Thinking as Action

Some Principal Changes in Medieval and Early Modern Europe

Harald Kleinschmidt


As opposed to the history of thought which has been awarded thorough attention by intellectual historians in the Collingwoodian tradition, the history of the activity of thinking has hardly attracted scholarly interest within the context of European culture. The following essay traces two paradigmatic changes in the history of European thinking between the early Middle Ages and the end of the 18th century. The first of these changes concerns the transformation of thinking in totalities into thinking in specificities during the high Middle Ages, and the second refers to the emergence of thinking as an ordering activity during the 17th and 18th centuries. It will be argued that changes in the history of thinking are part and parcel of wider changes affecting language and religious as well as scientific views of the world.

Harald Kleinschmidt, Prof. Dr habil., Institute of History and Anthropology, University of Tsukuba, 1-1-1 Tenno-ai, Tsukuba-shi. 305. Japan.

Le philosophe est l’amateur de la sagesse et de la verité: être sage, c’est éviter les fous et les méchants. Le philosophe ne doit donc vivre qu’avec des philosophes.

Voltaire

Introduction: Thinking and History

Taking thinking to be a kind of action means to postulate that the activity of thinking can be related to other patterns of action by persons. This postulate entails the further assumption that thinking is neither an art in itself nor, as it were, autonomous in its patterns and processes, but a social activity in a given cultural setting. In other words, if thinking is regarded as an action or a series of acts, the historicity and the cultural specificity of thinking must be claimed. However, both, the postulate that thinking is an action and the postulate that there is a history of thinking, have met with serious objections. With regard to the first postulate, David Hume (1886: 385–394), in his refutation of René Descartes’s arguments (1973: 249–364), took the view that thinking is neither an action in itself nor even a condition for action. Instead, Hume maintained that thinking is merely the configuration of ideas whose transformation into manifest actions requires passion as the stimulus of the individual’s will. But Hume’s moral philosophy of thinking rests on the partial claim that only what is empirically recognisable by others can be acknowledged as an individual’s action. This claim is tenable only within a concept of action which manifests itself in bodily movements and excludes all activities which do not spark bodily movements. By that count, dreaming, for example, cannot be an action, because it does not necessarily translate into movements, and, likewise, such forms of believed interaction as magical influence which transgresses space and time, cannot be accepted as action. Hence, while Hume’s concept of action is acceptable as a partial concept derived from a specific cultural background, the conceptual history of thinking must rest on a concept of action which is flexible enough to allow interconnections and comparisons between various
periods, areas and types of groups within which individuals can act. Such a concept of action has to include activities which do not translate into bodily movements. Consequently, thinking can be regarded as action in this wider sense of the term.

An objection against the second postulate was raised by Kant and has, in recent times, been articulated again most vocally by Peter F. Strawson (1990). Strawson maintained that the basic patterns of thinking have no history at all because they are common to all mankind. However, Strawson's claim that, so to speak, the principal patterns of thinking as action are the property of all mankind and, consequently, are a constant feature, can be subjected to powerful counterarguments. First, there is no reason to accept Strawson's premise that such principal patterns of thinking, if they existed and were indeed shared by all mankind, are specifically human in that they are not shared by other living beings. If thinking is an action that is characteristic of certain species of living beings, it belongs to biological evolution and, for that matter, is in itself a historical phenomenon. Second, Strawson seems to look for the basic patterns of thinking in what he claims to have discerned as the least refined aspects of that action, namely the formation of simple concepts. But there is no reason for the assumption that what is postulated to be general has to be found only in what is perceived to be the simplest. By contrast, much empirical evidence exists notably from technology and linguistics which shows that the opposite has also been the case.

Third, and most importantly, Strawson rightly observed that those aspects of thinking, which he believes to be the property of mankind per se, cannot be discovered empirically and through inductive approaches, but that they must be reconstructed through metaphysical reasoning. However, Strawson fails to draw the appropriate conclusion from this observation. For, if metaphysical reasoning is supposed to conclude in rational statements about what purports to apply to or be valid for mankind as a whole, it excludes history on simple definitional grounds and not because of any reason which is related to thinking itself. Therefore, metaphysical reasoning is in itself historical and cannot be used for the purpose of denying the historicity of thinking.

Hence the contention that ahistorical features exist is true insofar as it applies to what has been set by definition as a constant feature of mankind. But this contention does not rule out investigations into principal changes of thinking within the history of mankind or any given part of it. Thus we can easily accept the hermeneutical definition of mankind according to which all human beings practice, among other common features, thinking as a set of soliloquial acts through which perceptions of objects are related to concepts. But this definition is flexible enough to allow the tracing of spatial, temporal and social variants in the interconnections between perception and conception. The tracing of such variants appears to be even a necessity, because hermeneutics tells us that objects can hardly be perceived unless already existing concepts of the perceived objects are available in a given culture (Gadamer 1986: 298–300). Consequently, if objects can only be perceived by means of already existing, culturally specific concepts, it is difficult to disentangle thinking as an action from specific cultural backgrounds. Moreover, under regular conditions, thinking as the action of transforming perceptions into concepts can hardly be dissociated from communication through language, because concepts need to be expressed through words as the property of specific communication systems. Hence, we can specify the definition of thinking as an action by means of which persons successively perceive objects on the basis of already available concepts, relate these perceptions to concepts and then communicate them through words. And we can simultaneously assume that these particular acts are controlled by the cultural conventions within which persons act and in consequence of which perceptions of objects, relations of these perceptions to concepts and communication of the concepts through words may differ in time, space and type of group (Lévi-Strauss 1962; Goody 1978: 36–51; Goody 1986a; Goody 1986b; Goody 1987).
The Historicity of the Semiotic Triangle

It is easy to understand that the formation, communication and retrieval by others of the semiotic triangle among objects, concepts and words can follow from different procedures, depending on the specific cultural background against which these triangular interrelationships exist. For instance, if we suppose that the Japanese phrase "Kore wa hon desu" relates a single specified object to the concept 'book', it expresses this concept with the word "hon" in such a way that the specified object is subsumed under an undetermined (generic) concept. Thus a literal English rendering of the Japanese phrase might be: 'As this specified object is concerned, it belongs to the concept of book'. The phrase implies that the specified object is not identified (in Heidegger's sense) with the concept of 'book', but the specified object as a concrete thing becomes associated with the generic concept as an abstract category before being expressed by a word. By contrast, the English phrase "This is a book" is the result of a different process in the formation of the semiotic triangle. The "is" in the English phrase identifies the specified object as a concrete special case of the generic concept of "book" as an abstract category before being expressed by a word. Consequently, the phrase allows the communication of the concept "book" only under the condition that the word expressing the generic concept is coupled with an article which has the task of restricting, in this particular case, the semantic range of the concept to the one specified object. Other potential ways of expressing the identification of a specified object as "a book" are not feasible, for a phrase like "This is book" is not communicable, and a phrase as "This is the book" carries a different meaning in that it expresses an extraordinary esteem for or importance of a certain book.

Likewise, the formation, communication and retrieval of the semiotic triangle may depend on the speaker's intentions. For example, the phrases "It is good to observe principles derived from the categorical imperative" and "It is good to observe the principles derived from the categorical imperative" differ with regard to the determinedness of the number of principles involved.

In this case, both phrases are grammatically possible and semantically meaningful, so that the choice of phrases is not restricted by the availability or inavailability of grammatical structures, but depends solely on the relative degree of determinedness that the speaker intends to express.

Moreover, at the level of conceptual analysis, the problem of the formation, communication and retrieval of the semiotic triangle is not only how to cope with series of culturally specific acts of thinking, but also how to describe and explain what happens when, intraculturally, such series of acts of thinking undergo change. This latter problem cannot be solved at the level of the conventional history of thought, which has long been practiced as a field of inquiry, because answers to the question what has been thought do not provide clues to the further question how a series of acts of thinking has been practiced and how such practices have changed. Thus the history of thinking needs to be concerned with the changing conceptual frameworks within which the formation, communication and retrieval of the semiotic triangle can take place.

That such changes occurred can be shown from the conceptual history of the word "word". Within medieval theology, the prologue of the Gospel of John provided an important text in connection with which the changing practices of the formation of the semiotic triangle can be studied. The problems eclipsed in the association in this text of the word "word" with the divine:

In the beginning was the word,
and the word was with God,
and God was the word.

Throughout the early Middle Ages, the exegesis given to this phrase by St. Augustine of Hippo was dominant. In his exegesis, St. Augustine distinguished the word "word" from the concept 'word', assigning to the former the external sound (sonus) and to the latter an internal, "spiritual" character (verbum quod vere spiritualiter dicitur) (1845: 1379–1384). The word, then, has a dual character; in one respect, it serves oral communication as used in the real
world; and, in the other respect, it is both eternal and the divine per se. St. Augustine made no effort to explain his equation of the conceptual part of the word with the divine; instead, he proceeded with a simile which likened the word to a blueprint: St. Augustine argued that, when humans make a blueprint before constructing a building, the blueprint remains unaltered with the planners even after the building has been completed. In a like manner, St. Augustine observed, the word as a concept remains in its original association with the uncreated and thereby unchangeable divinity even after the word as a sound has been pronounced to the world as the divine message. Then, St. Augustine used another simile, likening the word to Christ: Like the word, Christ has the dual character of an abstract and a concrete existence; and, like the word, Christ communicates in the world and, at the same time, remains divine as an unchangeable blueprint.

What becomes clear from this argument is that St. Augustine used an all-embracing concept of “word” which, through a twofold simile, allowed its equation with the divine. He could accomplish this equation with such ease because, to him, the pronouncement of a word meant much more than the utterance of an ordered sequence of sounds in that it was part of an integrated process of communicative action. Thus communicative action was understood as involving communicating persons totally, and this understanding of communicative action helped St. Augustine in his direct equation of the concept of “word” with the most comprehensive of all thinkable concepts, namely the divine itself. Moreover, it is important to note that St. Augustine did not associate the concept of “word” with the divinity in a symbolic way – as if the word was a kind of representative or abbreviation of the divine or a feature upon which the divinity could confer some of its characteristics. Instead, following the Gospel text closely, St. Augustine insisted that the word is not only divine, but it is itself the divinity. Put differently, in St. Augustine’s use of the semiotic triangle, concept and matter melted into a single entity with regard to the sphere of the divine and were separated only for the limited purpose of communicating the exegesis of the Gospel. Taken comprehensively, the concept of “word” defied determinedness and, for that matter, stood in itself as a metaphysical totality.

Up to the 12th century, St. Augustine’s views continued to be accepted as the standard exegesis of the prologue to the Gospel of John. After the 12th century, however, a different approach to the formation of the semiotic triangle took precedence. It was most powerfully represented in the work of St. Thomas Aquinas. Rejecting as too schematic St. Augustine’s differentiation of the external word (the sound) and the internal word (the divine blueprint), St. Thomas made a substantive effort towards distinguishing the divine word from the human word. To the divine word, he ascribed the characteristics, first, of being “semper in actu” (the word always has a real existence), second, of existing “unicum verbum in actu” (the divinity expresses everything in a single word at the same time), and, third, of being “eiusdem nature” (the divinity itself is the word). By contrast, St. Thomas ascribed the following characteristics to the human word (1980a: 229–231): First, the human word exists “in potentia et in actu” (humans need to form a concept before they can pronounce a word); second, the word exists “divisim” (humans require series of words used in succession for the expression of the conceptualised matter); third, the human word does not exist “eiusdem nature” (humans use the word, but they are not words; instead, the relationship between humans and the word is equivalent to the relationship between communicating persons and the communicated matter).

In ascribing to the divine word characteristics in opposition to those of the human word, St. Thomas retained the Augustinian conviction that the comprehensive divine word is a totality and, in this capacity, uniquely divine. But, at the same time, St. Thomas denied the validity of this Augustinian conviction for the human word. The consequences for the exegesis of the prologue to the Gospel of John were grave. Because of the elaborateness of the differences between the divine and the human word, the christological exegesis of the prologue became exceedingly difficult. Where St. Augus-
tine needed no more than a twofold simile, St. Thomas had to delve into logical and philological niceties. Where St. Augustine had been able to claim the identity of the word with Christ, St. Thomas assumed a parallelism according to which the relationship between God and Christ ought to be seen as equivalent to the relationship between the divine and the word. Where St. Augustine could argue that Christ remained divine as the divine blueprint even after he had begun to communicate in the human world, St. Thomas, on the one side, had to identify Christ as the personified integration of the otherwise separated spheres of the divine and the human word, while, on the other, he had to retain the belief that Christ was coeternal with God. St. Thomas was aware of the possibility that his exegesis might trigger debates over the question whether God and Christ were one and the same essence. He was worried about the inherent possibility that – Christ being partly human – the God-Christ relationship could be seen as personified in the form of the material generation of the son through the father. In order to protect himself against such a potential misunderstanding, he concluded his exegesis with the argument that, in the prologue, Christ had not been named because the evangelist had wished to refer to the God-Christ relationship in the terms of an immaterial “intelligibilis processus”.

However, even that elaborate and painstakingly symbolic analysis of the God-Christ-human relationship as expressed through the concept ‘word’ and the word “word” did not satisfy St. Thomas. For he had compared the Greek and the Latin versions of the Gospel and found that, in the Greek version, an article precedes the word “ολόγος” (ho logos), whereas, in the Latin version, no article appears in connection with the Latin word “verbum”. St. Thomas concluded that, in the Latin version, the article must have been dropped. Why did that happen? Following the conventions set by ancient Greek and Latin grammarians, he argued that the article would have determined or specified the meaning of the concept so expressed, and concluded that such usage would have restricted the “supereminentia verbi Dei”, the complexity or totality of the divine word. Because this consequence was not desirable, St. Thomas declared that the Latin version was preferable over the Greek usage. But that only meant that St. Thomas understood that words can represent their concepts more or less adequately and that the concepts can no longer be identical with the matter they denote. In short, to St. Thomas, the semiotic triangle was composed of three separate categories which did not overlap in human language.

To sum up the impact of these matters on the history of thinking, a change occurred, from a preference given to synthetical thinking in categories of comprehensiveness in the early Middle Ages, towards analytical thinking in categories of particularity from the 12th century onwards. As a consequence of this change, it has been perceived as becoming increasingly difficult to embrace totalities conceptually. It will be shown in what follows how this change in thinking affected the formation of concepts and the use of words.

Changes in Thinking and Their Impact on the Use of Words

One possibility in approaching the effects of changes in thinking on the use of words is to trace changing forms of the determinedness in the expression of concepts through words. Determinedness of words is a means of expressing totalities or particularities of conceptualised matter. It can be regarded as a universal of language (Kraňský 1972: 30–44) and can be expressed through a variety of different grammatical and morphological structures. Hence expressing the conceptualised totalities versus particularities of matter can undergo changes which are traceable in given preferences for certain grammatical or morphological structures. Within the corpus of Germanic and Romance languages, historically considered, such changes occurred prior to the 12th century, and they led to the establishment of the article as a word category which was then novel to these languages. Two categories of articles have been distinguished: the so-called definitive articles determine particularities in a finite number, whereas the so-called indefinite articles make reference to one single particularity as a part of
the same category of matter.

Admittedly, as St. Thomas Aquinas had observed, the article was not new per se, for it had been in use already in Ancient Greek as an indicator of cases. But the article neither belonged to the stock grammatical features of Latin and its derivative languages nor to the vernacular idioms of the Germanic and the Slavonic languages. Remarkably, articles have never been introduced into Slavonic languages. This observation raises the question and under which conditions the article was formed in some of the medieval European languages. So far the most convincing answer to this question was suggested by the Austrian Anglist Lichtenheld in 1873. Lichtenheld maintained that "the definite article is put before a noun to show that the idea expressed by the noun has already been stated, and to refer back to that statement" (Lichtenheld 1873: 338). With his view Lichtenheld placed the so-called definite article in proximity to the demonstrative pronoun and, indeed, was able to show that, in terms of word history, this article as a word category in the Germanic as well the Romance languages had its roots in demonstrative pronouns. Lichtenheld's view can easily be confirmed by deducing the derivation of Middle Italian il and Middle French le from Latin ille and of similar derivations in the Germanic languages (Lichtenheld 1873: 350 f.). By a similar reduction, the so-called indefinite article, such as English a, emerged as the reduced form of the numeral for one.

Difficulties, however, arose once the question of the date at which the demonstrative pronouns became reduced to the so-called definite articles and at which the numeral one was shortened to the so-called indefinite article. On the one side, as far as the definitive article in French is concerned, St. Thomas Aquinas testifies that the process had not completely ended at ca 1200, because to him, the article "le" was still a novelty which demanded an explanation. On the other side, the existence already in Ancient Greek of articles and the authority of Greek as a model language in which authoritative texts had been transmitted had stimulated repeated attempts to create articles in other languages as well. For example, already in the 1st century B. C., the Latin scholar Varro had postulated the existence of a "pronomen articulae" as a category into which he subsumed demonstrative pronouns such as hic, haece, hoc., if they were directly connected with a noun (1977–1979: VIII/45, VIII/52, VIII/63, X/18–20). Hence, through the influence of the Greek language and Latin grammatical theory, and because early medieval grammarians tended to follow the Roman models, there must have been some pressure on the transformation of the demonstrative pronouns into articles also in the vernacular languages. Thus Lichtenheld may well have been justified in his claim that, in certain contexts, the Germanic demonstrative pronouns had acquired some tasks of the so-called definite articles already before 1000, while retaining their demonstrative tasks in other contexts. Because there is no unequivocal evidence to suggest that the inception of this new usage began as early as in the 7th or 8th century (Amos 1980: 110–124), we may conclude that, by the 11th century at the latest, the so-called definite articles had come into use, but was still recognisable as a demonstrative pronoun rather than as the "case-forming part of a sentence" by which the article in Ancient Greek had been defined (Dionysius Thrax 1910).

What does this change imply for the expression of concepts through determined or undefined words? The first point to make here is that neither the Latin translators of the Greek text of the Bible nor the early medieval translators of parts of the Bible into vernacular languages, neither St. Augustine nor his early medieval commentators sensed any necessity to adopt the Greek usage of articles in Latin. Hence the grammar and syntax of Latin was then considered to be sufficient in order to express whatever degree of determinedness. Thus, whenever, in the early Middle Ages, the necessity arose to give expression to a particular concept, the then existing grammar and syntax of Latin and the vernacular Romance and Germanic languages sufficed. A specific need to express concepts through determined words did not arise. The implication is that, among the users of these languages without demonstrative pronouns as articles, a way of
Fig. 1. Christ being arrested. 8th century. Book of Kells, Dublin, Trinity College, Ms 58, fol. 114r. The human figures are depicted without individualising features.
thinking prevailed by which a specified object was related to rather than identified with a generic concept. This was so because demonstrative pronouns were in use in Latin, as well as in the vernacular Romance and Germanic languages during their early periods, for the purpose of specifying an object retrospectively rather than identifying it as a specific case of a generic concept. This can be discerned from the following phrase which is taken from the text of the epic of Beowulf written down at about 1000 A.D. The phrase contains a praise for the deceased King Scylf Sceting. The praise reads: “æt wæs god cyning” (1950: v. 11b). By means of a demonstrative pronoun, the phrase specifies the object of the praise, namely the deceased king who had been mentioned in the previous lines. The demonstrative pronoun, a neuter, relates the specified object to the generic concept ‘king’, which is qualified by means of the generic attribute ‘good’. Yet the phrase does not identify the dead king as a special case of the generic concept ‘good king’.

By contrast, in Geoffrey Chaucer’s late 14th-century Canterbury Tales, there is the following passage in praise of Theseus (1974: 24):

Ther was a duc that highte Theseus;
Of Atthenes he was lord and governour,
And in his tyme swich a conquerour,
That gretter was there noon under the sonne.

The praise is formulated with two so-called indefinite articles in connection with pronouns. In the first occurrence, the article is used, together with a demonstrative pronoun, in order to identify “a” ruler of the name Theseus who was in charge of Athens. In the second occurrence, the article is used, together with a personal pronoun, in order to identify Theseus as a special case of a conqueror, whereby this generic concept is qualified by the attributive phrase that Theseus was a more successful conqueror than anyone in the world. The only occurrence in this passage, where no article is used in connection with the naming of Theseus is the phrase where he is specified as the ruler in charge of Athens; but here, Theseus becomes identified, not as a special case of a generic concept, but as the holder of a specific office. This negative instance confirms the usage of articles as reduced demonstrative pronouns, and not, as in Ancient Greek, as “Case-forming parts of a sentence”; it required and promoted a way of thinking by which a specified object was identified as one representative of a generic concept.

Thus it can be confirmed that a change took place between the 11th and the 13th centuries in the course of which thinking was transformed from sets of relational actions to sets of identity-establishing actions. The first kind of action implied the coordination, whereas the second kind of action resulted in the subordination of the former under the latter. Hence relational thinking supported the preference of words which were grammatically undetermined and whose determinedness, when required, had to be achieved by syntactical means, for example by demonstrative pronouns or by the frequent use of such attributes as “supradictus” or “aforesaid”. By contrast, identity-establishing thinking supported the preference of words which were grammatically determined through articles which were derived from demonstrative pronouns which were replaced for syntactical means of expressing determinedness.

Changes in Thinking and Their Impact on the Use of Concepts

With regard to concepts, similar changes can be observed, and they become visible, among others, from changes in the concept of person. It has long been recognised that verbal, pictorial and sculptural descriptions of individuals as persons were stereotyped in the early Middle Ages.

The early medieval technique of describing persons coincided with a concept of the person that differed markedly from later usages. The changes can easily be gleaned from contemporary exegetical views on the Holy Trinity. Enforced by the fixing of trinitarian theological doctrine through the Council of Nicaea in 325, that is, since acceptance of the formula “tres personae – una substantia”, the concept of person retained much of the schematism which had adhered to the Latin word persona and its Greek relative prosopon, for the original mean-
ing of both words belonged to the world of the stage and denoted theatrical masks as the bearers of the stereotyped schematic totality of a moveable image.

The latter meaning was a requirement for ancient and early medieval Christianity, because, as St. Augustine's exegesis of the prologue to the Gospel of John shows, without the schematic totality adhering to the concept of person, it was difficult to reconcile the Nicaean creed with the logos christology of the Gospel. For it is only the stereotype schematism at-

Fig. 2. Display of theatrical masks used in dramas by Terentius. 9th century. Vatican City, Bibliotheca Aposto-
lica, Cod. Vat. lat. 3868, fol. 3r.
tached to the concept of person that allows the conceptualisation of the innertrinitarian relations in terms of an immaterial relationship and, beyond that, the simultaneous association of Christ with the divine and the human world.

Against St. Augustine’s doctrine, the temptation to perceive the innertrinitarian relationship between God and Christ in terms of a physical father-son relationship was strong. Gregory of Tours mentioned the case of King Chilperic I of the Franks (561–584) who apparently wrote a theological tract condemning the application of the word *persona*. According to Gregory, Chilperic had argued that *deus* ought to be the appropriate word for the trinity because the word *persona* carried with it the connotation of humanness and that, consequently, it was blasphemous to refer to the divine trinity as “tres personae” (1951: V/43). Chilperic seems to have made efforts to enforce his view in his kingdom by decree, being convinced of its appropriateness. Apparently, the king tried to turn against usages of the word *persona* which are recorded elsewhere from the 5th and 6th century, first and foremost in the work of Boethius (1891: 1342 f.) who had defined the *persona* as a human being and “nature’s rational individual substance”, and, in the second place, in Isidore (1911: 1/6) who had argued that nouns denoted the *persona* as a human actor and the verb a person’s action. However, Gregory claimed to have convinced the king of his errors so that the king gave up his views.

Despite Boethius’s and Isidore’s statements and despite the difficulties of communicating St. Augustine’s trinitarian doctrine to the believers, the concept of “person” as a schematic totality prevailed throughout the early Middle Ages and was used to encapsulate what is typical of mankind in an individual, both in physical and in spiritual respects. For instance, the early 8th-century Life of St. Wilfrid, Bishop of York, described the saint in the following way:

“During his boyhood he was obedient to his parents and beloved of all men, fair in appearance, of good parts, gentle, modest and firm, with none of the vain desires that are customary in boyhood; but ‘swift to hear, slow to speak’, as the Apostle James says: he always minis-

tered skilfully and humbly to all who came to his father’s house, whether they were the king’s companions or their slaves, even as the prophet says, ‘all shall be taught by the Lord’. At last, however, when fourteen years of age, he meditated in his heart leaving his father’s fields to seek the Kingdom of Heaven. For his stepmother (his own mother being dead) was harsh and cruel.”

Several features in the characterisation of young Wilfrid stand out as remarkable, first that, in accordance with the usage of the time, standard biblical phrases, such as a reference to quickmindedness, can be used to describe the specific habits of the individual; second, that generalizing attributes, such as Latin *pulcher*, *mitis*, *modestus*, *stabilis*, can express the particular physical and intellectual characteristics of the individual; third, that accounts of common practices, such as treating guests with hospitality can represent special abilities of the individual; fourth, that stereotypical motivations, such as escaping an allegedly cruel stepmother, can account for the personal motives for concrete action by the individual; fifth, that topical patterns of events, characteristic of early medieval hagiography as a literary genre, such as abruptly leaving the parents’ home, can be adduced as the formative events in the individual’s own life; sixth, and finally, that a saint is conceived and born as a saint, and the sainthood of an individual is announced miraculously before his birth becomes recognisable through manifest actions immediately after birth. Thus, during the early Middle Ages, the sainted individual did not convert to a saint, but, as his life advanced, adopted his divinely ordained role as actors in a play wear their *dramatis personae*.

It is difficult to explain these features in the early medieval descriptions of individuals except under the assumption that the underlying concept of ‘person’, well throughout the 10th century, retained core elements of the schematicism which had adhered to the concept in antiquity.

However, during a period between the 11th and the 14th century, the concept of ‘person’ became dissociated from the schematicism of the theatrical mask and coincided with the concept of the individual as the “creatura ra-
cionalis" (Megenberg 1973: I/2), the natural person as an individual actor. Life-size sculptures which had appeared during the later 10th century, began to express individual bodily features and specific emotions in the early 13th century.

Fig. 3. Sculptures of Ekkehard and Uta, the founders of Naumburg cathedral, mid-13th century.

Compare the account of the early life of St. Francis of Assisi by his first, 13th-century hagiographer, Thomas of Celano. He reports how young Francis, born of an urban patriciate family, enjoyed the youthful pleasures of life in the company of his comrades. Then, a divine inter-
vention caused him to change his attitudes and convert to a religious life (Thomas of Celano 1899: 81–176). Thus, in 13th-century and later hagiography, the sainted person became a saint through a conspicuous change which altered the fundamental conditions and patterns of his life. The person was no longer superimposed upon the individual as the role he had to play, but the person became synonymous with the individual.

Only in the jargon of jurists was the previous schematicism retained and, at the same time, enlarged to express the persona juridica, the legal person. This applied to a group of individuals or an institution as the legal equivalent of the individual and as a collective actor. But this jargon could not stem the individualisation of the concept of “person” and, beyond that, the rising tide of an entire body of political thought which, since the 12th century (John of Salisbury 1909: V/6, VI/1–21), had centered on the perception of political groups as a body politic as a metaphorical representation of the persona naturalis. In consequence, St. Thomas Aquinas had to employ an elaborate apparatus of logical, philological and metaphoric arguments in order to provide an exegesis for the mystical union of persons and substance of Christian trinitarian doctrine.

In conclusion, the history of thinking underwent a process of change between the 11th and the 13th centuries: Thinking as an action involving the interrelation of totalities was replaced by a preference for thinking as an action involving the identification of particularities, and the latter has continued since the 13th century. As has been shown elsewhere, the early medieval concept of thinking was suitable in a culture which was based on oral communication as the dominant norm even if writing was practised by certain groups (Kleinschmidt 1988).

The Introduction of Empiricism into Thinking

Nevertheless, there were elements of continuity in the medieval history of thinking, and these elements concerned assumptions about the effects which thinking could have on conceptualised and verbally expressed objects. “All our knowledge has its beginning in sense”, St. Thomas Aquinas wrote (1980b: 1, I, qu. 1, art. 9) when he set out to explain why the Bible makes frequent use of similes of corporeal things for the expression of spiritual matters. Indeed, the polysemic dimension of medieval culture has been emphasised many times. It stimulated multi-tiered interpretations of identical matters, proceeded from the concrete to the abstract and expressed the latter through similes of the former. Correspondingly, the medieval art of memory drew on the use of images for the purpose of training the memory and allowing persons to memorise abstract matters. Although Aquinas was well aware of the dangers implied in such mnemonic techniques he recommended their use in the form which had been transmitted from late Antiquity into the Middle Ages (Rhetorica ad Herennium 1978: 205–225). Aquinas did so with the argument that “man cannot understand without images; the image is a similitude of a corporeal thing, but understanding is of universals which are to be abstracted from particulars” (1980c: 371). In other words, thinking uncovered the order of matter, made this order explicit and helped persons to recreate the order in their memories. If the order of things was to be uncovered and recalled through thinking, it had to be considered to be pre-existent as an element of the divine creation. Thus, way up to the 16th century, the belief in the divinely ordained order of things prevailed. As late as in 1533, a printed version of a 15th-century theoretical tract on memory appeared which had been written by the Dominican friar Johannes Romberch. In this tract, the following spherical scheme of the universe was used as a mnemotechnic device for the recollection of matters related to sacred history and recorded in the Bible:

Here we find in an artful array from bottom to top the elements, the planets, the fixed stars, the celestial spheres and the orders of angels. The semicircle forming the bottom is filled with letters standing for the heavenly paradise, the earthly paradise, the purgatory and hell. According to this scheme, Romberch suggested, the names and facts from sacred history could be remembered in accordance with the true order of the world. Concrete images were ad-
duced and were ordered in accordance with the spherical ordering scheme so that the person trying to memorise something could wander through it in his or her mind and connect with the images of abstract Biblical names and facts. Retrieving these names and facts from memory would then be done with the help of these images following the order of the spherical scheme. In sum, processes of the formation, communication and retrieval of semantic triangles were regarded as possible on the basis of beliefs in the divinely willed order of the world. Because, throughout the Middle Ages, this accomplishment in thinking was an integral part of the belief in the divine creation as recorded in the Bible, the formation, communication and retrieval of semantic triangles was considered to belong, not to logic, but to ethics and metaphysics by the majority of thinkers who joined in with the tradition represented by St. Thomas Aquinas. The subsumption of considerations about thinking into ethics necessarily included the categorisation of thinking as an action in its own right.

However, in the 13th century, a minority of thinkers began to take a different point of view. Foremost among them was the Franciscan scholar Roger Bacon who insisted that thinking as an action had to take into account empirical observations of the physical and socio-political environments. His empiricism led Bacon (1897) to call into question the otherwise accepted theological doctrine that observations of the physical and socio-political environments had the sole task of verifying a priori metaphysical statements about the divinely created world. Although Bacon's attack was subsequently taken up by such 14th-century encyclopaedic empiricists as Konrad of Megenberg (1973: I/1), it was, however, refuted at the time on the grounds, first, that it implied the claim that thinking included the action of synthesising an order among disparate matters in the physical and socio-political environments, and, second, that actively synthesising such totalities lay beyond the reach of the human mind. Nevertheless, the late medieval empiricists argued more forcefully than mainstream thinkers that thinking should be regarded as a human action which made it possible to construct totalities on an empirical basis within the confines of what was compatible with the Biblical record. This minority view received some support from moderate 14th-century epistemological nominalists, namely William Ockham. Ockham argued that, although the human mind was incapable of penetrating into the mystery of the divine creation, it was capable of conceptualising empirical observations. Like the view of the empiricists, the moderate nominalist stand augured in favour of the acceptance of a division between, on the one side, what was empirically recognisable by the human mind and, on the other, what had to remain behind the divinely willed veil of ignorance. Taken together, both positions established a potential for the secularisation of thinking which, however, was not practised throughout the 14th and 15th century.

Subsequently, during the 16th century, the fusion of thinking into a theology dominated by ethical and metaphysical doctrine was effec-
Fig. 5. Hierarchical ordering scheme for logical distinctions. From: Peter Ramus, *Dialecticae Institutiones*. Paris 1543.
tively called into question. The resulting process led to a reorientation of thinking towards the autodynamic construction of an order of the world through the human agent in it. This process can be gleaned from the works and controversies about the teaching of that foremost 16th-century Huguenot logician and methodologist, Peter Ramus who at last fell victim to the anti-Huguenot riots of 1572. Like other 16th-century scholars, notably Jean Bodin (1966), Ramus strove to devise methodologies which would facilitate memorisation of academic subjects by students (1574). However, Ramus chose an approach which differed fundamentally from 13th- and 14th-century thinkers. Ramus took it for granted that, through thinking as a sequence of logical operations, the order of the world had to be established, visualised and memorised. Ramus thus broke with the previous practice of subsuming thinking into ethics and metaphysics and, instead, promoted logic as the philosophical discipline in charge of reflecting about thinking. Ramus was convinced that the dialectics of deduction, already practised by such 14th-century empiricists as Konrad of Megenberg, was the most important of these logical operations. It implied that the order of the world could be reduced to the following process: All matters associated with a general concept could be successively divided into the hierarchical order of its constituent elements, right down to the smallest recognisable part. In such ordering schemes, logic served as the abstract principle determining the criteria by which every element would be placed into a certain rank and file in the hierarchical order of the concept (Richardson 1629). These deductive schemes took the shape of the above example and were considered to create a complete order embracing all constitutive elements of a concept in a systematic way.

Such thesauri were understood by Ramus as a means for the easy establishment, visualisation and memorisation of matter and for the ordering of the world. They increased the importance of rhetoric which was restored as an art on the basis of the written precepts of Antiquity. These thesauri differed from the medieval formation, communication and retrieval of semantic triangles in that they created an artificial order of the world whereas, in the Middle Ages, the world was considered to have been ordered by divine will at its creation. Hence, during the 16th century, ordering the world became a human activity, and the impact of the divinity was confined to its activity of creation. Logic replaced ethics and metaphysics as the ferment for the formation, communication and retrieval of semantic triangles.

By around 1600, the word systema achieved general currency as a label for these ordering schemes and began to flourish as their most widely spread denominator. Already in 1608, the entire body of ordered human knowledge about the world could be presented in a survey entitled "Systema systematum", the system of systems (Keckermann, 1608). Soon the word systema achieved currency beyond the confines of these abstract ordering schemes and was applied to clusters of real-word phenomena in the socio-political environment. For example, in 1625, Hugo Grotius seems to have been the first to use systema for alliances among governments or federations of states (1646: 52). Such usage implied that systems could also reflect orders among man-made institutions.

With regard to the non-human physical environment, order was taken to be static once it was established through thinking as a human action. Thus the physical environment was still thought to exist unchanged as part of the divinely created world, and, consequently, thinking was not considered to provide insight into the manipulability of the world through human action. Although the belief in the static existence of the ordered world did not rule out empirical observations about its transformation, this transformation was believed to follow certain regular metaphysical patterns which were expressed by the metaphor of the "laws of nature" which appeared to allow the prediction of outcomes (Francis Bacon 1861: 253 f.) Perhaps the most elaborate of these timeless systems were Carl von Linné's botanical tables composed in the early 18th century.

As many others of its kind, this system was based on Ramus's dialectical method according to which a hierarchical ordering scheme was constructed arraying logically the broadest concepts at its highest ranks and the narrowest
Fig. 6. Hierarchical ordering schemes for plants. From: Carl von Linné, *Bibliotheca botanica*. Amsterdam 1736.

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<th>2 Commentatores</th>
<th>3 Ichnographi</th>
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concepts at its lowest ranks. No room was given for plant evolution and each category was exclusive in the sense that a concept or any single element of it could only find a place in one category.

Similarly man-made institutions of the socio-political environment were conceptualised as unchangeable once they had been established. In 1651, Hobbes, for one, defined the state as a “common-wealth” in systems terms and used Ramus’s dialectical method of ordering in his explication of this concept (1985: 274 f.):

“Having spoken of the Generation, Forme, and Power of a Common-wealth, I am in order to speak next of the parts thereof. And first of Systemes, which resemble the similar parts, or Muscles of a Body natural! By SYSTEMES; I understand any number of men joyned in one Interest, or one Business. Of which, some are Regular, and some Irregular. Regular are those, where one Man, or Assembly of men, is constituted Representative of the whole number. All other are Irregular.

“Of Regular, some are Absolute, and Independent, subject to none but their own Representative: such are only Common-wealths; ... Others are Dependent: that is to say, Subordinate to some Sovereign Power, to which every one, as also their Representative is Subject.

“Of Systemes subordinate, some are Politicall, and some Private. Politicall (otherwise Called Bodies Politique, and Persons in Law), are those, which are, made by authority from the Sovereign Power of the Common-wealth. Private, are those, which are constituted by Subjects amongst themselves, or by authoritie from a stranger. For no authority derived from foraigne power, within the Dominion of another, is Publique there, but Private.

“And of Private Systemes, some are Lawfull; some Unlawful: Lawfull, are those which are allowed by the Common-wealth: all other are Unlawfull.

“Irregular Systemes, are those which having no Representative, consist only in concourse of People.”

Change was ruled out as a possibility in the existence of these systems which, even though they were “artificial” (Hobbes 1985: 1), that is man-made machines, were part of the static divinely created world.

Likewise, in the 18th century, clusters of states as man-made institutions were described as systems in the same mechanistic way (Vattel 1758: 39 f.):

“Europe forms a political system in which the Nations inhabiting this part of the world are bound together by their relations and various interests into a single body. It is no longer, as in former times, a confused heap of detached parts, each of which had but little concern for the lot of the others, and rarely troubled itself over what did not immediately affect it. The constant attention of sovereigns to all that goes on, the custom of resident ministers, the continual negotiations that take place, make of modern Europe a sort of Republic, whose members – each independent, but all bound together by a common interest – unite for the maintenance of order and the preservation of liberty. This is what has given rise to the well-known principle of the balance of power, by which is meant an arrangement of affairs so that no State shall be in a position to have absolute mastery and dominate over the others.”

Again, the system, once established, was held to be unchangeable and persistent due to the validity and application of the divinely willed “laws of nature”.

Hence, during the 16th, 17th and the earlier decades of the 18th century, thinking as the formation, communication and retrieval of semiotic triangles was understood to be a human ordering action targeted at the physical as well as at the socio-political environment. Yet the orders, once they had been established through thinking, were conceived as part and parcel of the unchangeable divinely created world as set out in the Bible. However, the Biblical framework of knowledge was called into question during the 1730s about the temporal extension of the world. Questions about time were to touch upon the problem of change which could not leave thinking unaffected. Hence, during the 18th century, histories of learning and of discoveries were written (Beckmann 1786–1805; Fabricius 1752–1754; Gundling 1734–1736; Stolle 1736), and requests for studies in the history of words and concepts became
vocal (Schlözer 1804: 34 note b). In consequence, a history of human knowledge became conceivable, with the implication that both, the world and the ordering of it, could become subject to the rule of change. Among the earliest thinkers who related the formation, communication and retrieval of semiotic triangles to the progress of time were the Abbé de Condillac (1746: paragraphs 2 ff.) and Jean Jacques Rousseau (1793: 64–71). In his prize-winning essay on the origins of inequality of men, published in 1755, Rousseau took up an observation by Condillac and argued, among other things, that language as the orderly use of words for communicating concepts had not belonged to the initial equipment given to mankind upon creation. Instead, Rousseau insisted, words were man-made means to communicate concepts about the world and a specifically human instrument which had not been developed by earlier species. In doing so Rousseau also classified thinking as the condition for the use of language. Because men and women had created languages in their own particular ways, different types of languages had emerged. Thus Rousseau made explicit his view that thinking as the formation, communication and retrieval of semiotic triangles had its own history as an action, whereby he, more sharply than Condillac, contradicted the then dominant convictions about thinking. Since Rousseau, historicising thinking as an action has become an important element in European culture and has set it as the task for thinkers to devise methods and rules for the transformation of the world.

Conclusion

In sum, the history of thinking exhibits three fundamental changes. The first, occurring between the 11th and the 13th centuries, materially transformed thinking as a series of acts of relating totalities towards thinking as a series of acts of identifying particularities. The second, going on during the 16th century, was concomitant with the introduction of autodynamic modes of behaviour and led to the conceptualisation of thinking as an action establishing a man-made order of the world. The third, taking place during the 18th century, unleashed a potential for the historicisation of thinking and imposed a dynamism upon persons who came to be expected to employ their intellectual and physical energies to transform the world.

Notes

1. Ogden 1923:1-23. Of course, in nuce the concept of the semiotic triangle was already expressed by Locke, 1959: 16-17. However, as a nominalist, Locke treated the formation of concepts as a part of the speculative history of the human mind and sought to establish the conditions under which general concepts had once come into existence.

2. Eddius Stephanus, 1927: 4-7. I use Colgrave’s translation because of its currency although it could be bettered.

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