# INDEPENDENT SCIENCE AND THE DOCTOR OF PHILOSOPHY TITLE

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#### Abstract

The Doctor title actually means teacher and has been considered the highest academic title achievable in science for hundreds of years. The title Doctor of Philosophy indicated a life dedicated to learning, knowledge and the spread of knowledge and was usually awarded only when the individual was in middle age. An academic title does not reflect a specific job and follows other rights than the working titles. There are no universal system or level of scientific achievement behind the Doctor title throughout the world today. Each nation has their own interests and systems behind the academic Doctor titles. Is this monopolized practice beneficial for independent science in a modern world, or is there a need for changes?

*Keywords:* Doctor of Philosophy title, university, independent science, freedom of speech, innovation, production function.

### Introduction

The analyzed subject of this article is of great importance because the use of the academic Doctor title is widespread and does not necessarily cover the momentum of the scientific truth the way it is created built on independent science. Traditionally, the academic Doctor title is based on a university degree or exam, and undoubtedly reflects a monopoly or privilege. There is no universal system or level of scientific achievement behind the Doctor title. That is one of the consequences caused by the monopoly and privilege system behind the Doctor title worldwide. Over the years, the Doctor title has manifested itself as the identification of an individual's long life serving of science, education and spread of knowledge. Each country has its own understanding and practice behind the academic Doctor of Philosophy title, even if some international projects aim to build unified systems, the task is hampered with jealousy, competition, pride, history and political as well as economical obstacles. Why are there governmental monopolies and privileges behind the academic Doctor titles reach a level of trust and justification as an individual's identification of a long serving life of science, education and diffusion of knowledge free from economic, competition and political interests?

#### Methods

The methods used in this article are concentrated on theoretical aspects in the history of the Doctor of Philosophy title, analyzes of legal and practical approaches of independent science and the use of the Doctor title as an identification of a human being's identity based on its activities and level of justification. Comparison between independent science and innovation as an explonational factor in entrepreneurial history over a broad and timeless scope constitutes a basis of the argument and conclusions.

# The Origin of the Doctor Title

The Doctor title actually means teacher and has been considered the highest academic title achievable in science for hundreds of years (Doctor title). The first Doctor titles were awarded in the 13<sup>th</sup> century at University of Bologna (1237) and University of Paris (1213) and the popularity and use of the doctor title has spread around the world ever since (Doctor title).

Actually, the first roots of the Doctor title use can be traced back to the early church where Christian authorities taught and interpreted the Bible. The meaning of Doctor was a license to teach based on a required test. The applicant had to take an oath of allegiance and pay a fee. There is no doubt that the Doctor title and the license to teach represented a very high prestige and represented a higher prestige than the Bachelor title. Throughout the medieval in Europe, the license was considered a necessity to teach at universities, but it was reduced to an intermediate step to Magister and Doctor, which became the ultimate level of qualification for teaching. Theology, law and medicine were the earliest subjects for Doctor Degrees, but over time these three subjects do not reflect the whole scale of higher degrees as other subjects covered by philosophy have become more common (Doctor of Philosophy).

The title Doctor of Philosophy indicated a life dedicated to learning, knowledge and the spread of knowledge and was usually awarded only when the individual was in middle age. The Doctor title was granted by a university to learned people based on the approval of their peers after a long and productive career in philosophy. From its beginning and throughout the medieval ages, the Doctor Degree system functioned more

or less as a vocational training, even though on a higher level, handling over knowledge and skills from one generation to the next, partly by written sources and practicalities and partly by oral narratives. Control of information as well as privileges were the focus of the system and constituted its core value.

The Enlightenment introduced a completely new attitude to science and knowledge. Humboldt University of Berlin was established 16 August 1809 by Frederick William III and opened on 15 October 1810 under the name University of Berlin and represented a significant change in the development of science and education (Humboldt University). Its foundation was inspired by Wilhelm von Humboldt, Johann Gottlieb Fichte and Friedreich Ernst Daniel Schleiermacher, and is known worldwide for pioneering the Humboldtian model of higher education, a holistic combination of research and study, which has brought a strong influence on European and Western universities ever since its opening, like among others Johns Hopkins University.

The Humboldtian tradition is based on a central principle that unites the teaching and research of the work of the individual scholar and scientist. During the 19<sup>th</sup> and 20<sup>th</sup> century Humboldt University of Berlin was regarded the world's preeminent university for natural science. The individual and the world citizen are the two basic components of the Enlightenment and constitute the universities activities by enabling students to become autonomous individuals and world citizens by developing their own reasoning powers (Humboldtian model). Ideological, economic, political or religious influences should be replaced with teaching guided by current, independent and unbiased research. The university activities should not merely provide professional skills aiming towards the labor or commercial markets, but encourage students to build their own character by taking power over their own development. The study should be formed on the basis of logic, reason and empiricism avoiding authority, tradition and dogma.

The university had much larger and important tasks to tackle instead of being a provider of vocational training. Humboldt wrote a letter to the Prussian king explain his philosophy: "There are undeniably certain kinds of knowledge that must be of a general nature and, more importantly, a certain cultivation of the mind and character that nobody can afford to be without. People obviously cannot be good craftworkers, merchants, soldiers or businessmen unless, regardless of their occupation, they are good, upstanding and – according to their condition – well-informed human beings and citizens. If this basis is laid through schooling, vocational skills are easily acquired later on, and a person is always free to move from one occupation to another, as so often happens in life" (Humboldtian model).

Humboldt viewed philosophy as the connection between the different academic disciplines, which include both humanities and natural sciences. Freedom of research, curiosity and internal objectives are the scientific principles that should constitute the university and not market driven values. To exercise these principles the university must be independent from the state, financially and politically and exist outside of governmental and economic restraints. The university would be a platform for all involved in research and education. Independence for the university means avoiding the influence of the government, and that all scientific institutions of higher education must separate themselves from all forms within the state.

Humboldt proclaims that becoming a citizen of the world means dealing with the great questions of humanity: seeking peace, justice, and caring for the exchange of cultures, other genders relationship or another relation with nature. University education should not be job focused, but education that is independent of economic interests.

The research based university model rapidly made an impact both in Germany and abroad and in the 1960s, the Humboldtian model attracted renewed interests internationally. From the 1970s onwards, partnerships between universities and industry popped up in the Western world in the forms of research parks and research centers. Anyhow, the concept of the market university as an economic engine diverges from the Humboldtian principles. The last decade has shown an increased interest in the Humboldt principles as the call for education in academic freedom has accelerated as a response to the market and job related university practices encouraged by OECD. Current university reforms are characterized by non-Humboldtian values, as f. ex. the Bologna process, which is promoting occupational studies with economic interests and restricted to static educational methods without freedom of teaching.

# Independent Science and Innovative, Dynamic Pedagogy

The result of independent science is the scientific truth. Scientific truth is not a product or service that has a monetary value on the market. Scientific truth cannot be monopolized or capitalized in any way. Scientific truth is not manufactured or produced like products and services based on the production input factors. Products and services are made by combinations of land, labor and capital and are valued in monetary terms when sold on the market. Scientific truth enriches man and contributes to the collective understanding of humanity's great questions. Scientific truth does not relate to neither the labor market nor the commodity market or products or services of any kind. The process of independent science is characterized by independency from any power structures like state, government, organizations or market. Independence in science means freedom from any interference, economic dependency or control of any kind. The process of independent science is dynamic.

People that have the freedom of independency in their scientific activities make science. Independent scientist are not wage earners, and do not exercise their science under any employer or principal. The independent scientist controls the whole scientific process.

Dynamic pedagogy and innovative learning systems follow the same principles as the process of independent science (Sandal, 2012). Both the teacher and the student must be independent and free from any restraints. Contemporary or future profit as an economic basis for teachers and students function as the only beneficial framework that can secure independency. Innovative approach in education indicates a break with established dogmas and routines and opens for new insights and new solutions to established phenomena and unsolved problems.

Dynamic pedagogy does not take place within the knowledge and education industry, which is characterized by static and non-innovative learning methods. The knowledge industry transmit established truths and dogmas, and very often propaganda and political and religious lies to students. The knowledge industry is a part of the labor and commercial markets and functions as vocation school, both at lower and higher levels, like f. ex. university level within the Bologna process. Both teachers and students depend on wages and economic benefits, which are state or privately funded. The production costs are paid for by state or private, even though fees at rather high rates are common at prestigious universities and colleges. The knowledge industry functions like profit centers. The pedagogical principles are based on repetition and control and the goal of the knowledge industry is to provide future employers to the labor market. Most of the subject taught at universities are market oriented, and that makes the system suffer from lag and insufficiency, because no one can predict the future demand of labor in an open market. We have seen that a Bachelor degree is no guarantee for employment, nor even a Master degree can provide the holder a job, because there are other mechanisms in control of the labor market, among others, the Labor-marginal utility value exchange mechanism, not only the successful static education (Sandal. 2012). At the same time, one should underline the need for static education, because we live in a static based and oriented world.

Semi, non-innovative pedagogy is characterized by either a free teacher and dependent students, or vise versa. While the static, non-innovative learning system represents a linear structure and beneficial pedagogical process, the semi, non-innovative pedagogy represents a devastating activity. While the static systems is built on conformity between professor, students and curriculum, the semi static learning method results in rebellion, i.e. always objections and protests between professors and students and resistance to the curriculum from both sides.

Dynamic pedagogy knows no bounds for use or resources; it takes everything necessary to achieve its goals. This is in contrast to the static pedagogy, which is reduced to the strictest budgets for finance and time use. Static pedagogy is organized into semesters, weeks, days, hours and minutes, and there is no space or opportunity to go outside the frameworks and no incentive. Dynamic, innovative pedagogy has the capacity to alter the traditional methods, knowledge, and dogmas and open up space outside the traditional frameworks. Dynamic, innovative pedagogy is the result of independent science and it further stimulates independent science.

A life with independent science and dynamic, innovative pedagogy reflects dedication to learning, science and the spread of science based knowledge in the long tradition that is described with the title Doctor of Philosophy, and is perfectly achieved outside the knowledge and education industry.

# Exams, Degrees, Monopoly or Freedom of Expression and Personal Identity

Through hundreds of years, the Doctor title has been the highest recognition of a life dedicated to science, learning and the spread of knowledge based on science and the title reflects a level of philosophy achieved based on extraordinary contribution, both for the person and for the global society. The Doctor title not only reflects a level achievable for the ones who put their effort into the philosophy but it also indicates the profile and identity of the person. Doctor is not something to have; it is something to be. A degree reflects a privilege based on an achievement presented to an individual; Doctor of Philosophy is a way of life.

A scientific degree with corresponding privileges might seem useful when organizing the labor market. The degree system works both ways, controlling the level of understanding of the degree holder and the allocation of accessible and attractive jobs. The employer as well as the employee has a choice, study first and then work, or work first and then study. When enrolling in a doctoral degree program in the education industry the candidate can combine study with work, as most programs offer paid positions.

The belief that all human beings are endowed with reason and conscience dates back to antiquity and has been manifested as a response to World War II. The universal Declaration on Human Rights builds on the fact that all human beings are equal in dignity and rights and gifted with the power of the mind to think, understand and form judgements by a process of logic (Article 1.). The scientific truth belongs to all and consequently everyone has the right to freedom of opinion and expression, as stated in Article 19 in the universal declaration of human rights. To share and seek information and ideas through any media without boundaries is considered a human right (Article 19.), and constitutes an obvious part of the process of independent science. Furthermore, in the modern society everyone has the right to elementary education and higher education based on merits. Even though everyone has the right to higher education according to Article 26. (1), it is not likely to imaging that all will undergo higher education, at least not in an organized form. The fruits of the scientific truth are shared equally between individuals, as stated in Article 27. (1). Participation in the creation of science and devoting one's life to the advancement of science as well as sharing of its benefits are fundamental human rights.

The latest one to two decades have dramatically change the information flow in the world. From the situation where information was limited to the privileged few to the spread by help of printing and modern transportation to the opening of universities for the working class sons and daughters information now is globally widespread thanks to the internet and social media. Study programs are to be found everywhere on the Internet, one can study whatever subject from undergraduate to the doctor level, and usually free of charge. Dissemination of knowledge has taken a new and higher level globally, governments no longer monopolize it, even thou blocking of the internet is a reality and takes place. Information and knowledge are almost available everywhere and for everyone, representing a higher level of democracy. To live a life dedicated to philosophy, science and learning is no longer monopolized and restricted to the privileged few, but can be exercised by everyone who wants. The Doctor of Philosophy title has now, for the first time in history reached its potential, what it was meant to be from the beginning and without restrictions.

Personal identity goes beyond and above the working title. A working title describes the profession, skills and more clearly the function, responsibilities of scope of an individual job assignment, and thereby provides a more immediate understanding of the job in business communication. A working title might be useful when linked to the second input factor; labor, otherwise the employer can make no use of it. Some working title are restricted (EU regulations). Each member state in the European Union has a certain number of protected titles and reserves of activities. This is in the interest of the states to protect their power. An academic title does not reflect a specific job and follows other rights than the working titles. States monopolize the use of most academic titles, which they think are justified based on the interest of the state. The member states of the Bologna process, which covers a three circle of Bachelor, Master and PhD degrees with corresponding titles, have monopolized the titles (Nokut). Anyhow, the system is not coherent. Sweden f. ex. has left the degree system and presents doctor titles based on exams. Denmark still operates with degrees, but distinguishes between the small doctor title (Ph.d., Bologna process based) that is actually not recognized in the Danish Law as a Doctor, and the high doctor (Doctor Philosophiae) (Danish Law) that goes beyond the level and system of the Bologna process. In Norway, the historically analogous dr. philos. degree is officially regarded as equivalent to the new Ph.d. (Doctor of Philosophy). Academic titles are of great interest for the governments, not at least as a competitive argument between states and of course as a restrictive determinant on the labor market, even though a Doctor title is not a working title.

From the viewpoint of international independent science, science is not an object of competition, neither on the individual level nor on the national level. Still government use science as a tool for their own purposes in competition and as a regulator on the labor market. Science follows the same logic and truth as innovation. No one can employ a person to be an entrepreneur; the principal must be the entrepreneur himself (Schumpeter, 2008). The same goes for science; no one can employ someone to create independent science, the scientist must be independent.

The title Doctor of Philosophy reflects the identity of the individual and is not a working title.

### Conclusions

Independent science is made by individuals without any interference from the state or market. Independent science follows the same logic as the creation of innovation. Independent science is exogenous to the production function. The Doctor title represents the ultimate level of a life dedicated to science and functions as a strong indicator of a human being's identification and identity. Throughout centuries, governments have monopolized both science and the Doctor of Philosophy title, and reduced science to criteria for employment and a commodity at the commercial market. There are no universal system or level of scientific achievement behind the Doctor title. A new approach would be to decartelize the Doctor of Philosophy title and introduce it with its original meaning and purpose. Additional, a new and free title could be introduced worldwide to cover something more and different from the existing Doctor of Philosophy title.

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# Anotacija

### NEPRIKLAUSOMAS MOKSLAS IR FILOSOFIJOS DAKTARO VARDAS

Kodėl už akademinių daktaro vardų slypi vyriausybinės monopolijos ir privilegijos ir kaip akademinių daktaro vardų reikšmė ir naudojimas gali pasiekti pasitikėjimo ir pagrindimo lygį kaip asmens identifikavimą mokslo, švietimo ir žinių, nepriklausomų nuo ekonominių, konkurencinių ir politinių interesų, srityje? Šiame straipsnyje naudojami metodai vra sutelkti i teorinius filosofijos daktaro vardo istorijos aspektus, teisinių ir praktinių nepriklausomo mokslo požiūrių analize ir daktaro vardo, kaip žmogaus tapatybės identifikavimo, naudojimą remiantis jo veikla ir pasiekimų lygiu. Nepriklausomą mokslą žmonės kuria be valstybės ar rinkos kišimosi. Nepriklausomas mokslas vadovaujasi ta pačia logika kaip ir naujovių kūrimas. Nepriklausomo mokslo rezultatas yra mokslinė tiesa. Mokslinė tiesa praturtina žmogų ir prisideda prie kolektyvinio žmonijos klausimų supratimo. Nepriklausomo mokslo procesui būdinga nepriklausomybė nuo bet kokių valdžios struktūrų, tokių kaip valstybė, vyriausybė, organizacijos ar rinka. Isitikinimas, kad visi žmonės yra apdovanoti protu ir sąžine, atsirado dar antikos laikais ir pasireiškė kaip atsakas į antrąjį pasaulinį karą. Asmeninė tapatybė neatitinka suteikto vardo. Akademinis vardas neatspindi konkretaus darbo ir atitinka kitas teises nei suteiktas vardas. Šiandien visame pasaulyje daktaro vardas nėra universali mokslo pasiekimų sistema ar lygis. Kiekviena tauta turi savo interesus ir sistemas, siejančias akademinius daktaro vardus. Daktaro vardas atspindi galutinį mokslui skirto gyvenimo lygi ir veikia kaip stiprus žmogaus tapatybės ir tapatumo rodiklis. Kadangi už daktaro vardo nėra universalios mokslo pasiekimų sistemos ar lygio, naujas požiūris būtų atskleisti filosofijos daktaro varda ir jį supažindinti su jo pradine prasme ir tikslu. Be to, naujas ir nemokamas vardas galėtų būti pristatytas visame pasaulyje, kad apimtų kažką daugiau ir skirtingai nei esamas filosofijos daktaro vardas.