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## **THE ROLE AND PATTERNS OF NETWORKING IN KNOWLEDGE SOCIETIES**

*The social structure of modern societies is analogous to machines and their components in the industrial age. This concept is based on Descartes' division of the world into two, strictly separated parts: res cogitans and res extensa. In this paradigm, even thinking is seen as a brain product. This functioning pattern of modern society is questioned in post-modern, knowledge societies. Networking in knowledge societies is not just related to functioning within a system of res extensa, it can be used to create res cogitans through community development of knowledge that automatically re-shapes the understanding of our world.*

**Keywords:** *patterns of networking, knowledge societies, community, modernity, post-modernity.*

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## **РОЛЬ И ПАТТЕРНЫ ФУНКЦИОНИРОВАНИЯ СЕТЕЙ В ОБЩЕСТВАХ ЗНАНИЯ**

*Социальная структура обществ модерна аналогична машинам индустриальной эпохи и их компонентам. Эта концепция базируется на декартовском разделении мира на две строго разделенные части res cogitans и res extensa. В данной парадигме даже мышление описывается как продукт функционирования мозга. Этот функциональный паттерн общества модерна ставится под вопрос в обществах постмодерна — обществах знания. Сетевая деятельность в обществах знания может уже не ограничиваться функционированием в системе res extensa, но использоваться для создания системы res cogitans через развитие знания в сообществах. Это знание автоматически трансформирует представления о мире.*

**Ключевые слова:** *паттерны функционирования сетей, общества знания, сообщество, модерн, постмодерн.*

### The Concept of Modernity

Our modern world is based on a concept that was developed in the 17th century. René Descartes (1596–1650) considered that the whole world is a world of *things* that are divided into two strictly separated sets: *res extensa* and *res cogitans*: ‘things that are extended’ and ‘things that think’. In this paradigm, even thinking is seen as a brain product (Descartes 1977: 141). Today, at least most brain researchers are still convinced and try to substantiate that thinking is a product of purely physico-chemical processes.

Descartes thought and indicated that the pineal gland (“cette glande”), as the centre of the brain — the only organ in the brain that is not separated in two parts — is the organ that serves as an interface between both partial worlds and converts them into each other (Descartes 1996: 62–63). This assumption was later questioned and rejected. The most cautious scientists in this regard were the behaviorists. From their point of view, the brain is just a ‘black box’. Behaviorists like Ivan P. Pavlov (1849–1936) are convinced that the causal nexus between ‘stimulus’ and ‘response’ can and should be researched without knowing about the working of the brain, or how it functions.

Isaac Newton’s (1642–1726) classical mechanics presented in *Philosophiae Naturalis Principia Mathematica* formed the natural scientific basis of the conception of modernity. His ‘philosophical’ work became the model for the mechanistic way of thinking in Western sciences and societies. In combination with Gottfried W. Leibniz’ (1646–1716) statement that ‘our world is the best of all possible worlds’ (Leibniz 1968: 101), scientists, and later on most ordinary people, believed in an evolutionary process of technical improvement. Technical progress was seen as a way to overcome all problems and come close to eternal life one day.

In addition, philosophers of history like Auguste I. M. F. X. Comte (1798–1857), Georg W. F. Hegel (1770–1831) and Karl H. Marx (1818–1883) suggested that we should view the world as a dynamic happening that progresses. But their assumption of a progress ‘in stages’ stands in contrast to the idea of continuation as expressed by the sentence ‘*natura non facit saltus*’. Since Aristotle (384 BC–322 BC), Western scientists have tended to the conviction of linear movement. This approach was still an essential element of the rationalistic concepts of Descartes (principle of God-given functionality) and Leibniz (principle of God-given pre-determined, ‘pre-stabilized harmony’). Even non-rationalists like Charles R. Darwin (1809–1882) still believed in a continuous progress of life — based on natural selection, as worked out in his *Origin of Species*.

The countermovement to the optimistic belief in progress started relatively late. Arthur Schopenhauer (1788–1860) tried to show in his dissertation *On the Fourfold Root of the Principle of Sufficient Reason* that we have to differentiate between four forms of the causal nexus. Then in his major work *The World as Will and Representation* he unfolded his pessimistic meta-physical concept. In his belief, our causal structured world is the representation, the surface, of a ‘blind will’. Because of its blindness, the will creates a causal structured world of suffering and pain. Schopenhauer counters the rationalistic optimism (of Leibniz) with his *ir*-rationalistic pessimism. Samuel Ph. Huntington (1927–2008) can be seen as one of the latest of Schopenhauer’s followers. His book *The Clash of Civilizations and the Remaking of World Order* intends to show that individuals and nations as well as cultures are in conflict constantly. Nevertheless,

this idea is not new. In the year that the First World War ended Oswald Spengler (1880-1936) already predicted *The Decline of the West*.

### **The Paradigm Change**

The greatest shock for the mechanistic understanding of the world happened in the beginning of the 20th century. The mechanistic thinking was questioned by two theories: the quantum theory and the theory of relativity. On the one hand, the discovery that light consists of photons that behave sometimes like waves and sometimes like corpuscles was and still is incompatible with the deterministic mechanics. Microcosmic particles behave ambiguously. As long as we don't look to check, any object at the sub-atomic level is in a 'superposition' that means that "it is actually in all possible states simultaneously" (Kim 2012). On the other hand, Albert Einstein (1879–1955) showed (in *Does the Inertia of a Body depend upon its Energy Content?*) that matter and radiation can transform into one another. So, both theories suggest that microcosm and macrocosm are ambiguously, but differently, structured.

In consequence of quantum theory and the theory of relativity, the modern approach of epistemology has to be modified. We do not live in two separated worlds — the world of thoughts and the world of matter — as Descartes assumed, nor is the structure of both worlds absolutely identical. Rather the structures of both sets of the world are 'partially identical', as Nicolai Hartmann (1882–1950) worked out in his *The Insight in the Light of Ontology* (Hartmann 1982: 25). The categories of cognition (*Erkenntniskategorien*) and the categories of being (*Seinskategorien*) are different. But the categories of cognition are a product of evolution. Our categories of understanding are categories that human beings developed to enable us to live and to reflect on our lives and the world we live in. Our categories of understanding have to be in harmony with the categories of being. Otherwise we could not survive. Our categories of understanding assist our survival (and are not developed to simply recognize the structures of world(s) as they are). We do not see atoms and their clusters: we see *real* objects. Categorization of objects into atoms and their clusters promotes our understanding of real objects.

Quantum theory and the theory of relativity are incompatible, however both theories are persuasive against making purely objective statements about matter. Werner K. Heisenberg (1901–1976) formulates 'principle of uncertainty' as being the interdependence between subject and object. The result of a measurement depends on the intention of measurement. The aim influences the result. We cannot measure subject and object independently. Subject and object interact in such a way that we cannot measure different physical properties precisely at the same time. The principle of uncertainty expresses this issue mathematically.

Einstein showed in *On the Electrodynamics of Moving Bodies* that the perception of velocity is relative to the perspective of the beholder. Constant velocity is perceived by oneself as immobility. The perception of 'length' and 'distance' is affected in similar ways from the perspective of an outside observer. It seems that the size of an object begins to shrink in the direction of its motion if the object travels faster than the observer.

This interdependence between subject and object was discovered not only by physicists, but also by psychologists, particularly *gestalt* psychologists like Max Wertheimer (1880–1943). They found out that perception is an act of interpretation. According to Wertheimer ‘the whole must be more than the sum of its parts’. We always tend to see *Gestalten*, objects instead of particularities and that without further reflection. Optical illusions show that we see whatever we see always in its context. We see objects in their relationship to other things. A circle surrounded by smaller circles seems bigger; and the same circle seems smaller, when it is surrounded by bigger ones. Missing links are automatically amended in order to see a whole. Even spots in black and white are grouped to objects and we identify their spatial relationship.

It is important to stress these findings of the quantum theory and other actual research as they indicate that matter is not structured in the way our perception tells us. According to Anton Zeilinger (born in 1945) all matter consists of nothing else than a limited number of (sub)-atom particles plus information. The information, how the particles are ordered, makes the differences between things, even at the fundamental micro-cosmos level of matter: “*Information is the fundamental component of the universe*” (Zeilinger 2007: 73).

### On the Way to Knowledge Societies

Even in antiquity, *knowledge* was attributed great importance. Aristotle started his *Metaphysics* with the statement: “All people intend to acquire knowledge by nature” (Aristotle, 980a). Modern times can be characterized by the primacy of *labor* as the main factor of production. But in post-modern times labor loses its importance to the extent that *knowledge* gains power instead again. This paradigm shift influences and changes the way individuals, people and societies interact.

In the beginning of modern times Leibniz developed a model called *Monadology*. According to it each *monad* is autonomous, but has its own place in the system and functions in accordance with the system’s requirements (Leibniz, 1982: 54). The ideal of an industrial economy is a plant of robots, machines that fulfill their tasks precisely, perfectly and without output-reducing stops such as eating, drinking, sleeping and bad habits like smoking. Modern economies are planned, structured and have to work like machines, effectively and efficiently. This approach is applied to modern societies, too. They became part of the economic game. Individuals and their families became more and more dependent on paid labor. Human beings had to give in to the dictates of the industrial, mechanical production. This has been captured by the band Pink Floyd in its satirical song *Welcome to the Machine*. In contrast, Ultravox’ *I want to be a Machine* seems to praise the regulated order of machine-like life — but of course from an imaginative point of view.

The mechanical demands were contrary to the ideals of the *Enlightenment*. The philosophers of the modern times had to emancipate themselves from first of all Christian theology. In the Middle Ages philosophy was regarded as *ancilla theologiae*, ‘handmaid of theology’. Duns J. Scotus (ca. 1266–1308) was (one of) the first who differentiated between the truth of theology (*fides*, faith) and the truth of science (*ratio*, reason). Nevertheless, the de-coupling of the sciences from theology took a long time

and was very painful, as was experienced during the inquisition processes and judgments against notable scientists.

Even the liberation of the individual in the occident took some time and cost many human lives. Immanuel Kant (1724–1804) defined enlightenment as the “man’s emergence from his self-imposed nonage” (Kant 2012: 1). This task is not finished and will never be finished; it is an ongoing task. Right now we can observe such a liberation process in the Arab countries. Even in Europe we recently witnessed such a process after the collapse of the Soviet Empire (Wirsching 2012).

Modernity is an ambivalent concept. On the one hand it focuses on functionality and considers the machine as an ideal. On the other hand, it questions authority and intends to free the individual from all kinds of ‘mechanical’ system requirements. Furthermore, previous and current liberation movements show that the individual needs support from other individuals in order to become strong and powerful. The labor movement in our industrial age is just one example. In Berlin on 25 January 1918 a strike call demanded:

“And now, workers, onward to battle! We have a powerful weapon in our hands — our class solidarity. Let us use this weapon. *All for one and one for all!* [...]”

All the wheels stand still

When your strong arm it wills.” (Call for a Mass Strike 2012: 2)

The quotation shows that workers see themselves as a powerful part of the machinery system. The concentration and reduction to functionality is not without some benefit. The modern industrial system needed labor. The more the system needs labor, the more worth labor has. There are three important conditions for a counter-movement against this compartmentalization of labor within the production system. These conditions are the feeling of life-threatening powerlessness in the individual, the importance of one or some pivotal events, and the conviction and belief in one’s own strengths.

The counter-movement of workers who wanted to increase the value of their labor accompanied the industrialization process right from the beginning. The weavers’ revolt in 1844 is an example of this. In order to combat the potential wage increases and to reduce costs, capitalists tried to substitute human labor by machine-made manufacturing. The more the automation process proceeded and the more human manual labor was substituted, the more labor lost its worth and brain work became the most important production factor.

On 24 March 2000 the European Council declared:

Europe is facing “a quantum shift resulting from globalisation and the challenges of a new knowledge-driven economy.” So, the European “Union has today set itself a *new strategic goal* for the next decade: *to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion.*” (Lisbon European Council 2012: 1)

The higher education reform, called *Bologna Process*, initiated in 1999, expresses this paradigm shift. According to the Bologna process, study programs are to be developed and implemented and be outcome-oriented, in a way that guarantees and

optimizes the creation of beforehand defined knowledge. Knowledge is defined as the outcome of learning processes. It can be intended as an end in itself, such as in theoretical knowledge or it may be applied knowledge which has economic and political perspectives and is in keeping with the aims of the European Union.

However, knowledge always is part of the world of all the things that are *res cogitans*. It is important to stress that only human beings can think; organizations and science itself do not think. As Martin Heidegger (1889–1976) provokingly said: *Wissenschaft denkt nicht*, ‘science does not think’ (Heidegger 1984: 4). Only human beings have access to “the world of knowledge” (Franken & Franken 2011: 31). On the one hand knowledge is “an individual construction developed from our interaction with the real world”; on the other hand “knowledge determines our action” as far as it enables us to “change the real world” (Franken & Franken 2011: 31).

### Networking in Post-Modern Knowledge Societies

Individuals are not autarkic, they group together to form societies. According to Aristotle, all communities aim to be self-sufficient or to be ‘completed autarky’. This is the reason why Aristotle defined a human being as “φύσει πολιτικὸν ζῷον”, ‘a *political* animal by nature’, an animal that lives in a πόλις, an animal that builds urban communities (Aristotle, 1253a). The second very essential feature of a human being is that it is a ζῷον λόγον ἔχον, a ‘living being that has language’ (ibid.). This feature is just a means to an end to indicate what is good and what is bad. The intellectual abilities serve morality and justice. In this regard, both Aristotle and Kant argued practical reason to be superior to theoretical reason.

Language has another important function that Aristotle did not discuss. Language connects people. Dante Alighieri (1265–1321) was probably the first poet who decided to publish in the *ordinary* Italian language of the day instead of Latin that only academics were able to read at that time. Dante wished that all *noble*-minded people and not just a few privileged should benefit from his literary work. Furthermore, if morality and justice are values of the whole society, people have to be addressed in the language they speak.

Aristotle’s approach is interesting, as he argued for the *natural* necessity of community building in our Western cultures. Since human beings are political animals by nature, they have to build communities to survive. However, he concentrated mainly on the πόλις side of politics: the life spent in public in order to serve for the benefit of the πόλις, the ‘(city-)state’, in contrast to the opposite, the life spent in private homes for just and only private purposes. Nevertheless, community building, even political community building, can serve different purposes. For instance, in the 17th century, the era of Early Humanism, language societies (*Sprachgesellschaften*) were built in clear segregation against the politically powerful — concentrating on *virtus* (nobility) and *ereditio* (reason). In some regard the early philosophical *schools*, most of all these of Plato (428–348 BC) and Aristotle, can be seen as their predecessor organizations. Although Plato and Aristotle were mostly interested in politics, they also stressed the importance of searching for knowledge. As already stated, Aristotle starts his *Metaphysics*: “Πάντες ἄνθρωποι τοῦ εἰδέναι ορέγονται φύσει”; ‘all men desire to

know by nature’ (Aristotle: 980a). Although this activity is considered as a part of our inner world (of thoughts expressed in language) that Plato and Aristotle call ψυχή, ‘psyche’, by both pre-Socratics and Socratics knowledge was seen as a means in the political discourse. Plato’s and Socrates’ fight against the Sophists and the trial against Socrates show the political dimension of knowledge very clearly. However, Plato still dreamed of the ideal that kings will become philosophers and vice versa (Plato: 473c-d) in order to combine and live the synthesis of political/practical and philosophical/theoretical expertise in *one* person, the political leader. The language societies of the early modern times instead, did not any longer believe in this ideal. These societies were built as *counter*-organizations *against* the leaders in power. Although these societies were very small and in the beginning politically less important, they encapsulated early forms of non-governmental organizations and political protest, an important step forward in the process of building European civil society (Sloterdijk 2010: 94-95; Garber 2012: N4).

Once again, it is important to stress that, in the tradition of Plato and Aristotle, the search for true knowledge is primordially intended by the search for the true nature of men (Plato: 174b) that is to engage himself in πόλις; to interact in a community. Thus, the desire to know is said to have an originally political dimension. This also becomes very clear by looking at Plato’s *allegory of the cave*. It is no coincidence that this allegory is worked out in *Politeia*, ‘State’ (Plato: 514a-517a) and not in one of the dialogues that focus on just true knowledge like *Theaitet*. Particularly for Plato, the desire for true knowledge essentially has an *enlightenment* component. The men in the cave, equal to all ordinary people, are prisoners, prisoned in their world of perception, caught, as Schopenhauer — one of Plato’s followers — said, in the *veil of Maya*. Their main task should be to *free* themselves to see the truth — if necessary by the support of philosophers as μᾶται, ‘midwives’, like Socrates who called himself a kind of midwife and was a child of a famous midwife (Plato: 149c). Kant’s statement that *enlightenment* means the ‘man’s emergence from his self-imposed nonage’ is based on Plato’s political legacy that men have to free themselves to see the truth, the ἰδέεσς, ‘ideas’, behind the world of sensual perception/representation.

### **The Role of Networking in Knowledge Societies**

The most influential change in modernity was the shift in focus from reasoning as *act* to knowledge as *product* of reasoning. Since Descartes, the whole world — with the exception of *res cogitans* — was seen as a machine(ry); and the experts who understand this machine(ry) and would be able to explain its mechanisms were seen as *masters of the universe*. They were seen as, and often felt themselves to be, new gods as they got the knowledge and the power to create a new, entire world of technology introduced and justified as of the benefit for men. In this regard, reasoning is seen as just the transcendental condition for the production of technological goods. Later on, in the industrial age the shift in focus from the act to the product of reasoning became a paradigm shift, when human activities and products were seen from a capitalist commodity perspective. Karl Marx (1818–1883) rightly begins his critique of capitalism in his book *Capital* “with the analysis of a commodity” (Marx 2005). If salability defines

the (use-)value of human activities, outcome and output are the dominant criterion of success. For instance, the principal change in the higher education policy of Europe, the Bologna Process that concentrates on a change from input to output oriented approach, was introduced by economic interests. So, it was suggested to see even education as a commodity. One might argue, that even in ancient Greek times the Sophists tried to market their μαθήματα, ‘knowledge’ (Plato 313e). However, the demand for the education they offered was limited. The more we change our societies to knowledge societies the more education is use-valued.

Today, in the beginning of a post-capitalist era we see what we produce not just as products. Most scientists agree that our actions influence what and how we measure and consequently our actions influence the findings of research. The worlds of *res cogitans* and *res extensae* appear to be interlinked. In this regard, truth is considered to be found exclusively through communication in scientific discourses and not in monadic solitude. Thus, objectivistic understanding of the nature of knowledge is replaced with inter-subjectivistic (Franken & Franken 2011: 39).

The role of knowledge in *lifeworld* has also varied over time. In ancient times the active life (*βίος πρακτικός*) was of prime importance. Even Socrates (469 BC–399 BC) who claimed to know just one thing: to know nothing, was seen, respected, tried and sentenced to death as a, first of all, *public* intellectual. In modernity however, knowledge was part of the contemplative life (*βίος θεωρητικός*). Descartes called his most influential book *Meditationes de prima philosophia*, ‘Meditations on First Philosophy’. In more contemporary times of late and post modernity, knowledge is valued as a tool for economic progress. Taught knowledge is first of all applied knowledge, but even so it is not applied to politics as it was in the classic Greek times. The primacy of public interest changed from politics to economy. In western countries of today higher education policies require that Bachelor study programs are to be designed in a way to make graduates *employable*. Knowledge is recognized mainly by the criteria of economic usability.

In spite of the application of knowledge to improve our way of life, there are limits to what economic and technological progress can do to optimize our living conditions. Sustainability, which incorporates the notion of maintaining resources for future generations, has to be in harmony with the uses of resources for contemporary improvements in living conditions and economic progress. Economic usability must be in harmony with sustainability demands. Without this we will totally destroy our own livelihood. As Heidegger worked out in his existential analysis of *Being and Time*, the structures of being-with (others) and being-in (the world), *Mit-sein* and *In-sein* (*in der Welt*), are the major, primordial existentials of being-there, *Da-sein* (Heidegger 1979: 114). Knowledge understood as economic and technological tool demands more and more careful consideration and — as it is believed to be intersubjective in nature — the only possible method for this consideration is community dialogue.

Networking becomes more and more important in our knowledge societies as it is a process whereby knowledge both theoretical and applied is managed in our communities. Knowledge is the basis to understand and shape the complexity of life in all its interactions. Nevertheless, knowledge is primarily implicit. It is an outcome of *res cogitans*. It must be made explicit mainly through language in order to make use of



it as a resource. Only in communication, and discourse with others can knowledge be transformed and further developed. Networking helps to structure the communication process of discourses. As human action is always intentional, networking enables people to get in contact with each other and build communities of common interest. In business for instance this approach is called *Communities of Practice* building.

### **Patterns of Networking in Knowledge Societies**

The simplest way to communicate over (short and) long distances is to use the Internet. Particularly in the Internet the establishment of platforms helps to build, manage and widen communication networks. Networks can be purely scientific, such as *Academia.edu*, or private, such as *Facebook*, or created for people who share a common interest, for example economy-interested professionals, who may use *Xing.com*.

The following case is a good example of how Internet platforms work. In 2011 in Germany we discussed the rise and fall of Karl-Theodor M. N. J. J. Ph. F. J. S. Freiherr von und zu Guttenberg, former Minister of Defense. On February 16 2011, the *Süddeutsche Zeitung* reported that he may have plagiarized his dissertation. One or two days later *GuttenPlag-Wiki* started its “collaborative documentation of the plagiarism” (GuttenPlag 2012). The institution building of this *wiki* is caused by the intention for *enlightenment*. The function of the *wiki* is to try to find out the truth. Searching for truth, however, is no longer a domain of just some single philosophers or scientists, as far as only a few men cannot fulfill this task. GuttenPlag therefore welcomes everyone to contribute. It does not pre-decide who is a peer and who is not. Only the outcomes and/or outputs count. The *wiki*’s ethical code of conduct states: all statements, “additions and amendments in this *wiki* are transparent and comprehensible at any time. Each change is logged” (GuttenPlag 2012). Until April 3 2011, in less than two months, *GuttenPlag* listed the enormous number of “1,218 plagiarised fragments out of 135 sources on 371 out of 393 pages (94.4 %) in 10,421 plagiarized lines (63.8 %)” (GuttenPlag 2012). This would not have been possible without the co-operation of hundreds of users. They formed a more or less anonymous body of researchers. The common aim of the team is not to make party political capital, but to ensure the scientific integrity of doctorates in Germany and to ensure that holders of doctorates are rigorous in their scientific work. To fulfill this task of enlightenment by the *wiki* was all the more urgent as the government tried to downplay the plagiarism as a venial sin.

The case shows how platforms have to operate in order to attract contributors and ensure their participation and commitment. The rules for participation and publication must be clear, simple and transparent and the intervention criteria of the editors and/or administrators are to be communicated in detail. Furthermore, these criteria must be target related and restricted to the level required to guarantee the quality, the achievement of outputs and outcomes. As no one can say that he is in possession of absolute truth, the search for truth is/should be of common interest and not be shunted to specialists. In this regard the pre-decision and selection of peers is questionable and should be avoided. Paul K. Feyerabend (1924–1994) was the first theoretist of science who proclaimed this approach in *Knowledge for Free Men*. According to him “the last

word is the arbitration award of the free citizens” and not of *experts* of whatever kind (Feyerabend 1980: 77). This means that networks should be organized in such a manner that participants could share common interests independently from any system of power status. The discourses within networks are to be set up *herrschaftsfrei*, ‘power-free’, as Jürgen Habermas says. Only the quality of arguments should count. The action-theoretical positions of Feyerabend and Habermas also coincide, as participation in discourses should have an enlightenment motive: according to them the intention of discourses should be to develop the communities in which they take place and, last but not least, the society as a whole. Socrates, once again, is the first who exemplarily behaved — at least as he is introduced in Plato’s dialogues.

In our late-capitalist times, however, not only knowledge but even networking has a commodity status. Particularly our professional relationships with others are often intended and seen from a perspective of usefulness and functionality. For instance, *Xing.com* is a network created to bring business people in contact with other business people in order to do business together. In this regard doing business is the main purpose. Private relationships that arise as a result of networking for professional and most likely business reasons tend to be subordinated and misused for such purposes. This of course conflicts with the concept of humanity. As Kant expressed in his *Grounding for the Metaphysics of Morals*, it is a categorical imperative to “Act so that you treat humanity, whether in your own person or in that of another, always as an end and never as a means only” (Kant 1785: 47). As each man is an individual he wishes to be valued equally and treated fairly in all the discourses he participates in. In the long run only those networks that guarantee this ethical standard will prosper.

### Conclusion

Knowledge takes over the primacy of labor with the paradigm shift from mainly rational contemplative individuality to partly rational action-oriented inter-subjectivity. As knowledge is an intangible asset, it cannot be ordered and evaluated easily in and from hierarchical structures/perspectives: it requires network communication in social communities. The Internet, as the simplest way to communicate in networks, defines the patterns of networking in the present-day knowledge societies. However, individuals hold knowledge unless or until they share their knowledge and/or feed it into organizational systems. If this does not happen, knowledge development is hindered. Meanwhile, individuals are more likely to engage in knowledge sharing and development processes when they feel secure and observe that all actions are transparent, their efforts are appreciated and their contributions are valued. Thus, to allow the development of knowledge in post-modern societies it is vital to provide Internet platforms of community networking and establish simple and clear rules of open participation.

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