Franjo Prot

6. Kinesiology – science of human movement the piece of legacy from Nicolas Dally (1795-1862) for contemporary kinesiology scholars and professionals

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Abstract

Kinesiology, the science of human movement /kinetics quite recently gained full credibility as an academic discipline for the field of human movement and exercise practice in area of education, sport, recreation and kinesitherapy worldwide, becoming a proper denominator for the field of sport or exercise science. Therefore in this paper short biography of the forefather of KINESIOLOGY, or CINÉSIOLOGIE as a francophone variant, how Dally introduced the term and conception in his book from the year 1857 is presented. The presentation integrates some newly available authentic illustrative material which documents and underpins importance of Dally’s overall contribution to the wide spectrum of scientific, cultural and everyday issues he dealt with. It seems, almost compulsory to be reminded and speak about Nicola Dally and his work again as a confirmation of concluding statements on him and his legacy of his biographer from 19th century as recorded in M. Pierre Larousse’s Grand dictionnaire universel du XIXe siècle. Bibliography based on resources of worldwide relevant on classical and online library catalogues is added to the references.

Key words: Dally Nicolas, kinesiology, cinésiologie, history of sport science.

Introduction

In last 50 years name and work of Nicolas Dally have been mentioned numerous times in the context of development of academic discipline and science in the area of human movement and exercise. Some researchers have been informed and considered his contribution [Mraković, 1971; Ilić, 1981; Mraković et al., 1987; Renson, 2000, 2002, 2006], some of them had not [Braun, 1941; Momirović, 1969; Kroll, 1981; Park, 1981; Harris and Hoffman, 2000; Hoffman, 2005; Starosta, 2001, 2002, 2002a, 2007].
The first International conference on kinesiology "Kinesiology - present and future" organized by Faculty of physical education (today named Faculty of Kinesiology of University of Zagreb) had been dedicated to 140th anniversary of publishing the book Cinesiologie by Nicolas Dally. Two introductory papers opened the conference. The first addressed the present and future of kinesiology [Mraković, 1997] and the second one addressed to the past and covered some new insight in to work and life of Nicolas Dally [Prot, 1997].

Limited time and resources for research were available at hand at a time, having good idea in mind Dally biography have been discovered, and bibliography reconstructed. Founded facts have been considered sufficient to point out and conclude that he could be considered as a forerunner or "farther" of contemporary kinesiology, announced also by the title and content of his book "CINÉSIOLOGIE OU SCIENCE DU MOUVEMENT. dans ses reports avec l'éducation, l'hygiène at la thérapie, etudes historiques théoriques et pratiques", which have been further developed as contemporary academic area and dynamic scientific field in second half of 20th century.

The library search started with information in National Union Catalog pre-1956 imprints Volume 131, published by Mansel [1971]. The largest print union catalog ever published is the American National Union Catalog Pre-1956 Imprints (NUC), completed in 1981. The NUC of Pre-1956 Imprints is published in 754 volumes, containing over 528,000 pages. The set takes up approximately 130 linear feet of shelf space (about 40 meters). Achievement of American National Union Catalog Pre-1956 Imprints has since been superseded by the creation of large electronic resource sharing networks, such as OCLC's WorldCat. WorldCat is an expanding universe of information alternatives, why stand alone? WorldCat is a global network of library content and services that uses the Web to let any relevant institution to be a part of the global catalog.

Two years later on the Second International conference on kinesiology professor Ronald Renson from Catholics University of Leuven have been invited to present some new insight on Dally and related developments, with prospective cooperation later on [Renson, 1999, 2005, 2008]. In the mean time in the year 2007, 150th anniversary passed almost unnoticed. Just two passionate researchers meet together in Leuven, and have a nice time together exchanging some news (olds) on the subject.

Just recently (November 2009) it comes to reality, that I came in possession of authentic (original) peace of the book Dally's book "CINÉSIOLOGIE OU SCIENCE DU MOUVEMENT. dans ses reports avec l'éducation, l'hygiène at la
thérapie, etudes historiques théoriques et pratiques”, in the very good condition with complet front and back cover. And, it is interesting, stimulating and exciting to have it as a possession (Fig. 6.1 and 6.2).

Fig. 6.1. Original front page of the Dally’s book CINÉSIOLOGIE OU SCIENCE DU MOUVEMENT. dans ses reports avec l’education, l’hygiène at la thérapie, etudes historiques théoriques et pratiques, published by Librairie Centrale des Sciences, Paris 1857., from the author’s personal library.
OUVRAGES DU MÊME AUTEUR:

Description de la machine à vapeur, avec une note sur l'histoire de la vapeur et celle des grandes voies de communications dans l'antiquité, par N. Dally, Directeur de l'École centrale de Bruxelles ; Bruxelles, 1839.

Linguistique ou mécanisme de la formation des langues, à l'occasion de l'Histoire de la parole et de l'écriture, par Ch. Nobes, par N. Dally ; Bruxelles, 1833.

Cours de psychologie, par N. Dally ; Bruxelles, 1890.

Mœurs, usages et costumes des peuples de l'Asie, ouvrage publié par Wahlen ; Bruxelles, 1843.

Méthode géographique ou division naturelle de la surface de la terre, brochure avec cartes ; Paris, 1844.

Du traitement de la phthisie pulmonaire par le mouvement, lettre à M. le Dr Bureau-Hoppey ; Paris, 1880.

Du traitement du Choléra par le mouvement, brochure, 2e édition ; Paris, 1889.

Fig. 6.2. Original back page of the Dally's book CINÉSIOLOGIE OU SCIENCE DU MOUVEMENT..., from the author's personal library.
There are some Dally's published titles (for the period from 1833 to 1856) which have been advertised there:

- Dally, N. [1833]: Description de la machine à vapeur. (avec une notice sur l'histoire de la vapeur et celle des grandes voies de communications dans l'antiquité). Bruxelles.
- Dally, N. [1833]: Linguistique ou mécanisme de la formation des langues. (à l'occasion de l'Histoire de la parole et d'él'écriture, par Ch. Nodier). Bruxelles.
- Dally, N. [1833]: Cours de psychologie. Bruxelles.
- Dally, N. [1843]: Mœurs, usages et costumes des peuples de l'Asie. (ouvrage publié par Wahlen). Bruxelles.
- Dally N. [1850]: Du traitement rationnel de la phthisie pulmonaire par le mouvement gymnastique: suivi d'un aperçu sur la nécessité d'introduire l'habitude d'exercices méthodiques dans la vie intérieure des familles: lettre à M. le docteur Bureaud-RiofreyAuthor. (48 pages)

At the same Google book project offers to all interested to use a copy from Biblioteca Atheneu Barcelonés library, Digitized by Google (Figure 6.3).
In this contribution the short biography of Nicolas Dally is presented following mainly the sources from The Grand Dictionnaire universel du XIXe siècle (Great Universal Dictionary of the 19th Century), often called the Larousse du dix-neuvième of Pierre Pierre Larousse, where it had been presented, and correct with the new finding of Renson [2000]. Additional authentic illustrations from available documents and resources are presented and stressed.

Dally Nicolas (1795-1862)

Dally, Nicolas, borne 1795, in Sampigny, Meuse, according Renson [2000], was a son of the engineering colonel, the soldier of the Republic. The military career characterized his youth. As many of his age and time, he was dragged into the imperial wars of the decade. As the adjutant of the 15th Dragon regiment of the Napoleon armada he was made a captive of war in November 1812, while his army was fighting in retreat near Berezina. The Battle of Berezina took place November 26-29, 1812 between the French army of Napoleon, retreating after his invasion of Russia and crossing the Berezina (near Borisov, Belarus), and the Russian army under Mikhail Kutuzov, Peter Wittgenstein and Admiral Pavel Chichagov. The battle ended with a victory for the Russians. The French suffered very heavy losses. It is why, since then; "Bérézina" has been used in French as a synonym of disaster. He came back to France after two years of imprisonment in St. Petersburg. Negotiations about his returning to the military milieu, or in public life, made him to run away in 1817. He exiled and settled in United Netherlands, i.e. Belgium.

A circumstance that he was a soldier's son soothed the militant passions of the young Dally. His war and army experiences left just a little place for the sympathetic feelings to the military obedience, called discipline. His later works showed that even then he had been studying physical and mental distortions, consequences of the monotonous military drill.

After he had settled in Brussels, he was able to devote himself to scientific improvement and research, specially in the field of medicine researches. He founded a school according the model of the one in Paris, but it, unfortunately, brought neither the expected prosperity (wealth) nor pleasure. He had been reported as N. Dally, Director de l’École centrale de Bruxelles, elaborated and documented by Renson (2000).

At that time he issued a work under the title "Description of steam engine". It became an origin of the paper on "Evaporation steam" (Brussels, 1833) and of the work on important traffic corridors of the ancient times. Dally wrote "Linguistics or Mechanism of language forming" [Dally, 1833],
based upon the Nodier's "History of words and writing". In the year 1836 he engaged himself with his "Physiology" and with comprehensive work on customs and costumes of Asian people. That work was published in 1843 by Wahler in Brussels. After he had returned to France, as a member of the Geographical Society he was engaged in geographical researches (Dally, 1843). The map of Central America uncovers his title and position in society as a "Membre De Plusieurs Sociétés Savantes" (Fig. 6.4. and 6.5.)

Fig. 6.4. Map of Central America where Nicolas Dally is designated as cartographer.

Fig. 6.5. Detail from upper right corner the Map of Central America.
Our Dally considered geographic characteristic to be important and crucially responsible for the cultural differences. Ethnology and linguistics were, in his opinion, only the particular parts of human history and philosophy. He was expanding his medical knowledge and horizons avoiding to be a dualistic and split body from mind when considering humans. Having the holism and harmony between body and mind continuously in mind, he was particularly dealing with dynamics and movement that were represented by the simple name of gymnastics. He was giving a series of lectures and discussions on that subject. One interesting fact is relation and cooperation of Dally with Hypolite Triat. In the year 1846 Dally and his companion Triat established a big exercise hall in Paris, but it was demolished during the Francis I Street construction.

According to: http://www.psta.com/images/cat5.pdf the company had been established GYMNASSES DE FRANCE, SOC. GEN. FRANCE : PARIS. “The company was formed 1855 by a M. Triat, from Nîmes, and raised a capital of F5 million by selling shares (Fig. 6.6.). The shareholders could, if they wished, obtain repayment of the cost of their shares by taking free gymnastics courses in the company’s gymnasium. Triat new how to profit from the new bourgeois taste for physical fitness. His courses, offered in Brussels and Paris, were quite expensive, the monthly fee being the amount of the monthly wage for a worker. In 1860 his Paris gym was expropriated without compensation in connection of the development of the Champs-Elysées.” Gymnastics for women had been introduced and gymnasium opened in Liège in 1839.

Fig. 6.6. GYMNASSES DE FRANCE, SOC. GEN. FRANCE : PARIS. 5 Actions de F20, printer’s proof. black, buff. Border of arabesques, and a vignette of a gymnasium with men doing exercises.
Dally proposed a program of physical education to the Republic in 1848, and it was accepted with few changes. As a part of the campaign Triat and Dally publically address the provisory government of 1848 to establish Ministry of education "ministère de l'éducation publique" with three sections: physical education "Education physique", intelectual education "Education Intelectual ", and professional and social education "Education professionnelle et sociale" (Fig. 6.7).

Figure 6.7. Pamphlet of Triat and Dally address to 1848 Provisory Government an citizens of Republic (Renson, 2008).
La Révolution de 1848 vient enfin réaliser dans la loi ce qui s'était insensiblement réalisé dans le cœur du Peuple Français. La VÉRITÉ écrite dans l'Evangile : Liberté, Égalité, Fraternité.
Avec cette vérité seront mises en rapport toutes nos institutions sociales.
Une des premières réformes, la plus essentielle de toutes les réformes, doit porter sur l'éducation.

Que le gouvernement provisoire decrete qu'il sera établi un ministère de l'éducation publique, et que l'éducation y formera trois sections distinctes:

*Education physique - Education intellectuelle - Education professionnelle et sociale.*

En attendant la constitution définitive de cette institution nationale, les soussignes demandent, vu l'urgence,

Qu'il sit actuellement institué du ministeré de l'instruction publique une division spéciale de l'education physique, ou l'on s'occupera de l'introduction immédiate de la GYMNASTIQUE RATIONNELLE dans toutes les écoles et les pensionnats de l'un et de l'autre sexe, ainsi que dans tous les centres de population, de manière à préparer, en même temps que la régénération sociale, la régénération physiologique de tout le Peuple Français.

Qu'à cet effet, il soit immédiatement, el par initiative, établi, dans chaque arrondissement de Paris, un VASTE GYMNAZE propre aux exercices physiologiques de mille personnes à la fois, et pouvant contenir au moins dix mille spectateurs.

Ces gymnases seront en même temps les lieux des assemblées et des fêtes du peuple.

Les citoyens Trial et Dally, directeurs du Gymnase central de l'allée des Veuves, offrent au Gouvernement provisoire le concours gratuit de leur expérience pour la prompte réalisation de cette grande institution hygiénique. sociale et républicaine.

Paris, le 1er mars 1848. TRIAT et DALLY." (Renson, 2008)

(I am very grateful to professor Ronald Renson who introduced me with this document and share with me this copy after his invited speech at the 5th International conference on Kinesiology in Zagreb, 2008)

Along with all of his activities he remained to be an unselfishly caring father to his children, of whom one became a higher officer. The other one, M. Eugen Dally (1833-1887) who in his doctoral thesis proved and developed his father’s idea about the therapeutic bases of functional moving (movements). Proceeding with his work in his father’s spirit, he became an assistant secretary of the Anthropological Society, a principal of the Ethnology Department, and a professor at l’Ecole d’anthropologie.
Nicolas Dally was a typical man of progress of his era. He was a curious worldwide traveller interested in revealing characteristics of the world he was living in. His membership and activities in the Anthropological Society implies his basic commitment: the universal, holistic attitude towards the civilization's achievements while respecting all diversities and peculiarities at the same time. The main subject of his interests was the role of the movement and the exercise in education, hygiene, and therapy. In his public appearances, through the publications and lectures, he promoted his ideas.

At last, five years before he died, N. Dally had completed his creative work by the book *CINÉSIOLOGIE OU SCIENCE DU MOUVEMENT. dans ses reports avec l'éducation, l'hygiène at la thérapie, etudes historiques théoriques et pratiques*, published by Librairie Centrale des Sciences, Paris 1857. This comprehensive work comprises of 823 pages of text and attached preface and illustrations. In this book the synthesized European and non-European scientific achievements of the age can be found. He explained his concepts underlying the great importance of the role the movement (exercise) played in development and enhancement of human abilities, in formation of human characteristics, and in acquisition of knowledge and skills aimed at the human health benefits and preservation. That was the announcement of the new scientific discipline for the future that, as was said, is going to study the human movement in its complexity, integrity and anthropologic relevancy.

**How and where he presented naming kinesiology as science of human movement?**

At the beginning of the book (pages VIII and IX) Dally was concerned with the name of the new science: *"Where to look for that new name?"* He found the solution: *"The very movement, is the answer. Its root, expresses the general concept of natural or artificial moving."* After the explanation Dally concluded: *"We have consequently acquired a name kinesiology or science of movement."* It should be stressed that Dally adopted Francophone variant "CINÉSIOLOGIE" not and English one, *"KINESIOLOGY"* as we use it today outside the French speaking cultures (Fig. 6.8.).

According to the Larousse's "Grand dictionnaire universel" (Paris, 1870) the book is Dally's capital work in: *"which he developed such ideas that only descendants would be able to appreciate them in their true values"*.

Nicolas Dally died in Paris 1862. After his pass away someone can make the statement. So much effort and pain - *why are Dally and his work still unknown?* If we consider the power and originality of Dally's mind, we can
Les trois mots cinésie, cinésique, cinésitechnie rappellent, chacun, la notion de l'art ou de la science du mouvement artificiel; mais l'idée d'art et de pratique y prédomine. Pour désigner plus spécialement l'idée de la science et de la théorie des cinèses et de leurs rapports, le terme de cinésiologie nous paraît le plus propre.

Nous avons donc adopté le titre de Cinésiologie ou Science du Mouvement, et sous sa dépendance viendront la Cinésie éducationnelle, la Cinésie hygiénique et la Cinésie thérapeutique.

Fig. 6.8. The part of page IX of the Preface where the term CINÉSIOLOGIE was adopted, Digitized by Google.

say he was one of the leading intellectuals of his epoch. Undoubtedly, his education was versatile, but complete and solid. Historical problems pre-occupied him as well. He was trying to answer these questions by detailed quotations and patient researches employing creative approaches at the same time that should decrease uncertainty and bring light in to the possible doubts. By the original ideas of his he was always able to outshine the earlier ideas of others. In short, there are a few so, very and thoroughly, original books as “CINÉSIOLOGIE” is, in particular. Dally was an erudite, profound experimenter who was able to direct his thoroughness to the wholeness of the problem, what should be a foundation of every true philosophy. His ideas on the subject are still fresh and worth of attention today.

According to WorldCat’s library catalog service the book Cinésiologie; ou, Science du mouvement dans ses rapports avec l'éducation, l'hygiène et la thérapie; études historiques, théoriques et pratiques. by Nicolas Dally is traced by library copies to be present by countries: Belgium = 1; Netherlands = 1; United Kingdom = 2; France = 7; USA = 6 (New York = 1; Connecticut = 2; Maryland =1; Minnesota = 1; Utah = 1); Argentina = 1.

The Figures 6.9, 6.10, and 6.11. are presenting few of the copies reported in published papers, and conference presentations.
Fig. 6.9. The title page copy of Dally's book CINÉSIOLOGIE OU SCIENCE DU MOUVEMENT... a copy from Sainte-Geneviève Library, Paris. Present in Zagreb kineziology circle in 1970's, [Mraković, 1971].

Fig. 6.10. The title page copy of Dally's book CINÉSIOLOGIE OU SCIENCE DU MOUVEMENT... a copy from library of Faculty of medicine, Paris. Present in Zagreb kineziology circle in 1990's, [Prot, 1997].

Fig. 6.11. The title page copy of Dally's book CINÉSIOLOGIE OU SCIENCE DU MOUVEMENT... from INSTITUT SUPERIOR D'EDUCATION PHYSIQUE UNIVERSITE DE GAND (Renson, 2000, 2002, 2006, 2008)
Włodzimierz Starosta

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Author of this monograph - member of International Association of Sport Kinetics elaborated without honorary. It is his gift for IASK members, scientists, coaches and sportsmen.

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I would like to dedicate this monograph to my wonderful wife Tatiana and my dearest son Slawek, who for a very long time incredibly patiently endured my passion for science, and the numerous inconveniences related to that. I would like to thank them also for their continuing help and support in difficult moments. I will always be grateful to them for that. Filled with enormous gratitude.

Author

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