

# **Semiotics as a Theoretical Basis of the Human Sciences**

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**Abstract:** In all cultures of the world, the members of the younger generation must prepare themselves for life within the environment into which they were born. They do this by learning to adjust themselves to the social institutions, to handle the tools in use, and to master the valid sign systems. That is, they acquire the social, civilizational, and mental competences of their culture. In the schools and universities of the Western hemisphere, the academic disciplines that teach the relevant knowledge and skills have for several millennia been known as “the humanities”.

Historically, the most influential characterization of the humanities has conceived of them as studying the human “spirit” (“Geist”, “esprit”) and its cultural expressions as striving not to explain, but rather to understand what goes on in a culture.

In the present paper, this approach is discussed with respect to the various conceptions of the humanities that were developed in the course of European history. It will be shown that each of these conceptions is motivated by trying to account for newly introduced types of signs and sign processes.

This observation is taken to justify the claims that

(1) semiotics provides a scientific basis for a rational explication of the tasks and terminologies of all the humanities, that

(2) semiotics can serve to re-design the humanities of the various cultures as human sciences, and that

(3) semiotics is able to specify the cultural role and the educational values of the human sciences as a whole.

## **1. The humanities**

In all cultures of the world<sup>1</sup>, the members of the young generation must prepare themselves for life within the environment into which they were born. They do this by :

- learning to adjust themselves to the social institutions,
- learning to handle the tools in use, and
- learning to master the valid sign systems.

That is, they acquire the social, civilizational, and mental competences of their culture.

In the schools and universities of the West, the academic disciplines that teach the relevant knowledge and skills have for several millennia been known as “the humanities”. Today, this term is predominantly used in a more narrow sense; it has become an administrative concept, which is mostly defined negatively as comprising the disciplines outside the natural, social, and engineering sciences as well as outside the professional schools of law, medicine, and theology. Historically, however, there have also been attempts to define the humanities positively by characterizing their epistemological status. This can either be done by describing the distinct kind of knowledge to which they contribute or by specifying the distinct methods of research that enable them to gain that knowledge. The most popular characterization conceives of the humanities as:

—studying the human spirit (Latin: *spiritus*, French: *esprit*, German: *Geist*) and as

- methodologically striving not to explain but rather to understand.

And it is in these terms that the educational function of the humanities also tends to be assessed.

In what follows, I will put this discussion on a broader basis by examining the various conceptions of the humanities that were developed in the course of European history, and I will show that each of these conceptions was (and is) motivated by trying to account for newly introduced types of signs and sign processes.

This observation will then justify the claims that

(1) it is semiotics (i. e., the theory of signs and sign processes), which provides a scientific basis for a rational explication of the tasks and terminologies of all the humanities, that

(2) semiotics can serve to re-design the traditional humanities of the various cultures as human sciences, and that

(3) semiotics is able to specify the cultural role and the educational values of the human sciences as a whole.<sup>2</sup>

## 2. Traditional European conceptions of the humanities

In Europe, reflections on the substance and the functions of the humanities have a history which goes back to the Homeric epics and to classical Greek philosophy. During this history the humanities were re-invented several times;

(1) In the Greek city-states of the 5th century BC the humanities took the form of *paideia* (which is the Greek word for “education”). The task was to prepare the young males for manhood and citizenship, i. e., for “politics” in the Greek sense (cf. the Greek word *polis* “city” and its morphological derivative *politēs* “citizen”). For this purpose itinerant Sophists were employed—including famous philosophers such as Protagoras (485—415 BC) and Isocrates (436—338 BC), who developed programs of private tuition to teach traditional myths, train political action, and practice reading and writing.

(2) For the Romans of the first century BC, the goal of education was *humanitas*, i. e., the formation of living beings that do not behave like animals but stand their ground in public communication on forums and market places. This skill was typically trained in schools of rhetoric for which Cicero (106—43 BC) and later Quintilian (40—95 AD) provided the teaching materials.

(3) In late Antiquity, education was achieved by teaching the *artes liberales*, i. e., the skills needed for doing business as a free person. They comprised language-related skills, namely grammar, rhetoric, and dialectics (the *trivium*) as well as mathematical skills, namely arithmetic, geometry, astronomy, and music (the *quadrivium*). Having been elaborated in pre-Christian times, the *artes liberales* were re-designed by St. Augustin (354—430 AD) and Boethius (480—524 AD), so that they could be taught in monasteries in connection with the bible as a preparation for a Christian life. As such they later became the fundamental disciplines of university education in the Middle Ages.

(4) In the age of Renaissance, the wealthy citizens of Italian city-states conceived of education as *studium humanitatis*. This idea was developed by Humanists such as Coluccio Salutati (1331—1406) and Pico de la Mirandola (1463—1494), who emphasized that religious experience (*divinitas*) is not sufficient for a young person to become *humane* (i. e., “really human”) and proposed the reading of ancient secular texts in addition to the bible.

(5) In 18th century France, the canon of texts to be read was extended to include literature (“belles lettres”) written by enlightened contemporary authors and was designated as *litterae humaniores*. Encyclopedists such as Diderot (1713—1784) and d’Alembert (1707—1783) developed appropriate lists of texts in their educational programs for the lycée, gymnasium, and college.

(6) In Romantic Germany (around 1800), the humanities were re-conceptualized as studies of the human spirit (French: *esprit*, German: *Geist*) and therefore designated as *Geisteswissenschaften*. Idealist philosophers such as Schelling (1775—1854), Hegel (1770—1831), and Dilthey (1833—1911) focused on the activities and results of human work (known as *ergon* in Greek and *opus* in Latin) and

introduced them as independently relevant objects of research and teaching. Any work in that sense was taken to be educationally important, and that led to the inclusion of works of art, works of music, works of architecture, philosophical works, and legislative works as well as handiwork among the artifacts to be studied.

(7) In the heyday of colonialism around the turn of the 20th century, when the competing attempts of Western nations to dominate the world became increasingly hampered by its cultural diversity, the question of what is a culture became prominent. In imperialist Germany neo-Kantian philosophers such as Windelband (1848—1915), Rickert (1863—1936), and Cassirer (1874—1945) drew attention to the various symbolic forms of human behavior and pointed out their culture-specific character.<sup>3</sup> They proposed to regard the comparative study of the symbolic forms produced in a culture and the comparative study of all cultures as central tasks of the *Geisteswissenschaften* and suggested to re-name them into *Kulturwissenschaften* (English “cultural studies”).

(8) In the context of globalization at the turn of the third millennium, this proposal has gained new attention. In many Central European universities, the humanities are now being re-organized into faculties of cultural studies. They are usually grouped around *media studies*, which investigate the specific types of messages with which we can reach each other in the global context; not only

- via simple spoken and written communication, but also by means of
- static and moving pictures (movies),
- gramophone, audiotape, and broadcasting,
- telephone, videophone, and telefax,
- e-mail, chatting, blogging, and web pages,
- books, journals, newspapers, and television,
- conversations, symposia, telephone and internet conferences,
- processions, demonstrations, rallies, and web jamming, and
- the information flow in cyberspace, based on computing and telecommunications.

If one may believe Bernard Berelson (1912—1979) and Marshall McLuhan (1911—1980), to be human is reducible to being a competent media partner in the various media<sup>4</sup>, and the time has come for the epistemology of the humanities to consider the validity and the shortcomings of this position.

### 3. Central ideas and consequences

In comparing these historical versions of the humanities in detail, one notices that they share a number of properties while differing in many others. What they have in common is that they all tried to account for the knowledge and skills which students

need in order to reach full participation in the life of the culture into which they were born. However, they differ in that

- each responded to another historical challenge,
- each was organized by another leading idea,
- each endorsed another field of knowledge and skills, and
- each was subject to other restrictions.

(1) Greek *paideia*, for instance, was designed to help the students become distinct from those whom the Greeks called BARBARIANS; it centered around the faculties of reading and writing as well as philosophical argument in small dialog circles; and it excluded non-Greeks, women, and slaves.

(2) Roman *humanitas* demanded the teaching of everything that distinguishes humans from ANIMALS; it centered around the faculties of remembrance (*memoria*), verbal formulation (*enunciatio*), and public speech (*oratio*); and it was accessible to the free men of all nations, but again not to women and slaves.

(3) The *artes liberales* of the Christian Middle Ages were designed to discipline the bodies and souls of their students against HEATHEN practices; they aimed at preparing the students for reading and interpreting the Holy Scriptures; and they were intended for all free persons and did not generally exclude women any more.

(4) The Renaissance *studium humanitatis* was developed in explicit contrast to the study of THEOLOGY (*studium divinitatis*); it introduced male and female students alike into the best human experiences which were found documented in the classical writings of Ancient Greece and Rome made newly available to Latin Europeans by Islamic translators and Byzantine scholars; eligible for this type of education were the children of wealthy citizens and noble families—those who had no means to support themselves were excluded.

(5) With the emphasis on the *litterae humaniores* (*belles lettres*) the Enlightenment reacted against the UNCIVILIZED custom of collecting natural curiosities (called “*realia*”); the study of both ancient and contemporary languages and the knowledge of literature and art was offered to provide a human framework of thought for the cultural integration of *realia*; excluded from this approach were the “peasants”.

(6) The studies of human spirit (*Geisteswissenschaften*) of the 19th century were designed to defend the specific tasks of the humanities against those of the NATURAL and ENGINEERING sciences, which had become popular during the industrial revolution; the concept of work was introduced to focus the students’ attention not only on literature, but also on the fine arts as well as on historical documents and political monuments, which were analyzed using the procedures of the newly developed university disciplines of philosophy and historiography; excluded were persons lacking

school education.

(7) The approach of cultural studies (*Kulturwissenschaften*), which developed in the early 20th century and is becoming popular now again, emphasized the uniqueness of each human individual, each work of art, and each culture as a whole; it claims that the natural sciences by definition cannot do justice to this research interest since they strive to reach general laws, i. e., employ nomothetic methods; the humanities, in contrast, are taken to be able to account for what is individual and unique, since they use idiographic methods, i. e., concentrate on the specific circumstances; of course, such an approach is unsuitable for UNCULTURED persons, in other words those who do not have sufficient knowledge of those circumstances.

(8) The approach of *media studies* in our own time focuses on the experience of computer-assisted global telecommunications and follows the idea of a world-wide free flow of not only goods but also information and knowledge; it concentrates on investigating the specific properties and differences between the various existing media and the possibilities of combining them by means of digitalized media technologies; excluded are the UNINFORMED, in other words those who have no access to these technologies (especially radio, television, telephone, and computers).

**Table 1 European conceptions of the humanities**

400 BC	Greek city-states <u>paideia</u> (Isocrates and itinerant Sophists) preparing for manhood and citizenship excluding non-Greeks, women, and slaves distinguishing from <u>barbarians</u>
100 BC	Roman Empire <u>humanitas</u> (Cicero and Rhetoricians) forming public orators excluding women and slaves distinguishing from <u>animals</u>
500 AD	Early Middle Ages (monasteries and universities) <u>artes liberales</u> (St. Augustine and Boethius) preparing for a Christian life excluding the unfree distinguishing from uneducated <u>heathens</u>
1400 AD	Renaissance Italian city-states (Humanists) <u>studium humanitatis</u> (Salutati and Mirandola) forming the perfect gentleman/lady excluding the poor distinguishing from <u>theological experts</u>

**Table 1 European conceptions of the humanities (Continued)**

1700 AD	Enlightenment France (Encyclopédistes) <u>litterae humaniores</u> (Diderot and d'Alembert) forming the good administrator excluding the peasants distinguishing from <u>uncivilized persons</u>
1800 AD	Romantic Germany (Idealist philosophers) <u>Geisteswissenschaften</u> (Schelling, Hegel, Dilthey) creating the polyhistorian excluding those lacking school education distinguishing from <u>natural scientists and engineers</u>
1900 AD	Imperial Germany (Neo-Kantians) <u>Kulturwissenschaften</u> (Windelband, Rickert, Cassirer) creating the multicultural person excluding those lacking school education distinguishing from <u>uncultured persons</u>
2000 AD	Postmodern Anglo-America (Content analysts) <u>Media studies</u> (Berelson, McLuhan) creating a well-informed global public excluding those lacking media technology distinguishing from <u>uninformed persons</u>

In retrospect one can say that each of these eight re-conceptions started by giving a strong impulse to the humanities and severely changed the traditional ways of both communication and communication research. Each time cultural life appeared in a new perspective, which led to new attempts at categorizing the world. However, as time went by, each new approach lost much of its original organizing power for the academic disciplines involved. These disciplines tended to disintegrate into mere lists of subjects, and the theoretical aspirations present at the start were again and again reduced to the mere teaching of practical routines:

- paideia* was reduced to reading and writing;
- humanitas* became equated with mastering rhetorical figures and tropes;
- the *artes liberales* dwindled into the *trivium*, in which not much more was taught than the grammar of Latin;
- the *studium humanitatis* became equivalent to the ability of quoting classical authors;
- the *litterae humaniores* (*belles lettres*) were instrumentalized for writing essays according to classical patterns of style;
- the *studies of the human spirit* were practiced as etymology, and historiography became story-telling;

—*cultural studies* degenerated into tourism; and

—concerning *media studies*, the foreseeable development will produce knowledge dealers and experts in the application of the latest media technology.

Nevertheless, such skills are not at all irrelevant, and if one regards them in the chronological order of their emergence, one can observe a step-by-step extension of tasks and a widening scope of problems dealt with:

(1) When the Greeks started to be concerned with writing, this led to increased knowledge and expansion of their own **language** (classical Greek).

(2) When the Romans became interested in holding successful public speeches, they had to train not only their linguistic competence but also their **body language** (including adequate posture, gestures, and facial expressions).

(3) When medieval monasteries taught a canonic foreign language (i. e., Latin), they did so to train the ability of **translating** the Holy Scriptures from that language into the students' mother tongue. And this was progress even if the translations were often only given word by word, inscribed as interlinear versions into the original text.

(4) The Renaissance humanities then extended the range of their subject matter from religious to non-religious texts in the classical foreign languages Latin and Greek and from linguistic artifacts to ancient architecture and sculptures. This made them proceed from word-by-word translations of texts to verbal **commentaries** on artifacts, based on knowledge about the circumstances of their production.

(5) The Enlightenment systematized the interpretation of literature and art by introducing **analyses of style**, claiming that the style of an utterance makes its receiver understand not just the text, but also its author. What is significant here was expressed in the famous *Aperçu* of Georges Buffon (1707—1784): “Le style est l'homme même” (“The style is the person”; see Buffon 1753).

(6) The 19th century widened the scope of the humanities even further by including

a. not only religious and literary texts but also non-aesthetic texts such as historical treaties, state constitutions and laws,

b. not only sculptures and architecture but also pictures and music, as well as artifacts outside the arts such as the tools and utensils studied in archeology.

These were preserved and restored when fragmented, and held in high esteem as **objectivations of the human spirit**. Their interpretation was assumed to give access to what Hegel called the objective spirit of a period, age, or epoch.

(1) The 20th century cultural studies then added the competence of understanding and comparing entire cultures on the basis of the artifacts, institutions, and customs that occur in them.

(2) And if the media studies of today fulfill their promises, we will eventually discover

- why humans have separate and partially competing sense modalities such as the eye seeing,  
the ear hearing,  
the nose smelling,  
the mouth tasting, and  
the skin touching/feeling;

—how an optimal division of labor between them can be organized with the help of media technology; and

—how this division of labor can, for humans of all cultures, guarantee an adequate access to their natural and social environments.

**Table 2 Skills taught in the humanities**

1. Reading and writing
2. Making efficient speeches
3. Translating the Holy Scriptures
4. Commenting on literature and the fine arts
5. Understanding authors
6. Restoring human artifacts
7. Comparing human cultures
8. Organizing human perception and knowledge

Let me now show that these various skills need not be learned only by doing, but can be analyzed and taught on a theoretical basis, and that the academic disciplines which study them do not form an unconnected set of separate domains, but rather build on one coherent epistemological foundation: that of semiotics.

#### 4. Basic tasks and competences of semiotics

Semiotics deals with *semiosēs* (sign processes), and a semiosis is generally said to involve the following factors:

There is a *sender*, who intends to convey a *message* to an *addressee* and makes sure that he or she is connected with him or her through a shared *channel*. In preparing the intended message, the sender chooses an appropriate *code* and selects from it a *signified* (a meaning) that includes the message. Since the signified is correlated through the code with a corresponding *signifier*, the sender then produces a *sign* that is a token of this signifier.

If everything goes as intended by the sender, the addressee perceives the sign through the channel and takes it as a token of the signifier, which refers to the signified on the basis of the code. The addressee then reconstructs the message from

the signified with the help of the *context* given in the shared situation ( see Figure 1 ).

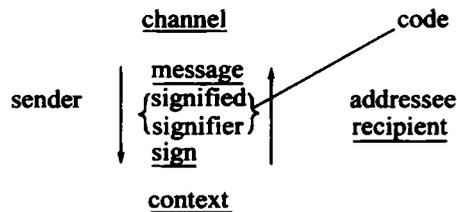
Examples of a semiosis containing all components mentioned are

—the production and comprehension of a verbal utterance such as when I say “ I greet you ” ( see Saussure 1916 ),

—the conveying of a message through emblematic gestures such as a HAND SHAKE ( Ekman and Friesen 1969 ), as well as

—the operation and observation of street signs such as the traffic lights which you can see ( Prieto 1966 ).

A semiosis of this type is called “ communication ” by Buysens ( 1943 ) and Mounin ( 1970 ).



**Fig.1 Factors of semiosis.** Underlined are the terms denoting factors whose presence is necessary and sufficient for semiosis to take place. The left-hand arrow indicates the sequence of the sender’s choices, the right-hand arrow that of the addressee’s.

A more detailed analysis of what goes on in a semiosis leads us to isolate particular types of processes within the production and reception of signs.<sup>5</sup>

a. Thus when I am the sender having in mind the message of greeting you and wanting to use the verbal code of English, I must choose between the various greeting concepts offered by the English language:

Do I wish to give you

—a formal or

—a familiar or

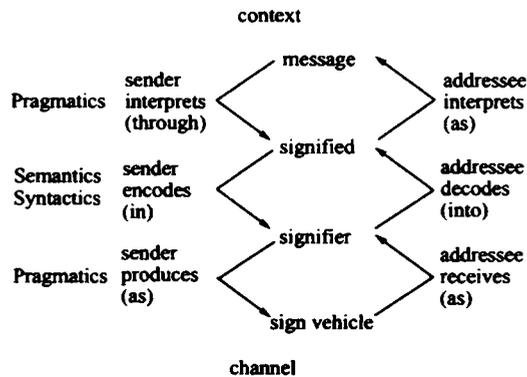
—an intimate greeting?

Do I wish

—to address you explicitly or

—to include you in a general greeting?

These are different signifieds. The process of selecting one of them is the first step of sign production. It depends on the relationship between sender and addressee and is therefore called a “ pragmatic process ” ( see Figure 2 ).



**Fig. 2 Pragmatic processes.** The sender interprets the intended message through a signified, encodes the signified in a signifier, and produces the signifier as a sign vehicle. The addressee receives the sign vehicle as a signifier, decodes the signifier into a signified, and interprets the signified as a message. The sender's and addressee's interpretation activities are pragmatic processes in the narrow sense.

We say: The sender *interprets* the intended message through a signified taken from the accepted code.

b. Having decided on the signified, I choose the necessary components of the corresponding signifier and construct a well-formed English expression out of them, such as

- “I wish you a good morning, dear colleagues” (formal and explicit),
- “Good morning” (formal and implicit),
- “Hello” (familiar),
- “Hi” or “Ciao” (intimate).

Selecting the appropriate items from one's vocabulary and composing them into a well-formed expression is the second step of sign production. It comprises *syntactic* and *semantic* processes and leads from the signified to the signifier. We say: The sender *encodes* the signified in a signifier taken from the accepted code.

c. Having composed the signifier to be produced, the sender can put to work his or her articulatory apparatus and pronounce this signifier. Here, there are again several options open which concern the manner of pronunciation. The sender can speak

—slowly, loudly, and with a rising tone such as “Good morning!”

—or quickly, softly, and with a sinking tone such as “Good morning!”

He or she can articulate all sounds

—with great precision

as in [gʊd mɔːrnɪŋ]

—or let the sounds merge

as in [gmɔːnɪŋ]

This process of transforming the intended signifier into a physical event is the third step of sign production. Just as the first step, it highly depends on

—the sender's assessment of the context and

—the sender's relationship to the addressee, which is why we also classify it as a "pragmatic process" (see Figure 2). We say: The sender *realizes* the intended signifier through a certain sign (also called "sign matter").

Analogous things happen in sign reception.

a. The addressee *receives* the physical event as a token of a certain signifier. For example, he or she assigns the utterances [gʊd mɔːrnɪŋ] and [gmɔːnɪŋ] both to the English expression "Good morning!".

b. The addressee then *decodes* this signifier into a signified. For example, he or she takes it as a formal greeting through which he or she is addressed implicitly.

c. Finally the addressee *interprets* the fact of having been addressed in this way as a sign of "politeness without special personal attention", which is the message conceived from the recipient's perspective. As this example shows, the recipient's message need not always coincide fully with the sender's message, even if they use the same code.

All the processes described so far contribute to a semiosis which takes place between a sender and an addressee, and this type of semiosis is generally called "communication". However, semioticians also deal with *sign processes without a sender*, where the addressee is but a simple recipient, as when one takes a fact as an indicator of another state of affairs; examples are the red spots on a child's skin taken by a doctor as signs (indicators, symptoms) of measles. In this case we again have a channel (light) transmitting a sign (the redness of the skin), which involves a signifier (the pattern of the red spots); there is a code correlating the signifier with a signified (measles), which, in the given context, is the basis for inferring the message ("the organism with the red skin has measles"). But there is no intentional sign production taking place here, since there is no sender.

In addition to senderless sign processes we have to consider *sign processes without a code*. These are cases where there is no standard connection (be it innate or conventional) between a signifier and a signified intervening in the interpretation of the sign. An example of a senderless sign process without a code is a pedestrian crossing the main street and taken by a driver in a side street as an indicator of there

being no fast traffic in that part of the main street. In this case we have a channel ( the light in the street ), a sign ( the fact of the pedestrian crossing the street ), a message ( “there is no fast traffic in that part of the main street” ), and a context ( the crossroads ), but no sender and no pre-existing code systematically correlating signifiers and signifieds: there is no generally known signifier and no signified, but only a concrete sign ( sign matter ) and a message inferred from its occurrence on the spot.

The presence of a sender and of a code do not imply each other. There are senderless sign processes which function on the basis of a code, as when we classify an abandoned piece of clothing as a signifier of a skirt or of a dinner-jacket. There are also codeless sign processes which senders perform intentionally in order to convey a message, as when a young man in the presence of a young woman who happens to look at him imitates one of her involuntary body movements in order to express his sympathy with her ( a case of a flirt ).

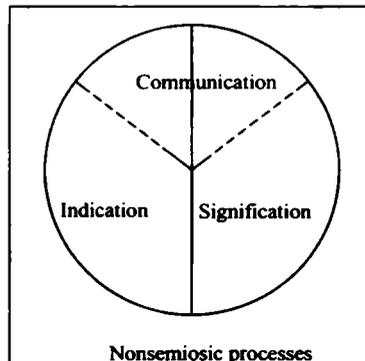
For our present purposes we need not go into further details, so let me summarize the types of semiosis I have introduced:

(1) If a semiosis involves a *sender* who produces a sign intentionally and openly in order to make an addressee receive a message, the resulting sign is a communicative sign, and if the addressee receives the message, the resulting process is called “*communication*”. ( Communication can occur without signifiers and signifieds, but not without senders or addressees. )

(2) If a semiosis involves a *code* ( i. e. , a standard connection between a signifier and a signified ), the sign in question is a signifying sign, and the resulting process is called “*signification*”. ( Signification can occur without senders and addressees, but not without signifiers or signifieds. )

(3) If a semiosis involves *no code*, the sign in question is an indicating sign, and the resulting process is called “*indication*”. ( Indication can occur without signifiers or signifieds and without senders or addressees, but not without signs, messages, or recipients. )

The relationship between communication, signification, and indication is illustrated in Figure 3. It shows that signifying signs and indicating signs may both occur outside communication, but both can be utilized by a sender in order to communicate messages.



**Fig. 3** The relations between communication, signification, and indication as types of semiosis.

Indicating signs are the basis of the most elementary sign processes in humans and primates, but they also play a role in the most complex sign processes, e. g., in communication through language, since they are needed by the communication partners to control correct understanding. In our greeting example for instance, there is a great difference between the polite but formal and implicit “Good morning” being said in passing without lowering one’s speed and without changing bodily orientation, and it being said by a person halting for a moment and turning to the addressee with a slight bow. Halting and turning here function as additional signs indicating personal esteem.

### 5. A semiotic conception of the humanities

As I hope to have made clear, the factor model of semiosis is a convenient tool for the analysis of various kinds of sign processes. But does it also cover the practical skills taught within the humanities?

My response to this question is yes; All these skills are directly related to the factor model of semiosis. And what is even more important: Each historical stage of the humanities appears to have been developed in order to overcome a specific problem which arose because some factor of semiosis was yet unknown or needed implementation.<sup>6</sup>

(1) Take the invention of writing systems and the practices of *reading* and *writing*. When you are standing near a building with another person at 11 o’clock in the morning and that person says to you “Let us meet in front of that building this time next week!”, you can easily infer his or her message merely by relying on your shared knowledge of the situation and by taking into account what this sentence signifies. However, imagine you are taking a walk along the riverbank of the Yangtze and you find a bottle lying there that contains a piece of paper on which you read “Let us meet

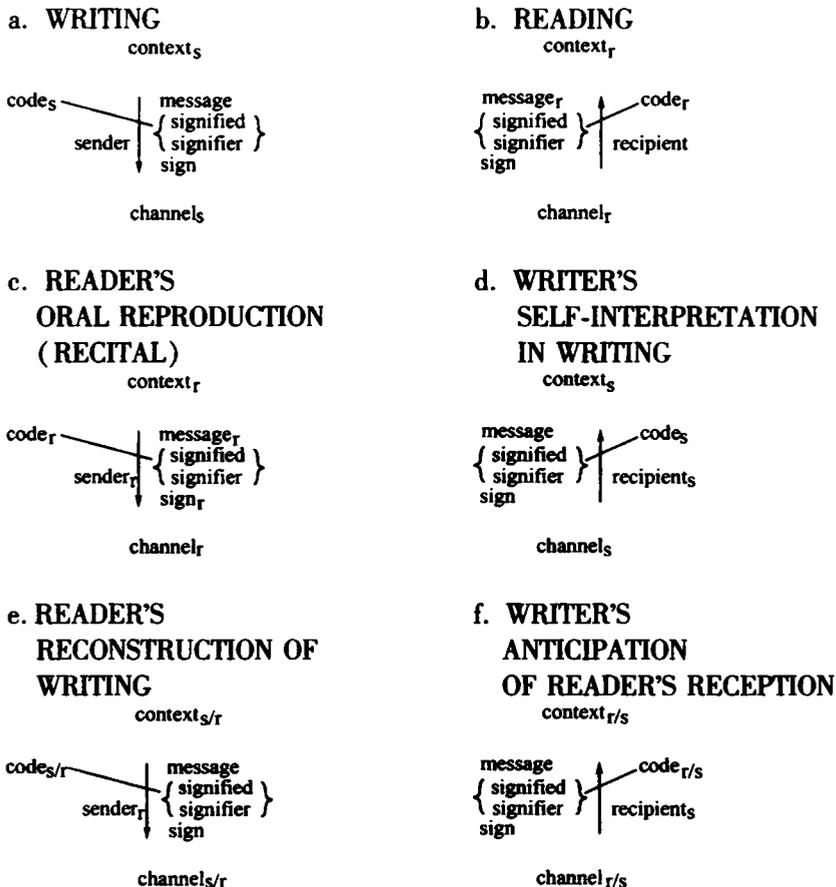
in front of that building this time next week!” Here you will not be able to infer a message, although you have perfectly well decoded the signified from the signifying sign: Without knowing the *sender* and without sharing the *context* (i. e., place and time) of the sign production you will be helpless. It will be impossible for you to make sense of the signified.

This example shows that writing is not just a way of conveying an intended message by producing the same signifieds as in an oral message (i. e., merely switching from the acoustic to the optical channel). On the contrary, in writing one must choose different signifiers in order to compensate for the fact that the writing context is hidden from the addressee. In our case, the sender must re-phrase the oral text, for instance, by writing “The sender suggests that Prof. Posner and he meet in front of the NNU Concert Hall on Saturday, November 22, at 11 o’clock”. If the addressee were forced to find out the place, time, and participants of this meeting himself without any additional indications, it might prove to be a very difficult, if not impossible task.

One of the first recognized aims of European humanities was to set up explicit principles guiding the addressee or recipient of written messages in reconstructing their context of production. This is made evident in the Platonic Dialogs by the discussions of the difference between names on the one hand and indexical morphemes and deictic expressions on the other.

Before the introduction of writing systems, the standard semiosis between humans had been face-to-face communication, which allowed them to use several channels (or sense modalities) simultaneously. In this form of communication both sender and addressee are present in the same situation, they can see, hear, smell, and touch the same objects and events, and use them as additional signs helping to infer the intended message from the verbal signifieds. When there is a danger of misunderstanding, the addressee can always ask and solve the problem on the spot.

The introduction of writing made the visual channel available for the transfer of verbal messages, but at the same time it changed the structure of our communication. Instead of being at the same place at the same time and sharing the situation with the addressee, the sender of written communication is usually in a different place, time, and situation when producing the message, compared with the place, time, and situation of the addressee when trying to recover that message. Technically speaking, *communication is split into two sign processes here*, taking place on two different channels and in two different contexts (see Figure 4 a-c).



**Fig. 4** Written communication

Learning to utilize written language thus demands not only learning a writing code (such as Chinese logograms, the Onmun script, or the alphabet), but also learning to adjust to an unknown situation in which the communication partner might be while producing (Fig. 4a), receiving (Fig. 4b), or reproducing (Fig. 4c) the message in question. The sender must anticipate a probable type of reception situation each time (channel and context), and the addressee must reconstruct a probable type of production situation for the message in question.

While in the production situation there is only a sender anticipating an addressee with a hypothetical decoding capacity and a probable channel and context of reception, in the reception situation there is only an addressee reconstructing a sender with a hypothetical encoding capacity and a probable channel and context of

production.

The consequences of this split in the original situation of face-to-face communication can hardly be overestimated. The competence of anticipating and of reconstructing another individual's behavior over longer periods of time distinguishes present-day humans from all other animals.

(2) The second skill that was analyzed and elaborated in the early tradition of the European humanities was *public speech*. In producing a public speech, one does not communicate with just one person, but confronts a large group of persons, which can develop its own dynamism. This group is usually structured into various types of official and of implicit addressees. Thus starting my lecture to you today, I had the choice of uttering one, several, or all of the following phrases:

“Dear President of the IASS,  
dear Dean of the School of Foreign Languages and Cultures of Nanjing Normal University,  
dear Vice-President of the Jiangsu Association of Philosophy and Social Sciences,  
dear Members of the Scientific Committee,  
dear Members of the Local Organizing Committee,  
dear Chinese colleagues,  
dear international guests,  
dear students. . .”

In such a situation, my and your attention would have shifted from one type of person present to the other while I spoke.

In semiotics one differentiates between

—the addressees, i. e., those whom the sender wants to reach and whom the sender wants to believe that he or she wants to reach them,

—the bystanders, i. e., those whom the sender wants to reach but whom the sender *doesn't want* to believe that he or she wants to reach them,

—the excluded ones, i. e., those whom the sender *doesn't* want to reach and whom the sender also *doesn't* want to believe that he or she wants to reach them,

—the eavesdroppers, i. e., those whom the sender *doesn't* want to reach and whom the sender *wants* to believe that he or she *doesn't* want to reach them, etc., and these role attributions can change within one and the same speech.

A similar multiple play can take place in the relationship between what a speaker *says* and what he or she *means* by it. Thus when in Shakespeare's drama *Julius Caesar* Brutus says “Julius Caesar is an honorable man”, he can either intend the addressees to believe that Caesar is honorable or that Caesar is not honorable, and he can try to achieve the latter understanding by repeating the sentence with an ironic intonation.

Training this kind of speaking behavior for public speeches presupposes the distinction between a message (here: "Julius Caesar is not honorable") and the signified of an utterance (here: "Julius Caesar is an honorable man"). And it is that distinction which plays a basic role in speeches with rhetorical figures.

What further complicates the situation in public speeches is that they are usually not given spontaneously, but are prepared by writing a manuscript, which is then often learned by heart and eventually reproduced in a manner as if it were formulated on the spot. At least that was the Roman habit.

These considerations make it understandable why the Roman teachers of public orators not only emphasized the difference between a sign and its context, like the Greeks, but were also keen on distinguishing between

—the proper meanings (*signifieds*) of words and their utterance meanings (*messages*),

—a *written* sign and its *spoken* articulation, as well as

—verbal and nonverbal *channels* of articulation.

By analyzing these differences ancient rhetoric contributed a great deal to the factor model of semiosis and thus became one of the most powerful doctrines of the humanities.

(3) After the Roman Empire fell in the 5th century AD, a new skill became important: For more and more people, Latin was becoming a foreign language, and using Latin texts required *translation*.

Translation can be oral or written. Oral translation requires splitting the standard situation of face-to-face communication in a new way: When person A wants to communicate with person B who does not master A's language code, A has to address an intermediary person C who acts both as a recipient of the signs produced by A and as a sender of the signs necessary for B to understand A's message. This can be described as a combination of two different sign processes. In contrast with writing and reading, which can both be regarded only as fragments of a communication process, the two components of oral translation both amount to full-grown face-to-face communication (except for translation performed in translation booths with headphones).

It is interesting to see how these two processes are connected in practice. There we find that although the speaker A has to reach the translator C in order to get his message transmitted to his communication partner B, he tends to apply verbal forms of direct address (such as the second person pronoun "you" or "thou") immediately to his conversation partner B who cannot understand them.

This is the reverse of certain feudal bureaucratic situations where the King used his Minister as an intermediary between himself and his subjects who came to the

Palace to ask for help. Thus the King of Prussia Frederic II had the habit of applying the second person pronoun (the German equivalent of “you”) to address the Minister and the third person pronoun (the German equivalent of “he” or “she”) to the petitioner. The King would, for instance, say to the Minister: “You may tell him, his petition is accepted”. Later-on this way of formulating was continued even when no Minister happened to be present. The King then turned directly to the petitioner, saying “His petition is accepted. He may now leave the Hall of Audience” (cf. Vennemann and Wagener 1970). This is how the third person singular pronoun (and its corresponding possessive pronoun) in fact acquired the function of a pronoun of address in early New High German. It continued to be applied to low class persons in Germany until long after the French revolution.

This story confirms that oral translation must be analyzed as being composed of two separate sign processes, which tend to merge in various degrees; and this also holds true for written translation. In translating written texts in the medieval monasteries, the reader and the translator tended to be the same person, and the signifiers in the text to be translated (i. e., the “holy words”) were so prominent that their *signifieds* were specified by writing the corresponding signifiers of the target language above them, but their *messages* were often left unexpressed.

In the same vain, early theoretical conceptions of translation tended to suppress certain factors of the two sign processes involved in the task. In oral translation the addressee of the translation B was confused with the addressee of the text to be translated (the translator C); in written translation the *signifieds* of the original text were confused with the *signifieds* of the translation, and both were mixed up with the original message. It took several centuries to understand that translation itself is an auxiliary sign process (involving the complete set of sign factors), which becomes necessary when the recipients B of a given sign complex cannot recover its message because they do not master its code, or do not retrieve its production situation.

(4) Translating in the medieval sense of merely transforming the signifiers of the writer’s code into signifiers familiar to the reader was no longer regarded as sufficient in Renaissance times, when the Humanists strived for a genuine understanding and complete reformulation of biblical as well as non-religious ancient texts. What had to be overcome was the difference in the life styles between Greek and Roman Antiquity and Italian Renaissance. This is what made a more systematic consideration of the contexts of sign production and sign reception necessary. Italian Humanists concentrated on reconstructing the unknown circumstances and habits of ancient life and on relocating them in the life of the citizens of an Italian city-state.

Only by informing about the ancient production contexts and by trying to create reception contexts similar to the ancient ones could translations of the Bible and of

classical literary and philosophical texts be made fully understandable. This required adding *commentaries* to the translations—a habit that had started in Scholasticism and was refined by Italian Humanists of the 15th and 16th and by philologists of the 18th and 19th centuries.

(5) The search for details of the life in which classical literary texts and works of the fine arts had originated also drew attention to the personality of the *author*. And it was in the age of Enlightenment that a controversy broke out about the sources of knowledge which a reader should use in trying to understand the author: Was the Renaissance interest in finding additional documents about the author's life and habits justified or was one to restrict one's interest to what was directly inferable from the given literary or philosophical work and general knowledge about the circumstances of life in the times when the work was produced? The prevailing answer to this question given by Enlightenment theorists was: The style of the work reveals everything one needs to know about the author. Such an interpretation of Buffon's aperçu "Le style est l'homme même" made literary and philosophical studies appear easy again.

This controversy raised the question whether the humanities should be conceived as being

—*analytical* disciplines, which primarily study works of literature, art, and philosophy and take into account additional knowledge only when this analysis does not succeed in making sense of the given signifiers, or whether the humanities should be

—*empirical* sciences, which primarily study a culture or historical epoch as such and obtain their knowledge from wherever they can get it.

The first option was facilitated by habits of writing that developed on the book market in the wake of the invention of printing. Not being personally acquainted with their readers, the authors developed systems of textual indicators to show them what kind of sender they had to imagine and what kind of addressee they were supposed to be (see Posner 1997). These circumstances generated analytical concepts such as

- “the author implicit in this work”,
- “the reader implicit in this work”,
- “the production and reception contexts implicit in this work”,
- “the communication channel implicit in this work”, and
- “the code implicit in this work”.

It was sometimes hard to distinguish these concepts from those of the historically real authors, readers, contexts, and channels as well as the historically valid codes.

(6) The problem of which type of knowledge should be the basis for the skills taught in the framework of the humanities became very prominent in the discussions of the 19th and 20th centuries. The previous five conceptions of the humanities had

limited their task to developing and analyzing practical skills such as reading and writing, making public speeches, translating the Holy Scriptures, commenting on literature and the fine arts, and understanding authors. The following three conceptions were more abstract; they set themselves the task of studying the *conditions of the possibility* of such skills. Friedrich Schleiermacher (1768—1834), Wilhelm Dilthey (1833—1911), and Hans-Georg Gadamer (1900—2001) took up an idea from the Renaissance in calling this study “*hermeneutics*”. They saw the basis of all humanities in there being human subjects who strive to understand each other and are equipped with the means required to achieve this understanding.

Dilthey assumed that understanding another person consists in reconstructing that other person’s internal experiences; and he claimed that those are accessible through the analysis of their external expressions. Dilthey and his followers distinguished various types of such expressions, which we can, for our present purposes, classify into artifacts and institutions:

—Artifacts are the material results of human behavior such as bodily expression, action, and verbal communication. They include the products of human work such as tools, machines, and buildings, which signify their purpose through their form. And this is also true of works of literature, music, the fine arts and of scientific and religious texts.

—Institutions are forms of organization of social life such as the family, the school, the church, the law court, the clinic, the theater. They signify their purpose through the behavior of their members, especially that which occurs in rituals and other collective manifestations.

Dilthey insisted that it is impossible for a person to perceive or understand another person’s internal experiences directly. According to him, understanding is based on the interpretation of specific properties of a person’s artifacts and institutions.

This is so even for self-understanding: We can only know ourselves by interpreting the results of our own behavior and the behavior of the other members of our institutions.

Further, it also applies to institutions trying to understand persons or other institutions or themselves. In this case we have to do with collective understanding, and that can only occur in an institution which has some objectivations of the person, of the other institution, or of itself available which lend themselves to interpretation.

These considerations show that understanding in the sense of Dilthey coincides with interpreting in the framework of the factor model of semiosis. Interpretation there takes place

—partly by drawing *ad hoc* inferences from a given sign event, as in indication,

and

—partly by means of a code which provides sign forms (signifiers) for the perception of a sign event as well as correlated meanings (signifieds) for its message, as in signification,

and both types of interpretation can be intended by a sign producer, as in communication.

Dilthey summarized his approach by formulating that the general condition of the possibility of the skills taught in the humanities is *the human spirit* and its ability to understand itself by interpreting its own external expressions. If you have followed my analysis and are willing to regard the external expressions of the human spirit as either indicating or signifying or communicative signs, then understanding in the sense of Dilthey becomes a *sign process* and a human spirit is nothing but a *sign user* who produces and receives signs which carry messages about himself or herself and other persons.

With this semiotic explication of the highly metaphysical and metaphorically used term “human spirit” we have shown that not only the conceptions of the humanities up to the Enlightenment, but also the conception of German Idealism are all implicitly based on sign theory.

(7) What remains to be discussed is the skill of *understanding and comparing entire human cultures*. Does such a comparison also have a semiotic basis? Let me summarize here the answer for which I have argued elsewhere (see Posner 1989 and 2004). All human cultures are semiotic entities of the following kind: Each culture consists of

—a set of sign users belonging to overlapping institutions which constitute a society,

—a set of signs which the sign users produce as artifacts that constitute a civilization, and

—a set of codes which the sign users need in order to deal with their society and civilization, the codes constituting their mentality.

In this approach all central concepts necessary to characterize a culture are semiotically based.

Understanding a given culture is therefore equivalent to analyzing its sign processes. Moreover, comparing different cultures is equivalent to comparing their sign processes on the three levels of society, civilization, and mentality—which amounts to comparing the sign users, signs, and codes of the cultures concerned.

(8) But how does globalization with its emphasis on the *media* and on *media studies* fit into this picture? It would be wrong to conceive of a medium as a black box on the same level as the factors of semiosis specified in Figure 1. Media studies can

only fulfill their task if they analyze the intricate combinations of restrictions on the sign factors by which a medium is defined. Thus a book as a medium is characterized by a set of factors in which

—the *sign* matter consists of sheets of paper ( or papyrus or parchment ) which are bound together in a certain order, to be perceived through the optical channel within air as contact matter,

—the *signifiers* are restricted to patterns on the sheets which belong to verbal or pictorial *codes* ( or formal languages ) ,

—the *sign users* include an open set of human *recipients* who are not co-present and typically do not know each other, as well as one or more human *senders* who are usually absent from the reception process, and

—the *context* is one of writing, typing, or printing and of reading, i. e., scanning with the eyes.

In contrast, a pop music concert uses

—*sign* matter which consists of simultaneous sounds ( on the acoustic channel ) and views ( on the optical channel ) within the contact matter of air, and

—*signifiers* which belong to the text format of songs applying the codes of the English language, Western gestures, and tonal music;

—the *sign users* include one or several human *senders* who are co-present and an open set of human *recipients* who are also co-present but for the most part do not know each other and whose number can be increased by others listening or watching via an electronic channel; and

—the *context* is one of dancing, drinking, and singing.

The special factor constellation of the pop music concert predisposes it for an emotionally-charged, generally understandable *message*, which can provide every individual in a large audience with a feeling of belonging, while the factor constellation of the book is less specialized concerning its messages.

As these examples show, media are semiotically well-structured constellations of sign factors, and their differences and specializations can all be covered by the application of semiotic concepts. This is also true for the computational telecommunications and the channels and messages which are presently being developed for sign processes over global distances.

**Table 3: Sign factors, professions, and disciplines treated in the European humanities**

	AGE	SIGN FACTORS	PROFESSION	BASIC DISCIPLINE
1	400 BC	Greece: sender and addressee	dialog partner	philosophy
2	100 AD	Rome: signifiers	orator rhetorician	rhetoric
3	500 AD	Middle Ages: signifieds	translator annotator	grammar
4	1400 AD	Renaissance: context	commentator interpreter	hermeneutics
5	1700 AD	Enlightenment: virtual vs real senders and addressees	essay writer stylist	stylistics
6	1800 AD	Romanticism: artifacts (sign complexes, texts)	philologist historian	philology etymology history
7	1900 AD	Imperialism: society civilization mentality	traveler tourist	comparative literature
8	2000 AD	Globalism: channels and messages	media specialist knowledge dealer	computational telecommunications

## 6. The humanities conceived as human sciences

With that answer I have reached the end of this programmatic lecture. I hope to have shown the following:

(1) The subject matter, terminology, and training goals of the humanities in each of their European versions can be fully reconstructed within the theoretical framework of semiotics.

(2) If the humanities do not limit themselves to developing rules for an adequate sign behavior of humans, but also take on the task of studying the conditions of the possibility of these rules, they will have a chance to overcome their traditional status of being merely arts and will eventually become sciences.

(3) It will then make sense to conceive of the humanities as human sciences and

of semiotics as their theoretical basis.

### Notes

1. For an explication of the concepts of culture, institution and society, artifact and civilization, mentifact and mentality see Posner 2004.
2. This is one of the main tasks of cultural semiotics; see Posner 2004.
3. See the publications of Windelband 1878—1880, Rickert 1910, and Cassirer 1923—1929.
4. See Berelson 1952 and McLuhan 1962 as well as 1964.
5. Parts of the examples used in the following elucidations are taken from Posner 1989: 245ff.
6. For detailed analyses of the interaction between the humanities and the media technologies since the Renaissance see Goody 1987, Giesecke 1991 as well as Briggs and Burke 2002.

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