the sphere of the social’. What are the meanings of the terms ‘domain’ and ‘sphere’? We shall argue that in their original meaning these terms are derived from the aspect of space.

8 As an example Cassirer uses the illogical concept of a ‘rundes Viereck’ (a ‘round square’) (Cassirer 1910, 16). This is a variation of the original example (also employed by Bertand Russell) – of a square circle – derived from Immanuel Kant (1724–1804) – see his Prolegomena zu einer jeden künftigen Metaphysik die als Wissenschaft wird auftreten können (1783, 341; § 52b). However, figurative (metaphorical) language use appears to ‘transcend’ the demands of logicality, for nobody has a problem with a square circle, such as a ‘boxing ring’!

9 The classical example is found in the arguments of the Greek thinker Zeno against multiplicity and movement. His third Fragment first grants motion and then denies it in static spatial terms (‘position’ – the place it occupies): ‘Something moving neither moves in the space it occupies, nor in the space it does not occupy’ (Diels and Kranz, B Fr. 3).

10 Such an account will have to face the fact that every structural element of coherence actually represents an analogy from a specific aspect – such as the biotic analogy within the structure of the social aspect, captured in compound phrases such as social
life, social differentiation, social integration and social adaptation. The normal life cycle of any living entity follows the path of the biotic time-order of birth, growth, maturation, ageing and dying. Biotical growth indeed proceeds along the lines of differentiation and integration. Diverse organs differentiate, but if the living entity does not manage to integrate this differentiating growth process, it will disintegrate and die. Clearly, social differentiation and social integration are analogies of biotic differentiation and biotic integration – keeping in mind that an analogy is constituted by a partial similarity and a partial difference.

11 Comte was holistic (universalistic) in his thinking, while Spencer was individualistic (atomistic) (cf. Spencer 1968, 22).

12 In his ‘structuration theory’ Anthony Giddens is remarkably ambiguous towards the use of the expression social adaptation. On the one hand, for example, he wants to discard altogether any reference to social adaptation, while nonetheless conceding that there may be legitimate usages of this expression. Then once again he fears that such usages may be too vague and diffuse (Giddens 1986, 233–236, 270–271). In different contexts he simply uses the terms (social) differentiation and integration, without realizing that they reflect the same biotic analogy within the structure of the social aspect underlying the notion of social adaptation (Giddens 1986, 181 ff.).

13 There are four options, namely between aspects, between aspects and entities, entities and aspects and between different entities.

14 In general sociology discusses ‘social distance’ under the heading of social stratification (‘layers’). Undoubtedly this concept of social stratification is intimately related to our spatial awareness of nearby and far away and of higher and lower. Analogies between aspects are known as modal analogies. Since they cannot be replaced at will – at most synonyms can be given – modal analogies differ from the other three kinds of analogies that may be designated as metaphors.

15 Of course what is unique to space can only reveal its meaning in coherence with other aspects, first of all with the foundational numerical aspect. What is remarkable is that Aristotle specified two criteria for continuity still adhered to by the modern set-theoretical approach developed by Cantor and Dedekind – in spite of the fact Aristotle rejected the actual infinite while the Cantor-Dedekind approach explored it (for a discussion of these issues see Strauss 2002; Strauss 2005 Chapter 2; Strauss 2006a).

16 A vector possesses both distance (magnitude) and direction.

17 In passing we note that there is a difference between succession – something numerical – and causation (cause and effect) – something physical (already realized by Kant). Although the day succeeds the night and the night the day, one cannot say that the day causes the night or the night the day!

18 The next year, when Hilbert attended the second international mathematical conference in Paris, he presented his famous 23 mathematical problems that co-directed the development of mathematics during the 20th century in a significant way – and in problem 4 he provides a formulation that opens up a new perspective on this issue, for instead of speaking of the distance between two points, he talks of a straight line as the (shortest) connection of two points: ‘[Das] Problem von der Geraden als kürzester Verbindung zweier Punkte’ (see Hilbert 1970, 302). We have pointed out above that connectedness is synonymous with coherence and continuous extension, showing that Hilbert took recourse to the primitive and indefinable meaning of space.

19 Already in 1925 Hilbert has mentioned this difference – see Hilbert 1925, 164.
‘Erst durch die zeitherige Entwicklung der Geometrie und der Physik tritt die Notwendigkeit hervor, zwischen dem Raum als etwas Physikalismchem und dem Raum als eine ideellen, durch geometrische Gesetze bestimmten Mannigfaltigkeit zu unterscheiden’ (Bernays 1976, 37). [‘Only through the contemporary development of geometry and physics did it become necessary to distinguish between space as something physical and space as an ideal multiplicity determined by spatial laws.’]

The first modal function, the arithmetical aspect, will only have anticipations and the last one (the certitudinal mode) only retrocipations. An example of a retrocipation is found in our discussion of ‘distance’ because we have seen that it represents an analogy of the meaning of number at the factual side of the spatial aspect. An example of an anticipation is given in the deepened understanding of infinity, first of all extensively explored in modern mathematics by Georg Cantor. The order of succession within the numerical aspect underlies our most basic notion of infinity, preferably designated as the \textit{successive infinite} (traditionally known as the \textit{potential infinite}). When this numerical order of succession is deepened by pointing forwards to the spatial order of simultaneity (at once), we meet an anticipatory analogy within the quantitative aspect, preferably designated as the at \textit{once infinite} (traditionally known as the \textit{actual infinite}).

Such as the relation between natural numbers as they are used in fractions: 1/2, 3/11, etc.

Only found in the post-arithmetical modalities.

The Dutch philosopher, Herman Dooyeweerd, who is the founder of the theory of modal aspects, also introduced a radically new philosophy of time by proposing that time order (law side) is always correlated with time duration (factual side) – such as in the biotic time order of birth, growth, maturation, ageing and dying (correlated with the different time-spans of individual plants, animals or human beings) (see Dooyeweerd 1997 – see in particular 1997-I, 28 ff.).

Later on we shall explain what the \textit{external coherence} entails.

In passing we note that this idea of the application (i.e., positivization) of principles is found in the thought of various 20th century scholars. For example, Hartmann holds that values have the inherent tendency to be realized (Hartmann 1926, 154 ff.) and that they must be positivized (\textit{positiviert}) (Hartmann 1926, 160 ff.; see Horneffer 1933, 105). The word positivization was also used by Smend in the year 1930 (see Smend 1930, 98). More recently Habermas continues to employ this term, for example when he speaks of ‘the positivization of law’ (Habermas 1996, 71; 1998, 71, 101, 173, 180).

In connection with the idea of \textit{enforcement} or the \textit{validity} (being valid) of principles see Strauss 2009.

Von Bertalanffy starts out by explaining his system theory in terms of a definition of a system: a system is a ‘set of elements in interaction’ (Von Bertalanffy 1973, 84, cf. 36, 37). On page 32 he refers to systems as ‘complexes of elements standing in interaction’ and in the introduction ‘complexities’ are seen as a substitute for ‘systems’ or ‘wholes’ (1973, 3). Sometimes the term ‘holistic’ is used synonymously for the term \textit{system} (Von Bertalanffy 1973, xvii).

Just recall an important assumption of modern theories of the social contract, holding that all human beings are ‘kings’ in their own right – never to be subjected to the authority of another human being. The striking words of John Locke read: ‘[F]or all being kings as much as he, every man his equal’ (Locke 1690, 179).

Compound or complex basic concepts are co-constituted by a combination of multiple
elementary (analogical) basic sociological concepts. The concepts of social subjects or social principles provide examples of such compound basic concepts. Once a theoretical account is given of both the elementary and compound basic concepts of sociology as a discipline the typical nature of distinct societal entities (social forms of life) can be articulated by investigating the type laws holding for them. Whereas modal (aspectual) laws hold for all possible kinds of entities, type laws only hold for a limited group of entities, namely those belonging to that kind. The type law for being an atom only applies to atoms and not also to states, clubs and marriages. These distinctions are extensively explained in a work dedicated to the basic concepts of the discipline of sociology (see Strauss 2006).

31 In the Zermelo-Fraenkel version of axiomatic set theory – in following Frege – a clear distinction is drawn between member of (the symbol: \( \in \)) and inclusion (the symbol: \( \subseteq \)). Those elements that are members of a set are contained (the \( \in \)-relation) in that set, whereas a set always includes (itself) and its subsets (cf. Fraenkel et.al. 1973, 23, 25, 27).

32 Whereas he views human beings as Weltoffen (open towards the world), Portmann characterizes animals as Umweltgebunden (constrained by environment) and Instinktgesichert (protected by instinct) (Portmann 1990, 79).


34 ‘den sogenannten Eigengesetzlichkeiten einzelner sozialer Sphären’ (Habermas 1995-2, 437).

35 Church, state and university – sacerdotium, imperium, stadium (Romein 1947, 2; Stellingwerf 1971, 136).

36 The starting-point of this legacy goes back to Aristotle who displays a good understanding of it in his Nicomachean Ethics (Book V, Chapter 10), where he already developed the above mentioned view that although equity is just, it is not the justice of the law. (Also see the Employment equity act – No.55 of 1998).

37 In Chapter 3 of Strauss 2006 an extensive analysis both of the indispensable analogical basic concepts of sociology and the corresponding one-sided trends of thought is found (see in particular pages 137–241).

38 Note that within a just state all these legal spheres function intact, whereas in a power state none of them are guaranteed. This distinction is discussed in more detail in Strauss 2008.
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