

***Nous poietikos* as general intellect in the production of commons**

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Philotechnie - an old, forgotten idea¹

Philotechnie - the friendship with craft - is an old idea², but one which has not been much cultivated by the lovers of knowledge, by philosophers. Philosophers have forgotten what to do with their hands. Craftwork binds the three basic questions of *philotechnie*: What are things?, How are things like when they are in a good state? How can we produce them beautifully?, i.e. epistemic, ethical and aesthetic questions as practical challenge, as work; and as collaboration of head, heart and hands. Craftwork is, at its best, educative work. We can use it as a methodological mirror to cross-enlighten modern industrial labour and its three cousins - science, politics and the fine arts.

Modern craftspeople do not dip their hands into clay. They are producers who produce social situations in which all the three questions of *philotechnie* are posed and solved. To be an *expert* (i.e. a person wise through experience), knowing is not enough. The questions of truth, goodness and beauty, abstracted from craftwork, as a result of the first modern industrial production, have to be embedded back into everyone's labour again. This is the new poetics of communities - *poeta faber* – which we need in the industries based on knowledge and commons.³ It is then a negation of negation of traditional craft. A negation which "does not re-establish private property for the producer, but gives him individual property", a property, "which is proper to the proper *subject*"⁴, i.e. the general intellect of producing commons.

The classical roots

The *demiurge* - the public craftworker - was the very starting point of doing philosophy. In classical philosophy, *poiesis*, craft, the art of making things, posed a challenging conceptual problem: how to account for the fact that women and slaves engaged in craftwork that produces, makes visible, something new and unprecedented. This had to be explained away, demanding supermundane ideas (Plato) or the supernatural productive ability of nature (Aristotle). Otherwise there

¹ The main part of the essay has been published before in Finnish. Volanen, Matti Vesa, *Filoteknia, työ ja elämä* (in Finnish: *Philotechnie, work and life*) in J. Haukioja & J. Räikkä (eds.) *Elämän merkitys – filosofisia kirjoituksia elämästä* (in Finnish: *Meaning of life - Philosophical writings on life*). Turku: Unipress, 223–231, 2005.

² The expressions *polytechnique* and *philotechnique* are commonly used in the French-speaking world. The poly- and philotechnic ideas stem from the Napoleonic times when armies needed versatile engineers and technicians. The institutions of philotechnic associations have traditionally provided education in general subjects, technical matters, and art. In Swedish, the term *kunskap* conveys a wider meaning than the term *vetenskap*, which refers to natural sciences.

³ Volanen, Matti Vesa, *Filoteknia ja kysymys sivistävästä työstä* (in Finnish: *Philotechnie and the question of educative work*). Koulutuksen tutkimuslaitos, Jyväskylä: Yliopistopaino, 2006. Röder, Petra, *Poeta Faber. Der frühromantische poiesis-Gedanke und die idee der 'freien bewussten Tätigkeit' bei Karl Marx*, *Deutsche vierteljahrsschrift für Literaturwissenschaft und Geistesgeschichte*, 63, 521–546, 1989.

⁴ Marx, K. *Capital*, vol 1, 929. Nancy, Jean-Luc, *Communism, the Word*, Douzinas, Costas & Žižek Slavoj, *The idea of Communism*, Verso:London 149, 2010.

would have been no escaping the admission that slaves and women were giving birth to something that was non-divine and/or non-natural, in other words human. This was, naturally, beyond the pale in a slave society. Thus, it was precisely the possession of concepts, or, more precisely, the mastery of the linguistic articulation of concepts and the associated social practices that distinguished a free man from a slave. Craftspeople of those times had – as ever – thoughts with hands and hands that thought, that is abilities to make or craft things. For the purposes of making things, those concepts took the form of, and adopted a mode of, an existence in a *feel for* the making of an artefact. The associated concepts often lacked even an oral, let alone a written, expression. In those days craft was still mute.

The love of craft, *philotechnē*, has experienced a very different development than the love of knowledge, *philosophy*. In classical culture, the love of knowledge ennobled both the knowledge and the person possessing the knowledge, whereas the love of productive craft could either ennoble both the skill and the craftsman to divinity, or condemn them to slavery as products of nature. Hephaestus and Athena not only *philosophized* in their divine chambers atop Mount Olympus, but also *philotechnicized*. The *Iliad* (Books V, VIII, and XVIII) describes, for example, how the gates of heaven would open automatically when the divine chariots were approaching. Hephaestus, the god of blacksmiths, made tripods that moved themselves, *autómatoi*, in the residences of the gods. And these were not merely toys or divine hobbies since they were associated with the same nobility and divinity as the results from philosophizing, knowledge. They were divine high technology. Later, Plato used the expressions *philotechnēin*, *philótechnos* and *philotechnia* in various contexts.⁵

The question, asked by the lovers of knowledge, of the origins of knowledge was answered when an earthly, common craftsman was raised to heaven to become a divine *demiurge*. For both Plato and Aristotle, the basic metaphor for understanding philosophy, or the entire world, was craftsman-like production, not a lover of knowledge strolling in an olive grove.

Plato did not consider nature or material (*physis*) as the source of form and the direction of movement, i.e. life. They were brought to earthly life *ab extra* as the divine craftsman's (*demiurge's*) gift from the world of ideas. Aristotle, on the contrary, relied upon nature: it works like a craftsman. Nature has an inert mover, which is part of nature's own way of functioning. Nature produces the best results itself. Outside help is not needed because nature works like a *demiurge*, a craftsman, the source of life.⁶

Over time, *demiurge* became *theourge*, denoting someone who creates and produces from nothing, *ex nihilo*. Later, creationism generated theology, the study of a god.⁷ In our minds, we still have the image of God as a craftsman who worked six days and rested on the seventh. It was not until the Enlightenment and the modern era that

⁵ Bartels, K. *Wie die Murmeltiere murmeln lernten. 77 neue Wortgeschichten*. Kulturgeschichte der antiken Welt. Vol. 90. Mainz am Rhein: Philipp von Zabern, 2001.

⁶ Solmsen, F. *Nature as Craftsman in Greek Thought*. *Journal of the History of Ideas* 24, 473–496. 1963; Thomsen, D. *>Techne< als Metapher und als Begriff der sittlichen Einsicht*. in G. Bien, K.-H. Nusser & A. Pieper. *Praktische Philosophie*. Vol. 35. Freiburg/München: Karl Alber. 1990.; Cahoon, L.E. *The plurality of philosophical ends. Episteme, Praxis, Poiesis*. *Metaphilosophy* 26(3), 220–229, 1995.

⁷ Anton, J.P. *Theourgia – Demiourgia: A Controversial Issue in Hellenistic Thought and Religion* in R.T. Wallis (ed.), *Neoplatonism and Gnosticism*. New York: State University of New York Press, 9–32, 1992.

theology and knowledge, and with them the divine and the nature-based demiurge, were separated. However, let us not jump ahead of ourselves.

Philosophy did not examine craftsmanship for its own sake, from the inside, as the work of hands, and the condition of one's life. Such conditions were external, hypothetical, and given. They could only be understood by participation (*praxis/mimesis*), through poetry. The starting point for forming the concepts related to the understanding of the world and human life was referring to something that is not present directly, but through references (*theoria/sophia*), i.e. something that is expressed in educated discussions. Thus, philosophers failed to study the core of craftsmanship where concepts are tacitly formed through non-verbal experience, and where, therefore, the experience cannot be directly communicated to others.⁸ Craft was mute. The concepts of craftsmanship and craftwork were rooted in experience, which was rooted in the space, tools, and facilities in which it was performed. In order to recognize the concepts embedded in a tripod, one had to make them. The way for the earthly demiurge to structure the surrounding world was by changing it through production and thus revealing the potential beauty of the world (*poiesis/techne*).

Although the craft of production was, in many respects, mute at the time, it was also already a *method*, a process: from raw material to an end product, an artefact. Unlike knowledge, craft referred to something that was directly present: a situation, a realm, a workshop. This craft accumulated through situation-dependent experience as the relation between form and content. Understanding the world and life is not enough to produce and change the world. Everyone had to produce their own life. Production (*poiesis*), or slave labour, provided the foundation for both such development and the development of know-how (*theoria/poiesis*). When potters work clay, giving it a form, the potters themselves become *in-formed*: they learn what is possible and impossible with the various kinds of clays that they use. At the same time, they learn what is possible and impossible for themselves as craftsmen. Furthermore, through practice, they learn how to stretch these limits to serve their goals. Thus, the potter learns *by making*. It is not just about forming the images in one's mind (*Bildung*)⁹, but about forming oneself through forming the world – about the sense of life, having a hold on life and the world (*poiesis/mimesis*).

When building the work cycle, the craftsman has to ask no fewer than three questions: What are things? How are they when they are well? How can they be beautifully produced? He has to include three sets of concepts in the inner relationship: theory/inactivity (*skhole*)/epistemology; *praxis*/goodness/ethics; and *poiesis*/beauty/aesthetics. The craftsman describes, values, and changes the world in a beautiful manner, here and now. The methodology of craft, *philotechnia*, is the general study of changing the world. Essentially, craft is richer and more concrete than knowledge. It requires solving, one way or another, the interdependency between episthetics, ethics, and aesthetics. The solution has to be made while producing here and now yet in a generalizing and adequate manner.

A philotechnician constructs the *theory/praxis/poiesis* relation on the basis of *poiesis*: the aim is to produce something beautiful from something already existing, instead of *ex nihilo*. Thus, episthetics, ethics, and aesthetics are built-in conditions of work, often without a verbal form and attached to a certain time and place: the true, good,

⁸ For a comprehensive overview on craftsmanship, see e.g. Hägermann, D. & Schneider, H. *Propyläen Technikgeschichte*. Bd. 1: *Landbau und Handwerk 750 v. Chr. – 1000 n. Chr.* Berlin: Ullstein Buchverlag, 1997.

⁹ This is Meister Eckhart's model which links the image and the process of forming. The idea is that humans become images of God through self-formation.

and beautiful in a given situation.

This construction requires reliance on nature. Craft¹⁰ meant bringing out the true, good, and beautiful in accordance with nature. Nature works the same way as the craftsman does, it works with him. To produce is to produce together. However, a craftsman can never tell whether or not nature always works for him. He can only trust in nature's promise of the true, good, and beautiful. Thus, craft is about *mythos*, or linking processes together¹¹; it is also about building the place for production, such as the smithy; and about power, trust, and happiness; work and life, working life. The materialization of the craftsman's sense of situation (*poiesis/mimesis*) in the artefact verifies *mythos* and it appears as the feeling of good life management, deliverance, and happiness.

The philotechnical methodology forms the realm or cycle where the classical understanding about the changing of the world occurs, i.e. the causalities involved in the change. Consider the example of a hammer. From the Aristotelian perspective¹², the reason for the hammer's existence is fourfold: 1) *the material reason*, i.e. the iron it is made of, 2) *the formal reason*, i.e. the form the iron takes in the hammer, 3) *the relevance*, i.e. what the hammer was made for, and 4) *the contributing reason*, i.e. the craftsman who made the hammer. Thus, the reasons for the hammer's existence are embedded in the hammer and its usage: the reasons are revealed by examining its place in the system of production. Defining the reasons is a matter of *deduction*, or reasoning, but only within this realm of activities. Its constitution did not require divine ideas or nature's inner demiurge, but a generalization based on one's own experience of how nature works in various situations. Thus, a craft, or a professional skill, is a fundamental skill. A hammer is not just a hammer since it plays a part (*Beispiel*) in the constitution of life.

The Birth of the Modern Era

The theoretical foundations of the modern era lie deep in the Middle Ages.¹³ At that time, scholasticism sought desperately to find a synthesis between rationality and religion, philosophy and theology. Thomas Aquinas (1225–1274) was one of the developers of the synthesis. He supposed that because God is almighty, his absolute power (*potentia absoluta*) cannot be limited by the finite human rationality. Thus, Aquinas considered that God had, by exercising his absolute power, voluntarily restricted his ordained power (*potentia ordinata*) in a manner that was understandable to humans. William of Ockham (1285–1349) broke this synthesis by claiming that the only reason for God to create was his own. God cannot be confined even to his human creations, and, therefore, he has an absolute will. Thus, every order can be broken or reconstructed at any given moment. Hence, theology is more powerful than philosophy, and nature cannot be trusted to support reason.

Thereafter, the breakdown of the domination of theology began to show elsewhere. In Nicolas of Cusa's (1401–1464) 1450 dialogue between a layman (*idiotus*), a philosopher, and a rhetorician the craftwork of a wooden spoon is discussed. To the layman, the making of the spoon meant self-comprehension and self-esteem. The

¹⁰ *Craft* < to connect; *skill* < to separate

¹¹ Kitto, H.D.F. *Poiesis: Structure and Thought*. Berkeley: University of California Press. Date needed. I think it may be 1967.

¹² McCullough, G. *Heidegger, Augustine, and Poiesis*. *Theology Today* 59(1), 21–38, 2002.

¹³ In this section, I partly follow the interpretation of Gillespie, M. *Nihilism before Nietzsche*. Chicago: University of Chicago Press, 1995, and McCullough, G. *Heidegger, Augustine, and Poiesis*. *Theology Today* 59(1), 21–38, 2002.

spoon could not have been an imitation of nature (*imitatur naturam*). It was not a triumph of craft. However, it was something that was absolutely new with no pre-existing model found in nature. Thus, our layman did not observe nature or the cosmos to find his own place in them. Instead, he observed the world of humans' own achievements (*solo humana arte*), a world which is produced solely by humans themselves. According to Hans Blumenberg¹⁴, Cusa's dialogue was among the first to describe, in a positive manner, the imitation of nature and/or God giving place to a human craft. The break was not started by art or science, which, after all, share the same origin with theology. A whole new generation of thinkers was needed: Bacon (1561–1626), Galilei (1564–1642), and Descartes (1596–1650) came to fill the void. Nominalism's rigorous thesis about God's absolute will destroyed the trust in nature and its rationality. The frightening and oppressing irrationality had to be controlled in some way.

René Descartes sought and found what seemed to him a solid foundation for human freedom and the management of nature: *ego cogito ergo sum*. When nature does not have a divine spirit, humans can subjugate it to their power. Thus, the idea of God's absolute power declined: God became a *being*, separate from humans and life. As a separate being not dependent on the self, God can be examined and the question of God's existence can be approached. The result: "that hypothesis I do not need" (Laplace). When nature was no longer rational and God was declared useless, building a deductive world order and conception of life was no longer feasible. Bacon made the method of study radically inductive: understanding the world began from material reality rather than from rational principles. Nature thereby gives the researcher and research feedback that must be heeded. Thus, a new smithy, a research laboratory, and a craftsman were created. The researcher of nature became a self-denying craftsman in two ways: first, he placed himself conceptually outside nature, in a universal position, as a god in relation to nature, outside human communities (*theoria/praxis*). Second, he did not trust himself as an observer, for he had to discount his own subjective experience. Observing had to be dedicated to standardized research equipment and situations that are not dependent on the researcher. Life had the same fate as God. Life resulting from work became the object for research and came to be over-analyzed. The relationship to life remained only via equipment, not by feel (*theoria/poiesis*). Only measurable force and movement were left from nature's feedback, *in-form*. Truthfulness was conceptualized in relation to movement and force, and truth shrank to reality, it was no longer a fact (*Tatsache*). This reality has only an external connection to goodness and beauty. A laboratory links theory, inactivity, and *poiesis* together without having an internal relationship with the target, nature: "We must put nature on the rack and force her to answer our questions" (Bacon).

Later, the modern era saw the development of nation states and capitalism. The downside of national science and art projects was the forced deformation of craftsmanship into paid work. The only thing left from craftwork was the use of force. Craftsmen and the rural poor became the *labour force* for the industrial system. For most people, life happened outside of work. At the same time, national institutions were created for science, art, and politics – as well as for the labour force and labour market.

¹⁴ Blumenberg, Hans, *Nachahmung der Natur. Zur Vorgeschichte der Idee des schöpferischen Menschen (The imitation of nature. On the prehistory of the idea of creative man)*. Studium Generale, 10, 266–283, 1957.

The national bourgeoisie considered paid work as the exterior condition of their own existence (*praxis/mimesis*). The art favoured by the bourgeoisie detached itself institutionally from craft. The production of meanings, as *presentational* goodness and beauty, began craftwork-like and in the spirit of romanticism. The national golden ages of art displayed already forgotten peoples in art galleries and, later, in museums. Soon the presentational goodness and beauty ceased to refer to a target, and Pandora's box of semantics was opened: the presentational began referring to another presentation. Nature, the people, and life pulled away from the realm of experience. They were superseded by languages, symbols, and meanings (*Bedeutung*) without experience (*Sinn*), or experience without meanings. Most importantly, the production of meanings rapidly became part of industrial activities where craftsmanship no longer had a place. This was the beginning of the golden age of the cultural industry.

Breaking the Shackles of the Modern Era

If the classical economy was based on agriculture and hand tools, the first modern economy was based on machines and machinery. Later, machines learned to use languages and languages learned to operate machines, and thus, languages have become a central instrument for production. A *texture* of machinery and languages has been formed: machines cannot survive without languages, nor can languages survive without machines. Instruments of the activities and communication of working life are becoming intertwined. They are becoming the stages of a single work process. In recent years, the concept of work has included the requirement of learning – learning at work. Thus, it has now become possible, in principle, to restore the three fundamental elements of craftsmanship to work: the productive inactivity, the experimental and detective play, and the beauty of production. This would require restructuring paid work from the perspective of the economy of time¹⁵.

The fluency of the manufacturing processes has become the central, sometimes almost the only, criterion for the modernization of labour. Thus, the epistemic, ethical, and aesthetic concerns of work remain outside the manufacturing process. Their methodological exclusion from work eliminates the possibility to evaluate paid work, which is a concept generated by industrialization, from a historical, and, thereby, a future perspective.

Along with the technical development, the subject of production has, in many respects, been transformed to accompany the manufacturing process, to direct the production, to become an *expert*. Mere knowledge is not enough for such expertise. As part of globalization, economic life has witnessed the division of ownership, companies and factories, leading them to becoming each others' external conditions. Furthermore, such a deepening division seems to reconstruct the relationship between paid work and entrepreneurship in a fundamental manner.¹⁶

Craftwork as methodological mirror

Examining the question of the form of work requires craftsmanship as a methodological mirror. It is not about romanticizing or glorifying craftsmanship, but taking the entire human, with head, hands, and heart, into account in the structuring of work. In European cultural history, the duration and richness of craftsmanship, in

¹⁵ Marx, Karl, *Grundrisse der Kritik der politischen Ökonomie*. Berlin: Dietz, 1974.

¹⁶ For a look into the ongoing debate on the matter, see e.g. Gorz, A. *Wissen, Wert und Kapital. Zur Kritik der Wissensökonomie*. Zurich: Rotpunktverlag, 2004, Wolf, H. *Arbeit und Autonomie. Ein Versuch über Widersprüche und Metamorphosen kapitalistischer Produktion*. Münster: Verlag Westfälisches Dampfboot, 1999. Haug, W.F. *High-Tech-Kapitalismus. Analysen zu Produktionsweise, Arbeit, Sexualität, Krieg und Hegemonie*. Hamburg: Argument, 2003, and Schumann, M. *Metamorphosen von Industriearbeit und Arbeiterbewusstsein*. Hamburg: VSA-Verlag, 2003.

comparison to the short and austere tradition of paid industrial work, has an unmatched history. The latter cannot be considered rich, at least not from the worker's point of view.

Using craftsmanship as a methodological mirror brings epistemic, ethical, and aesthetic challenges to the methodological centre of the development of work, thus making them the internal conditions of such development. The economy of time becomes fundamental in the development of work in regard to individual tasks and the whole work community, as well as the distribution of work within the economy in question. A radical development programme of work is also a programme that breaks the abstract fluency of production. It is a programme that aims to thoroughly plant the true, good, and beautiful into work through reconstruction of the economy of time. *Time* needs to be reclaimed, for everything else depends on it. For philosophy and *philotechné*, all this means at least one thing: if they and the institutions supporting them, i.e. universities and other institutions of higher education, fail to defend, support, and promote the educating nature of all work, or educating work, they cannot continue as the promoters of education and humanity.

Theory, praxis, poiesis

As we have seen, modern industrial labour has its historical roots in the classical triad of *theorie/praxis/poiesis* (as spaces: *skhole/polis/oikos*) and in the three forms of reason (*nous theoretikos/praktikos/poetikos*).¹⁷ Synthesis between head and hand – *Being and Making, theorie and poiesis* – leaves out the third element, the heart, questions of *Doing, praxis and ethics*. Synthesis between head and heart - theory and praxis - without hands is also abstract. We need to pose *three* questions to open up the horizon of *philotechné*: What are things? (theory), how are they when they are good (ethics), and how could we produce them according to the laws of beauty (aesthetics). This tradition of *philotechné*, love of craft, is in fact older than the friendship for knowledge (philosophy), but its history is part of the history of craftwork. The history of craftwork is a fundamental part of the European tradition of work. In this tradition work is not a question of an occupation but of a vocation.

Nevertheless, even at that time craft was already a method, a means, a route from raw materials to making a product, an artefact. Unlike knowledge, craft refers to something that is immediately present, to a situation, a sphere of activity, a workshop. Where a knower is faced with a single question, i.e. How are things?, masters of a craft must ask themselves no fewer than three questions as they construct their sphere of activity: What are things? How are they when they are made well? How can they be made artfully? Thus, the master of a craft describes, evaluates, and changes the world in a beautiful manner, here and now, but in what is nevertheless a valid and universal way. The methodology of craft is nothing less than a general theory about world-making.¹⁸

¹⁷ The literature on the relations of *theorie/praxis/poiesis* is of course very rich. One can have a good introduction via the history of the work/labour distinction. See e.g. Riedel, Manfred. *Arbeit*. Krings, Hermann und Baumgartner, Hans M. and Wild, Christoph. (Hrsg.) *Handbuch Philosophischer Grundbegriffe*. München: Koessel-Verlag, 1, 125 - 141, 1973. ; Krüger, Hans Joachim. *Arbeit*. Ritter, Joachim und Grünler, Karlfried und Gottfried, Gabriel (Hrsg.) *Historisches Wörterbuch der Philosophie* Schwabe Verlag. Basel 1, 481- 487, 1971. The histories of (national) geneses of science/politics/fine art related to the birth of industrial labour in modern times are also very instructive, see e. g. Polanyi, Karl, *The Great Transformation. The Political and Economic Origins of Our Time*. Boston: Beacon Press, 2001 (1944), and Gordon, Robert B. and Patrick M. Malone. *The Texture of Industry: An archaeological View of the Industrialization of North America*. New York: Oxford University Press Inc, 1994.

¹⁸ Volanen, Matti Vesa, *Craft and Art in Engineering Philotechné as an ideal of 'Bildung' in engineering education*, in Christensen S. H., Meganck, M., Dalahousse, B., (eds.) *Philosophy in engineering*. Aarhus: Academica, 65-81, 2007. Volanen, Matti Vesa, *Being Doing Making - A paradigm of the connective curriculum*, in Stenström, M-L., Tynjälä P. (Eds.), *Towards Integration of Work and Learning*, Berlin:

In modern times, via enlightenment and capitalism, we have lost the common basis of the triad, of head, heart, and hands, i.e. the core idea of craftwork.¹⁹ Culturally, as a fruit of the philosophy of the Enlightenment, we are under pressure to persist in this omission. We can go so far as to say that the first industrial revolution dismantled the central moments of craftwork, turning them into opposites, severing *theoria*, *praxis* and main part of *poiesis* (aesthesis) from craft work, reducing work to the creation of physical force, the labour force.

On the other side of the coin, in the nation states, science and scholarship, politics, and the arts all acquired corresponding institutions, which then became the loci of externally conducted research into labour and externally fostered the protection of labour – which among other things, led to the emergence of scientific methodologies of labour research. The result is that episteme, ethics, and aesthetics do not have any common core any more. As mere labourers, we do not have a view of the production of commons. The main opportunity provided to form social bonds is to make choices on the terms of the market, and to labour for money to pay for those choices. But as common experts in the knowledge-based society – as modern craftworkers – all labourers need a new solution, *poeta faber*, reunification of *theorie/praxis/poiesis*.²⁰

***Nous poietikos*, producing reason as a new general intellect**

The etymology of the concept ‘commons’ hints at the resources provided by nature being limited: we must deal with an undersupply of water (commu-) or food (commo-). So there is the negative myth (Rousseau) of the birth of community. With Peter Linebaugh’s idea of “commoning”²¹ – that we are discussing not only questions connected with dealing in natural or social resources but also the production of commons/community – we have not yet opened up a positive horizon. We can find it in the manifesto of 1848: There will be “associations, in which the free development of each is the condition for the free development of all.” Here we have a positive criterion for the communities producing commons.

How, then, do the commons we are producing all the time – we open the zone of development and hope for our children or fellow-citizens to form the same horizons as ourselves, i.e. we produce common values via our living work – turn out to be bare commodity, bare values mediated via money?

Commons and communities are in a mutual, constitutional relationship. The market (-place) is also a social construct and has its own social history. In the traditional sense, the coordination of production happened via the feedback system of prices. For a long time and in many cases, the enclosing and transaction costs per product were lower than starting one’s own production. But when knowledge forms a central part of the core of production, everything changes. The system of prices collapses.

The production of knowledge and artefacts are and have always been two sides of the very same process: there is no knowledge without a carrier and there are no artefacts without know-how. And, of course, in the same sense, there is no immaterial work, just as there is no pure material work. When technology opens up the possibility of

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¹⁹ Sennett, Richard, *The Craftsman*. New Haven, London: Yale University Press, 2008.

²⁰ Kirkeby, O. F. *Management philosophy, a radical normative perspective*. Berlin: Springer, 2000. Volanen, Matti Vesa, *Social Individualization and Poiesis*, Institute of Educational Research, University of Jyväskylä (diss. manuscript).

²¹ Linebaugh, Peter, *The Magna Carta Manifesto*. Los Angeles: University of California Press, 2008.

reorganising labour as “*poeta faber*”, to reunite *theorie/praxis/poiesis*, the production of knowledge necessarily has, in this wholeness, the role of conceptualizing common values. No machine, not even a computer, produces common values; they only realize those values (*theorie/praxis*) conceptualised and constituted earlier . The traditional *nous poietikos*, producing reason, now has a new quality of “general intellect” and there is no need for exchange but for contributions to production.²²

²² Siefkes, Christian. *From Exchange to Contributions*. Edition C. Siefkes: Berlin, 2007.