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## Education for a Knowledge-Based Society? A Concept Must be Rethought

Knowledge-based society is a strategic term which – like “postmodern society“, “postindustrial society“, “experience society“, “consumer society“, “risk society“, “media society“ or “information society“ and similar terms – aims to divert attention to a certain aspect. Aspects that are particularly highlighted by the term ‘knowledge-based society’ are knowledge and education.

It is said that knowledge, besides capital, will become an increasingly significant production factor of the modern society. Knowledge exists in the material form as technology. Inventiveness and science have flown into it. It is controlled by means of titles of ownership over patents and usage rights. However, knowledge has also a major role in the utilization of living labor. The thesis of the knowledge-based society even claims that this role obtains an increasing significance: Many economic processes cannot be mastered any longer by the mere execution of well-defined tasks, but increasingly also through involvement and self-responsibility. In this situation, it is not a matter of having more economically independent persons but rather enabling that the dependent employees do not work in a culture of command-obedience but in one of cooperation, as well as of process and result responsibility. An increasing number of companies are no longer oriented towards the production of mass-products, but rather towards complex system solutions which are to be found only through the utilization of the subjectivity of living labor or through living knowledge which – as opposed to materialized knowledge (in technology) – is hard to control by the employer and to a certain extent needs to be introduced voluntarily.

Example: The automobile industry still produces automobiles. However, today’s task is increasingly not a matter of selling a physical product, i.e. automobile, but satisfying the customers’ mobility requirements. People do not want to necessarily own the car, but to use it in places where a bike, train or bus does not suffice. The solution of these issues – e.g. by car-sharing linked with further usage possibilities – requires communicative and logistical services that very much go beyond the manufacturing of physical products. It is a matter of communication and cooperation with customers who in a certain way become the co-producers of the mobility options.

The second aspect is education. The thesis of the knowledge-based society claims that the requirements for the subjectivity of labor forces call for better education. This is, on one hand, a matter of higher qualifications that keep up with the increasing level of complexity of technological processes. A car mechanic has to additionally educate himself as mechatronics engineer. On the other hand, it is also a matter of the stated extra-functional skills: communication skill, cooperation skill, the ability to overview longer-term processes and to withstand setbacks. This is a matter of establishing subjectivity that is suitable for versatile economic use. In the concept of knowledge-based society, education represents a decisive prerequisite of modern economic activity. Its goal is employability.

Knowledge-based society is a very successful concept. The European Union has adopted it and uses it as a measuring stick for its strategy for vocational and higher education. It aims to direct both towards employability and generally promotes a continuous upgrading of professional and extra-functional skills. Education also has a key role in the politically highly influential cross-country comparisons by the OECD<sup>1</sup>. From the viewpoint of the OECD, countries that are better equipped for the challenges of the knowledge-based society are those where larger proportions of the youth begin and complete higher education. Therefore, the concept of the knowledge-based society contains an urgent recommendation to politics to lead more young people to graduation and make student places available to them. A rising number of graduates and students is viewed as a success indicator. The knowledge-based society's focus on education and, first and foremost, better and higher education, has consequences on the economy and society. Given the fact that this is a matter of goals which seem absolutely justified, one needs to ask what is the downside of this increased attention to education, employability and increased demands of independence and responsibility of the living labor. What are the consequences of the thesis which is implicated and also mostly explicitly advocated by the concept of the knowledge-based society, namely that the knowledge-based society was replacing the industrial society? What hopes, what emancipation potentials are linked with this? Who could be counted as the winners, i.e. losers? Does the thesis of the post-industrial knowledge-based society support the change in the social balance of power? Does the orientation towards better and higher education lead to the devaluation of vocational training? And, finally: isn't the downside of the knowledge-based society's focus on education the "educational panic" which is today noticeable as early as in kindergartens and schools?

### **Post-Industrial Knowledge-Based Society: Concern of New Divisions**

Unlike this one, many studies on knowledge-based society claim that the knowledge-based society is a consequence of the industrial society.<sup>2</sup> The beginning of this discussion<sup>3</sup> in science and politics was marked by trends and their political evaluation. The term of post-industrial society was a framework of the scenario of a collapsing society. The question was how technological development and the qualification requirements arisen from it could be socially organized so as to provide benefits for the majority. That meant an approach which differed from the concept of the knowledge-based society: the latter denotes a technological trend and increased requirements of the economy, deriving from it demands of education and knowledge. The critical discussion of the industrial society rather focused on the question whether this trend could be developed in the best public interest. Namely, there was concern that this technological advancement would divide the society into modernization winners

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<sup>1</sup> Organisation for Economic Co-operation and Development, headquartered in Paris. OECD is responsible for the country comparison "Education at a Glance" and, for example, also for PISA (Programme for International Student Assessment) studies, which it uses to compare the performance of the countries' school education.

<sup>2</sup> Nico Stehr, "Moderne Wissensgesellschaften" ("Modern Knowledge Societies". In: *Aus Politik und Zeitgeschichte* B 36/2001 (<http://www.bpb.de/apuz/26052/moderne-wissensgesellschaften>)

<sup>3</sup> Already in: Alain Touraine, *La Société post-industrielle*, Paris 1969; dt.: *Die post-industrielle Gesellschaft*, Frankfurt/M. 1972. ("The Post-Industrial Society"). Here I shall focus on the essay by Manfred Moldaschl, "Mythen der Modernisierung – Arbeit in der Wissensökonomie" ("Myths of Modernization – Work in the Knowledge Economy"), in: Birger P. Priddat/Klaus-W. West (publisher), *Die Modernität der Industrie*, ("The Modernity of Industry"), Marburg 2012, p. 215 – 247

(entrepreneurs, investors, highly qualified persons) and modernization losers (low-qualified persons, unemployed, degraded, overburdened). This division goes hand in hand with the loss of the industrial society's institutions: the dissolution of the formative and orienting milieus and the mass "people's" political parties that emerge from them<sup>4</sup>; Devaluation of trade unions as class-based institutions to stakeholders of the (specialized) workers with higher qualifications; Devaluation and dissolution of the system of vocational training which links the economy and the unions and the state as social partners in their respective responsibilities for a high level of vocational training, thus socially limiting profit interests. The departure from the industrial society is grasped as dissolution of the class-based society that is maintained by its institutions and institutional compromises. This becomes particularly obvious when it comes to the protection against unemployment through which the welfare state strengthens the wage-dependant strata against the capital forces. Within the concept of the individualized knowledge-based society, it yields from the obligation to work on oneself, to further educate oneself and to increase employability during phases without employment. The goal of this policy is a total mobilization of the entire human being as a working person – a human being who also works on him/herself in terms of his/her own usability, also beyond the process of the formal wage conditions. This process of deindustrialization is socially reflected in other concepts of describing the society: a class-based society and its institutions<sup>5</sup> are replaced by individualization and the civic promise of advancement to higher strata – through achievement and, first and foremost, education; social class division is replaced by the differentiation between those who are included and excluded, respectively.

### Hopes of Emancipation

The formation of subjectivity and the willingness to provide living knowledge, as described above, as precondition for tackling complex economic tasks, seems from a critical perspective as a total mobilization, a removal of boundaries of the working hours to the last corner of the private life.<sup>6</sup> However, this is where some critics have recognized chances for emancipation. So, this removal of boundaries, all the way to the private relations, also questions the latter's traditional pattern. Highly-individualized knowledge workers depart from the normal employment relationship which ascribes

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<sup>4</sup> Cf. Franz Walter, *Im Herbst der Volksparteien? Eine kleine Geschichte von Aufstieg und Rückgang politischer Massenintegration* ("In the Autumn of People's Parties? A Short Story about the Rise and Fall of Political Mass Integration"), Bielefeld 2009; *Von der Emanzipation zur Meritokratie. Betrachtungen zur 150-jährigen Geschichte von Arbeiterbewegung, Linksintellektuellen und sozialer Demokratie*, Göttingen 2013 ("From Emancipation to Meritocracy. Observations on the 150-Years History of the Workers' Movement, Leftist Intellectuals and Social Democracy") (with Stine Marg).

<sup>5</sup> For example, this was how the gymnasium was perceived as class institution – an awareness that emerged in SPD's struggle against the gymnasium and for the comprehensive school, as control of the middle-class elites, whereas the engagement by the Greens for the common school as a place of individualized education rather corresponds to the standpoint of a society of individuals and individual aspirations towards education and advancement. However, the Greens, too, ignore the fact that the gymnasium in Germany has the function of a leading institution of the school education. More on this: Heinz-Elmar Tenorth, "Das Gymnasium als Leitinstitution des deutschen Bildungswesens" ("The Gymnasium as the Leading Institution of the German Education System") *Engagement*, (2008) 3, p. 252-263.

<sup>6</sup> See Sara Horowitz, "The Freelance Surge Is the Industrial Revolution of Our Time", *The Atlantic*, September 1, 2011 (<http://www.theatlantic.com/business/archive/2011/09/the-freelance-surge-is-the-industrial-revolution-of-our-time/244229/>).

to the man the role of non-domestic breadwinner in a full-time job and to the woman the role of caretaker of the household, children and peace in the family. This conventional employment relationship is one of the socio-cultural foundations of the German industrial society. A completely different emancipation potential is derived from the key position which, in the knowledge-based society is ascribed to the so-called “symbol analysts” or the “creative class”. Robert Reich<sup>7</sup> and Richard Florida<sup>8</sup> use this term in an attempt to grasp the type of professional work, which in research, programming, project organization and consulting on production means disposes of knowledge, information and assessment and is able to evade the traditional control of the employers as their own labor power entrepreneurs. Their work is being increasingly organized as mostly cooperative and communicative project work – the projects thereof having the features of copyrighted works and are paid for on the basis of goods and services contracts. This is how a struggle breaks out over the products of their “creative work”, over control and exploitation rights. The employer attempts to extend his control over the living (as opposed to materialized in machines) knowledge of these professional knowledge workers through knowledge management and licensing systems such as company secrets, trademark law, design protection, copyright, patent law and is already experimenting with the consolidation of these “assets” in so-called “intellectual capital statements”.<sup>9</sup> But this control ultimately remains limited: the living knowledge cannot be bought and possessed; it must be voluntarily introduced into the project. On the other hand, the open-source- and free-software-movement derives from it the idea of an economy beyond the private property and control through the capital owners: the idea of a free network society on the basis of an economy of common goods.<sup>10</sup> Its self-conscious actors are the abovementioned symbol analysts whose high professional knowledge linked with their networking ability is deemed the source of social emancipation, chance for social consent and independence, liberation of hierarchies, control and orders.

### **We live in the Industrial Society – Despite the Regression of Industrial Jobs and Increase in the Services Sector**

What is the number of people who are the subject of so many hopes? It is low. Symbol analysts and the creative class (the term “class” is already misleading) are a very small group. As a rule, their work is organized as company-related service and it takes place in the institutional context of the industrial society. However, it is true that Germany and the most western industrial countries are witnessing a sectoral change of added value and jobs from the industry to the services sector. But one must not

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<sup>7</sup> Robert B. Reich, *The Work of Nations. Preparing Ourselves for 21<sup>st</sup> Century Capitalism*, New York 1992; dt. *Die neue Weltwirtschaft*, Frankfurt/M. 1993.

<sup>8</sup> Richard Florida, *The Rise of the Creative Class*, New York 2002.

<sup>9</sup> The most obvious problem concerning intellectual capital reports is contained in the fact that the greatest goodwill, namely the living knowledge of their personnel and the company’s innovation power which stems from their interaction, cannot be controlled as property. The personnel can leave the company on their own initiative.

<sup>10</sup> André Gorz, “Welches Wissen? Welche Gesellschaft?”, (“What Knowledge? What Society?”). Contribution to the Heinrich Böll Foundation Congress “Gut zu wissen. Links zur Wissensgesellschaft” (“Good to Know. Left of the Knowledge Society”) Münster 2002, p. 14 – 35 (available online at:

<http://www.wissensgesellschaft.org/themen/orientierung/welchegesellschaft.html>). This text was later expanded by Gorz shortly thereafter into his book “Wissen, Wert und Kapital. Zur Kritik der Wissensökonomie” (“Knowledge, Worth and Capital. A Critique of the Knowledge Economy”), Zürich 2004.

make the conclusion of a departure from the industrial society. The industrial society remains the basis of social work.<sup>11</sup>

Indeed, for years a process of deindustrialization has been taking place: the share of the manufacturing industry (in Germany, with the important automobile, chemical, pharmaceutical sectors and in the field of capital goods such as mechanical engineering, electrical equipment etc.) in the societal creation of value is shrinking, mostly in connection with the reduction of jobs in this sector. This is a long-term trend which has been indeed constrained in the past 10 years in Germany, while it continued unrestrained in the European Union. In the EU, the share of the manufacturing business in the gross value added from 2001 to 2011 has decreased from 18 % to 15.5 %. In the same period, this share increased in Germany from 22.1 to 22.6 %<sup>12</sup>. Still, the long-term trend persists in Germany, as well: back in the 1970s, this share of the industry was still at 37 %. As a comparison: in 1979 the industrial share in the United Kingdom was 33 %, while in 2011 it amounted to 10.8 %. In this period, the modern financial sector was created in the London City - the most successful and most-admired services sector – until the 2008 financial crisis – whose creativity and lack of scruples were enabled by the disengagement from the social institutions of the industrial society.

Reasons for this trend can be found in the processes of industrial rationalization, as well as in the loss of boundaries of national labor markets as a consequence of globalization. The competition in international product markets and recently also the possibility – created by the communication technology and the internet – of outsourcing production plants previously considered immobile, often leads to the migration of entire production branches to Eastern-European states and emerging countries which can produce cheaper goods of the same quality in the industrial sector. The foreseeable challenge for Germany (and other export-oriented industrial countries) is a relative loss of importance of traditional qualification systems and the necessity to develop new fields of work outside the industrial sector in the field of the service or tertiary sector.

Politics in Germany in the 1970s has reacted with the educational expansion which was demanded since the 1960s.<sup>13</sup> The raising of all talent reserves was aimed at building human capital in a country as poor in natural resources as Germany, thus corresponding to the long-term trend of industrial development, international competition and the development of the services sector. This educational expansion has indeed taken place, but the hope which accompanied it was fulfilled only in a very limited manner, also in terms of social advancement and finding work that is adequate for the raised qualifications, more challenging and better paid. The vertical mobility, namely social advancement, corresponds to the horizontal mobility from the industry sector to the services sector only in a limited manner. The clearest example are the temporary workers who are, admittedly,

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<sup>11</sup> More on this: Birger P. Priddat/Klaus-W. West (Hg.), *Die Modernität der Industrie* ("The Modernity of Industry"), Marburg 2012. Particularly: Manfred Moldaschl, "Mythen der Modernisierung – Arbeit in der Wissensökonomie" ("Myths of Modernization – Work in the Knowledge Economy"), p. 215 – 247.

<sup>12</sup> Karl Brenke, "Industrielle Entwicklung: Deutschland und Frankreich driften auseinander" ("Industrial Development: Germany and France are Drifting Apart"). DIW Wochenbericht No. 48.2012, p. 3 – 14, here p. 5 (table 1).

<sup>13</sup> Georg Picht, *Die deutsche Bildungskatastrophe. Analyse und Dokumentation*. ("The German Education Catastrophe. Analysis and Documentation") Freiburg im Breisgau 1964; Ralf Dahrendorf: *Bildung ist Bürgerrecht. Plädoyer für eine aktive Bildungspolitik* ("Education is a Civic Right. A Proposal of an Active Education Policy") Hamburg 1965; Daniel Bell: *The Coming of Post-Industrial Society. A Venture in Social Forecasting*, New York 1973.

predominantly deployed in the industry, but who work under worse conditions for services companies and are accordingly designated as service providers in the statistics. If we look at the 2011 data report, we will find out that there was an incline of women in the field of personal services: cleaning, saleswomen, office personnel, middle management administration, medical nurses and child care workers. When it comes to the men, professional driver remains the top job.<sup>14</sup> Two causes are particularly responsible for the “bound knowledge-based society”<sup>15</sup>: firstly, the continuing existence of the traditional gender roles and the conventional working relationship. Indeed, today many more women work as compared to 20 years ago. However, most of them do not stand at the disposal of the abovementioned total mobilization. This refusal represents somewhat of a liberation but, of course, also the continuation of tradition role concepts. So women look for part-time jobs in the personal services sector because they wish to keep on taking care of children and household or are de facto urged to do so. On the other hand, their husbands pursue full-time employment to a far greater degree. The second issue is represented by the shutdown effects of the education expansion, by which the education climbers of the 1970s insure themselves against a continuing advancement dynamics. We will discuss this in the following section more closely.

## Education-Policy Implications of the Concept of Knowledge-Based Society

### Academization

The concept of knowledge-based society is generally – and particularly by the European Union<sup>16</sup> - brought in connection with the trend of academization. When an increasing number of young persons are studying, it counts as contemporary and is celebrated as a success by politics. But what does academization mean? More people who are active in the knowledge-based society as managers, experts or supervisors and demand a prize for their academic diploma in the struggle for the distribution of money and influence? Or rather people who make up an academic habitus which always indebts them to responsibility for the common good? Humboldt, who belongs to the founders of the modern university, thought of it as a republic of sciences whose members, those who do research, teach and study, are citizens of a republican commonwealth. The latter is international in nature and as we would say today: globally oriented, its citizens work on global problems which they aim to responsibly resolve using their knowledge, ability for reflexion of the limited nature of their knowledge and the complexity of non-linear social developments. He envisaged that all alumni of these republican institutions would go to public service and work there towards common good. This

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<sup>14</sup> Statistisches Bundesamt/Wissenschaftszentrum für Sozialforschung Berlin (Federal Statistics Office/Scientific Centre for Social Research in Berlin) (publisher), Data Report 2001. Ein Sozialbericht für die Bundesrepublik Deutschland (A Social Report for the Federal Republic of Germany). Bonn 2011, p. 104, table 4.

<sup>15</sup> Michael Vester, “Die gefesselte Wissensgesellschaft” (“Bound Knowledge Society”). In: Uwe H. Bittlingmeier/Ullrich Bauer (publisher): Die “Wissensgesellschaft”. Mythos, Ideologie oder Realität? (The “Knowledge Society”. Myth, Ideology or Reality?) Wiesbaden 2006, p. 173 – 219.

<sup>16</sup> An interpretation of the most important conclusions and concepts of the EU on higher education and vocational training, by Justin J. Powel, Nadine Bernhard, Lukas Graf, “Amerikanisierung oder Europäisierung der (Aus)Bildung? Die Bologna- und Kopenhagen-Prozesse und das neue europäische Modell der Hochschul- und Berufsbildung” (“Americanization or Europeanization of Education? Bologna and Copenhagen Processes and the New European Model of Higher Education and Vocational Training”). In: Rolf Becker/Heike Solga (publisher): Soziologische Bildungsforschung. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 2012, p. 437 - 458.

cannot be a perspective today. But, still, the question remains justified whether academic education even today aims, through truth orientation and a scientific approach<sup>17</sup> in connection with cooperative service learning and problem-oriented learning, towards engaged citizens who work on solving global problems and who can responsibly make risky decisions in complex situations. As shown by the financial crisis, academically educated “creative heads” outside of institutional and ethical frameworks of the academic habitat (or the professional ethics as being analogue to the professional honor of the vocationally qualified) can easily cause for global problems.

### **Share of Academics as Benchmark, Accelerated Output through the European Higher Education Area and Simplification of the Studies**

However, the path taken by European higher education institutions points to another direction. Marked by the fact that Europe’s societies were developing from industrial to knowledge-based societies, the share of the academically educated persons became a benchmark of their modernization and the higher education institutions became mass institutions of higher education through conveyance of knowledge. A European system of bachelor and master studies has caused the rapid increase of the share of students by shortening the dwelling time.<sup>18</sup> Regardless of how the quality of these educational establishments is judged, it mostly does not serve to the education of the academic habitus of a republican commonwealth’s citizens. Higher education didactic experts still recommend the step “from teaching to learning” and advocate the problem-oriented learning. However, they basically only pick up the ideas of learning in a scientific seminar – and thus they are very far from the reality of the mass-business. In reality, higher education is increasingly becoming a form of vocational training with no clear perspective for individuals. In many cases, they do not convey collective occupational aspirations, but rather individual employability – however, in connection with the promise of considerable advantages regarding status and income. This has consequences on the economy and society.

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<sup>17</sup> Science is communication of the truth. At higher education institutions, in many cases it still has not reached the possible (information)technical level. Instead it awards, by means of copyrights and reputation, proper-master craftsmen (rarely craftswomen) who produce individual (top) achievements. When the ability of cooperative acting in complex societies gains increasing significance, it is acquired only in a very limited fashion in traditional forms of academic learning and competition operations. Via informatization, the modern higher education institution yet faces its industrialization as overcoming of the proper tradition of masters and artists. Computerized science becomes a cooperative communication of the truth based on the state of technology. That is the perspective of the clever essay by Martin Rost, “Zur Produktion der wissenschaftlichen Kommunikation im digitalen Zeitalter“ (“On the Production of Scientific Communication in the Digital Age“. In: Universitäten in der Wissensgesellschaft. Erfurter Universitätsreden 1999/2000. (Universities in the Knowledge Society. University of Erfurt Speeches 1999/2000). Published by Universität Erfurt/Heinrich Böll Stiftung. Munich 2001, p. 145 – 167. The writing of Yehuda Elkana/Hannes Klöpffer, Die Universität im 21. Jahrhundert. Für eine neue Einheit von Lehre, Forschung und Gesellschaft (The University in the 21<sup>st</sup> Century. For a New Unity of Teaching, Research and Society), Hamburg 2012, discusses (p. 390 – 499) the perspectives of the “University in the Digital Age“, but leaves it at the didactic possibilities and does not see how the production regime could be transformed by science.

<sup>18</sup> Bildung auf einen Blick. OECD-Indikatoren 2012 (Education at a Glance. OECD-Indicators 2012), page 173ff. See: [http://www.keepeek.com/Digital-Asset-Management/oecd/education/bildung-auf-einen-blick-2012-oecd-indikatoren\\_eag-2012-de](http://www.keepeek.com/Digital-Asset-Management/oecd/education/bildung-auf-einen-blick-2012-oecd-indikatoren_eag-2012-de).

### **Professionalism or Employability**

Orientation towards professionalism or vocational aspiration is based on recognized and institutionally regulated vocational qualifications. They are supposed to create skills of comprehensive vocational ability to act beyond individual jobs and sectors and be tied with structured employment- and career patterns, as well as with the inclusion into the existing collective bargaining system and the social legislation.

Employability is based on flexibly designed, flexibly usable and individually certifiable partial qualifications which can be developed and conveyed according to the changing operational requirements and individually different conditions.

Employability is supposed to correspond to the deregulation of the labor markets by a tendency of subordinating all facets of the individuals' vocational acquisition of competences to the goal of strengthening competition and competitiveness; on the other hand, conveyance of professionalism also aims at the development of individuals with independent professional identities and related skills, so as to formulate and assert their respective skills and interests. Primarily for the cooperative sector of the labor force, those are to this day the material and spiritual interests and the honor of the profession.

### **Academization is a Partisan Indicator – In Many Cases it is a Consequence of High Youth Unemployment**

It has been repeatedly argued that academization follows higher knowledge-society-related demands of the labor market. It is true that the field of business-related services requires more scientifically educated people. However, this field is limited. It still remains true that academically educated people better come to grips with a society which gives increasingly higher value to the ability of self-responsibility and individual precaution. In most OECD countries, including Germany, they live longer and healthier, display higher political and social participation and also manage to find a job with more ease compared to others: at first often an internship, then an auxiliary function, but eventually also a lasting position in middle or higher levels of business hierarchies where they find more individual options concerning their professional and employment career and better chances of advancement and development at the workplace. Unemployment of academics is significantly lower when compared with the group of persons with vocational training and, particularly, those with low or no qualifications. Academics are the leading figures of the concept of the social investment state<sup>19</sup>, for they, as strong market actors, can take better care of themselves and generate less social costs – regardless of whether they indeed advance to one of the prestigious and well-paid positions in the industry or in company services.

This is also the case with people in societies that lack an industrial basis for business-related services. Here, too, there is a growth of the services sector, but even stronger than Germany in the segments

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<sup>19</sup> Compare with: Neil Gilbert, The "Enabling State?" from public to private responsibility for social protection: Pathways and pitfalls. OECD Social, Employment And Migration Working Papers 26, Paris 2005.

of personal services in tourism, healthcare, nursing, cleaning and transport. Here a majority performs services for a few which have attained one of the rare jobs for the highly qualified with high social prestige. More surprisingly: Greece has a very high rate of youth unemployment. And still there are indications that the “clear oversupply (...) of higher-qualified persons with university and professional college degrees“ coincides with a “(...) chronic deficit of skilled workers, master craftsmen and technicians“.<sup>20</sup> In many Europe’s countries, academization therefore means first the delay of the frustrating experiences of unemployment, internship etc. It covers up the youth unemployment rate, when we do not limit the group of youth strictly (15 to 24 years of age), but expand it further to 15 to 29. If we look at the situation of young people after graduation from their studies, we will see that the increase of participation in higher education praised by the OECD (e.g. Poland 85%, Portugal 84%) and the (expected) academic degrees (e.g. Poland: 51%) goes hand in hand with high and extremely high youth unemployment rate: in Poland 27% and in Portugal 39%. Contrastingly, countries such as Germany or Switzerland are criticized for their low academization quota, even though the youth unemployment rate of 8.1% in Germany<sup>21</sup> and 3.5% in Switzerland<sup>22</sup> is well below the average of OECD countries. These are countries with strong industrial bases and a system of dual vocational training which provides well-paid workplaces in industry and crafts to a majority of youth who, for example, in Portugal work as waiters with their academic diplomas. The European Union has not remained untouched by this issue so today it calls for a reindustrialization of Europe – introduced through a socio-ecological third industrial revolution, which should meet the challenges of climate change and mass unemployment.<sup>23</sup>

It must be stated that the increase in the number of academics is a questionable indicator of modernization and enhanced competitiveness when we compare it with the high youth unemployment rate that accompanies it in many countries. Nevertheless, one has to differentiate between unemployed academic youth and the unemployed with mostly just school-based vocational training or even no training at all: for, it is often the case that high public subsidies for their higher education which very much surpass the public expenses for other youth, represent the society’s investment in the development of strong players on the market. After all, they are better suited for this situation than their unemployed peers who are less educated. If in doubt, the strong succeed in suppressing the weaker by using their wide employability. In addition to that, the weak – who, due to their aversion towards theoretical learning mostly did not go or were not allowed to go to higher education institutions – are even more frustrated by the reference to the employability-required lifelong learning. In a market that awards employability conveyed by studies, flexible and willing to learn, it is those weak youth who are the big losers: humbled education losers of a society which increasingly renders higher education the benchmark for good education and thus becomes a partisan one.

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<sup>20</sup> Stavros Stavrou, “Die berufliche Erst- und Weiterbildung in Griechenland. Ein Überblick“ (“Vocational Initial and Further Education in Greece. An Overview), unpublished manuscript Berlin/Thessaloniki 2012, 27 pages, here p.17. Between 1994 and 2005, Dr. Stavrou was Deputy Director of CEDEFOP (European Centre for Development of Vocational Training) seated in Thessaloniki/Greece.

<sup>21</sup> See: <http://de.statista.com/statistik/daten/studie/74795/umfrage/jugendarbeitslosigkeit-in-europa/>

<sup>22</sup> Neue Zürcher Zeitung, September 7 2012

(<http://www.nzz.ch/aktuell/wirtschaft/wirtschaftsnachrichten/jugendarbeitslosigkeit-steigt-in-der-schweiz-spuerbar-an-1.17577288>)

<sup>23</sup> Press release by the European Commission on October 10 2012: “New Industrial Revolution for a Return of Industry to Europe“ ([http://europa.eu/rapid/press-release\\_IP-12-1085\\_de.htm](http://europa.eu/rapid/press-release_IP-12-1085_de.htm))

### **Academics' Prize: Income Supplements for Academic Education**

Countries with an industrial basis and a system of dual vocational training dispose of a high share of well-educated people with a diploma in the upper secondary level – throughout all age groups. That ought to be the basis for social cohesion. Based on the developed system of general and vocational training courses in Germany, an 85 % share of the population who have at least attained a diploma from the upper secondary level compared to the OECD average of 73% and the EU average of 75 %, is very high. Higher shares are achieved by only eight OECD states, i.e. five EU states, including the Czech Republic and Slovak Republic, which show peak values of 91 % each. Granted, an academic diploma in the tertiary level still enables significant income advantages, but as the total number of the academics is not as high as in the countries praised by the OECD, the income gap is not so wide. Namely, the income of persons aged between 25 and 64 with a diploma in the tertiary level in Germany amounts 157% of the income of the working population with a diploma in the secondary level or with vocational training below the tertiary level. On the other hand, this group still achieves a 13% higher income compared to the working population with a diploma below the upper secondary level<sup>24</sup>. For example, in the USA where the academics quota has increased since the 1970s, the income advantage for academics is at 180 %. However, in the long run the trend towards more academics will have its price. This is something that is currently experienced by many British higher education graduates who are disappointed to realize that their price has fallen, by a third approximately, since the economy has been hiring higher education graduates also for relatively simple employment sectors.<sup>25</sup>

### **Educational Competition: Devaluation of the of the Vocational Training**

It is the very example of the high number of academic graduates in USA that shows that the income supplement for academics is not, or at least cannot be interpreted as, the only price signal for a too low of an offer.<sup>26</sup> Up- and downgrading processes and the shifting of societal power also have their respective roles here. So, the college wage premium which benefits the USA academics is a result of a long process of de-qualification and devaluation of trade union-organized vocational training, one that the USA economy since the 1970s saw as a chance to weaken the power of the unions. The de-qualification came along with the establishment of a rigid production regime in the companies, one that clearly divides between concept and execution. Execution becomes the domain of practitioners – manual workers. With each step of de-qualification and specialization (in the sense of narrowing down to a few well-defined tasks), their number was increased. On the other hand, concept becomes a new domain of the spreading academically educated middle class who, in their capacity as

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<sup>24</sup> Conference of Ministers of Culture and Education / Federal Ministry of Education and Research 2011: OECD-publication Education at a Glance. Substantial results of the 2011 issue, p.9 ([http://www.kmk.org/fileadmin/pdf/PresseUndAktuelles/2011/eag\\_2011\\_Lange\\_PM.pdf](http://www.kmk.org/fileadmin/pdf/PresseUndAktuelles/2011/eag_2011_Lange_PM.pdf)); see also Education at a Glance. OECD-indicators 2012, p. 191ff.

<sup>25</sup> Compare the report about a large-scale study on the material advantages of higher education in Britain: "Is University Education Worth it anymore?" (<http://www.gcgi.info/blog/398-is-university-education-worth-it-anymore>)

<sup>26</sup> Unlike the OECD (2011, p.168): "The relative income supplement for graduates of the tertiary level has increased in most of the countries, as a proof that the offer of better educated labor forces in most of the countries is still below the demand."

managers and supervisors – brainworkers – supervise the executive workers in the company and, when it comes to the private domain, lay claims to the extended offer of personal services by the carriers, cleaners and kindergarten teachers.<sup>27</sup> Such social processes are, as a rule, not subject of discussion when the European Union, en route to the knowledge-based society, looks up to, inter alia, the USA as role model. Is this also the case in Germany – namely, that with its system of vocational training, it offers an alternative to higher education and raises the academics' quota only slowly? According to the current tendency – yes. In Germany, too, especially in the course of its Europeanization, vocational training came under devaluation pressure.

### **Advantages of Vocational Training for the Economy and Social Cohesion**

Let us point out once again that in all countries with a dual vocational training the youth unemployment rate is significantly lower compared to those which organize a predominantly school-based vocational training (supplemented with occasional internships) or company-based as training in the company. Therefore, it is worth contemplating the advantages and conditions of their success. An industrial basis is one of the obvious conditions, for a majority of the dual vocational training takes place in the industry and in manual work, enabling the shift from manual training (for example, in car servicing and repairs) to the industry (for example, the automobile industry). The capability profile of the vocational training – unlike the USA and the rigid division between executive and control work – is much more oriented towards polyvalent working forces that collectively, in a holistic approach, learn a profession which provides qualifications for fulfilling tasks in the process. Collective employment competence of the labor forces allows a different production regime, one that enables a high level of independence and flexibility of the labor forces and flat business hierarchies.

This individual arrangement has strong institutional preconditions. In Germany they consist of the tri-relation between the state (who is responsible for the school-based vocational training and guarantees the validity of the diplomas), strong trade unions and strong employers' associations. Trade unions provide guarantees for the employers that they would prevail in view of the standards and thus also the costs of the in-company vocational training in the entire branch, so as to avoid the footboard effects feared by the individual companies, which would occur if companies without educational contribution would hire qualified labor forces at other positions. Companies that take on significant costs for vocational training, thus taking social responsibility, can rest assured that they will not be left alone and used in the end. On the other hand, the gain for the unions is represented by the fact that they make good use of the vocational training for recruiting young members and increase the value of vocationally trained labor forces by means of portability of qualifications. Eventually, all parties make profits from the advantages of a social-partner-based cooperation which may appear nonsensical from the point of view of individual businesses. Dual vocational training

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<sup>27</sup> Wolfgang Streeck, "Skills and Politics. General and Specific", MPIfG Discussion Paper 11/1. Max Planck Institute for the Study of Societies, Cologne 2011, p. 1-32 ([http://www.mpifg.de/pu/mpifg\\_dp/dp11-1.pdf](http://www.mpifg.de/pu/mpifg_dp/dp11-1.pdf)).

Streeck (p. 25) also emphasizes that, to this day, vocational school in the USA is viewed as backup school for African-Americans. The differentiating between vocational and academic has much stronger racist and class-related connotations than in Europe – however, Europe is catching up.

leads to a pool of qualified labor forces with task-oriented and transportable skills, which stands at the disposal of the entire industry and the related companies and enables open and flexible labor markets.<sup>28</sup>

This was the situation approximately until 1970. Since then, vocational training as a model of social integration of ideally all youth who are not in pursuit of a higher education diploma is under pressure. This is due to three reasons: firstly, the companies in agreement with the trade unions have continually raised demands of vocational training. For the first time, the problem of “trainability” had emerged. Primary and secondary schools failed to prepare all youth for a vocational training. Secondly, the opening of higher education institutions to vocational training detracted more skillful young people as they provided them with better economic prospects and higher social prestige. The third reason can be seen in the gradual dissolution of the business associations and the withdrawal of many companies from the system of vocational training. The advantage of an education in about 300 widely defined professions (that is the number in Germany) is thus manifested as closure for those who do not receive a training position or an education: no education – no job. As a result, in Germany, unlike countries with non-dual vocational training, almost everyone who completed a vocational training has access to the labor market. Then again, those with no vocational training face slim chances. The vast majority of unemployed youth in Germany belong to this group.<sup>29</sup>

The European Union wants to accommodate these youth by means of flexibilizing the vocational training. With a European qualifications framework that should lead to a unification of vocational training in Europe, it seeks a transformation of the collective vocational training into a system which is stronger customized for the needs of individual companies – thereby experiencing great resistance of the German trade unions, while large companies use this intention as an opportunity to depart from the creation of high portable professional qualifications, i.e. to take a further step back from the social partnership. It is yet to be seen how this European strategy will tally for the benefit of a vocational training which already today is far less successful than the dual one and how it can be connected with the path towards reindustrialization, provided that “Industrialization” does not mean just “more, and perhaps, electric cars”, but also the social integration of the capitalist production facilities: collective bargaining, dual vocational training, status security, recognition of a minimum level of living-standard independent of economic performance and ability to perform etc.

### **Social Closure and Education Panic**

We live in an industrial society that requires increasingly higher qualifications by the people. This is the rational basis behind the claim that today more knowledge and the ability of individuality and cooperation increase employability. This goal can be achieved via the vocational training or the incline of higher education. All indicators show that vocational training is being increasingly devalued in terms of employability and customized towards individual companies’ requirements for manual labor, whereas higher education is supposed to yield strong market managers and controllers of the future. In this case, education does not only produce social inequality – it also justifies it according to the benchmark of individual performance-related justice. After that, the individual educational performance is to fairly decide about the social position. Advancement through education is the

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<sup>28</sup> Acc. to Streeck (remark 25), p. 11/12.

<sup>29</sup> Karl Brenke, “Arbeitslosigkeit in Europa: Jugendliche sind viel stärker betroffen als Erwachsene” (“Unemployment in Europe: Youth are much more Affected than Adults”). DIW Wochenbericht No. 30.2012.

formula which equips the individualistic middle class with a strategic advantage towards the system of collective vocational training, because academic education and diplomas leading to it are principally valued higher than vocational training. In addition to this, the opening of higher education institutions which in the 1970s was used by many ambitious working-class children and youth for advancement – primarily in the public service (whose expansion became limited very soon), as a consequence led to a new closure: more and more children from the expanding class of academically educated parents are striving for higher education institutions where the academically educated middle-class faces itself<sup>30</sup> and marginalizes the youth who dare take their first steps outside the shadows of their non-academic families.<sup>31</sup> The “numerus clausus” which was introduced with the opening of higher education institutions did the rest in order to reserve studies with the highest reputations and the best status-related prospects (e.g. medicine) for children from better placed and mostly even unequivocally academic families.

The access to higher education institutions through comprehensive schools, community schools or gymnasiums is fought over with no holds barred. The academically educated middle class defends its status advantages and threatens with its migration from the public school system when gymnasium as the leading institution of school education seemed to be in danger. “Educational panic”<sup>32</sup> breaks out when the school education is aimed only at socializing, rather than differentiation and selection. This would indeed violate the pedagogical goal of universalistic performance expectations.<sup>33</sup> Bude, who had coined the term “educational panic” advocates, due to political and social reasons, restraining from radical institutional reforms which call gymnasium into question; instead, he advocates strengthening of vocational training. This brings us back to the big question whether Europe, in the backdrop of an ecological and social reindustrialization, is prepared and capable to also develop a dual vocational training based on social partnership.

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<sup>30</sup> On this subject, there are many works by Tino Bargel. E.g. “Soziale Ungleichheit im Hochschulwesen. Barrieren für Bildungsaufsteiger” (“Social Inequality in the Higher Education System. Barriers for Educational Climbers”) University Konstanz: Working Group on Higher Education Research. Hefte zur Bildungs- und Hochschulforschung 49, Konstanz 2007. ([http://cms.uni-konstanz.de/index.php?eID=tx\\_nawsecured1&u=0&file=fileadmin/gso/ag-hochschulforschung/publikationen/PublikatBerichte/Heft49\\_SozUngl.pdf](http://cms.uni-konstanz.de/index.php?eID=tx_nawsecured1&u=0&file=fileadmin/gso/ag-hochschulforschung/publikationen/PublikatBerichte/Heft49_SozUngl.pdf))

<sup>31</sup> An important initiative for the support of this very “first generation” at the higher education institutions is “Arbeiterkind”: <http://www.arbeiterkind.de/>

<sup>32</sup> Heinz Bude, *Bildungs- und Sozialpanik. Was unsere Gesellschaft spaltet* (Educational Panic. What is Dividing our Society) Munich 2011.

<sup>33</sup> For the discussion about the socializing, cohesive function and the differentiating function of school-based education, see Heinrich Böll Foundation, *Leistung muss sich lohnen. Suche nach Reformbremsen im deutschen Bildungssystem* (Performance Must be Worth it. Search for Reform Brakes in the German Education System): <http://www.boell.de/bildungskultur/bildungssystem/bildungssystem-2119.html>. Here especially the essay by Heinz-Elmar Tenorth, “Ein Votum für Leistungsuniversalismus auch in Schulen” (“A Vote for Performance Universalism in Schools, too”) ([http://www.boell.de/downloads/bildungskultur/Tenorth\\_Ein\\_Votum\\_fuer\\_Leistungsuniversalismus\\_2007-10-10.pdf](http://www.boell.de/downloads/bildungskultur/Tenorth_Ein_Votum_fuer_Leistungsuniversalismus_2007-10-10.pdf))