

Doctoral Studies: A Comparative Analysis between European and National (Greek) Level

Katerina Skondra

Department of Educational Sciences and Social Work,
University of Patras, Greece

Aggelos Kavasakalis

Department of Educational Sciences and Social Work,
University of Patras, Greece

ABSTRACT

The present paper investigates the evolution of Doctoral Studies by comparing the European and the national level (Greece). The research question is “How Doctoral Studies have been evolved at Europe and Greece during the 21st century”? The investigation is conducted via the analysis of policy texts and the production of “codes”. The time frame is set at the three decades of the 21st century. At the European level, the research focuses on the supranational entity of the European Union (EU) and the Bologna Process (EHEA). Moreover, it analyzes the official discourse of key stakeholders, such as the European University Association (EUA) and the European Students’ Union (ESU). At the national level, it draws on relevant legislation and a prior research’s findings. After analyzing and producing codes related to developments in Doctoral Studies at the European and the national level, a comparative analysis highlights the convergences and divergences between the two levels.

Keywords: Doctoral Studies, Doctoral Education, European Higher Education Area (EHEA), Industrial doctorates, joint doctorates.

INTRODUCTION

The present article aims to investigate the development of Doctoral Studies at the European and national level, through the thematic analysis of institutional policy documents and policy papers of stakeholders. It presents and discusses their similarities and differences.

Chapter 1 outlines the “current state of play” briefly and the key developments into Doctoral Studies, making an attempt to present the European theoretical context. Chapter 2 sketches the methodological choices made. The research objective is shaped, the research question is formulated, the research method is selected and the research tool and analysis process are described. At Chapter 3, the research findings and the data analysis are presented. The research is limited to the 21st century, dividing it into its three decades. The data of research are policy documents. Through analysis, codes are generated, which are dynamically formed by the data. Finally, after the analysis and comparison of the two levels, the convergences and divergences between them are emerged and the answer to the research question is provided.

DOCTORAL STUDIES: THEORETICAL CONTEXT

Transformation of Doctoral Education

Over the last decades, there are profound *structural and institutional transformations*, which occur in the form, the content, the locus of delivery, the recipients of Doctoral Education and respond to social, political and *students' expectations* (Carvalho & Cardoso, 2020, p. 375). This *deep transformation* contributes to the *multidimensionality of the transformation* and its' aspects, such as the foundations, the objectives, the methods, the organization, the process and leads to the realization of the *idea or concept* of Doctoral Education, namely *what this is or should be* (Cardoso et al., 2022, p. 885). Generally, "*shifting notions of what doctoral research and dissertations can (and do) look like*" are observed today (Anderson et al., 2021, p. 593).

Evolution of Doctoral Studies

Bearing in mind the specific wording of Swales (2009, p. 10), that "*it is time for the traditional PhD dissertation to be given a decent burial*", in Europe, new (non-traditional) forms of Doctoral Education (Bao et. al, 2018, pp. 524-541; Vasilopoulos & Giotakou, 2022, p. 54), could be "located", each of which leads to the award of a Doctoral Degree: (a) *the PhD by Published Work*, (b) *the Taught Doctorate*, (c) *the Practice Based Doctorate*, (d) *the Professional Doctorate*, (e) *the Joint Doctorate*, (f) *the Cooperative Doctorate*, (g) *the New Route PhD* and (h) *the Industrial Doctorate*.

In order to be more accurate considering *the Joint Doctorate*, universities may cooperatively offer two types: the *joint doctoral degree* and the *dual doctorate degree* (van den Hoven & Connell, 2016, p. 263). The first one shares a collaborative act between the two universities, resulting in one degree and one diploma with endorsements from both of universities, which also share the responsibility. The second one provides one degree and two diplomas from two different institutions, each of whom is responsible for their own awards (van den Hoven & Connell, 2016, pp. 263-264). There is also a third type of dissertation, the *joint doctoral dissertation/jointly authored doctoral dissertation*, which is jointly authored by two individuals Doctoral Candidates come from different scientific fields (Gale et al., 2010, pp. 21-28). Within the framework of the Bologna Process, into the Communiqué signed in Rome (Bologna Process, 2020), the form of Joint Programs, including Doctoral Programs, is introduced into the discussion for more systematic implementation.

According to *the Industrial Doctorate*, in Europe, new programs are emerged in the form of a new type of Doctoral Thesis, known as *an Industrial Doctorate/Industrial PhD/Industry-based doctoral programs* (Vasilopoulos & Giotakou, 2022, p. 54). They link universities with industry more systematically, carrying the hope that Doctoral Graduates will transfer and apply the knowledge they gained during their studies (Vasilopoulos & Giotakou, 2022, p. 54). Moreover, bearing in mind developments in relation to the third cycle in the framework of the EHEA, a new model is formulated and promoted, named as *the model of structured doctoral education* (Vasilopoulos & Giotakou, 2022, p. 54).

RESEARCH METHODOLOGY

Research Objective, Question and Method

The research objective of this article is to analyze the evolution of Doctoral Studies at Europe and Greece during the 21st century. Therefore, the research question is formulated as follows: *How Doctoral Studies have been evolved at Europe and Greece during the 21st century.*

The qualitative method is chosen as the research method. The most significant argument for selection is the nature of the subject matter. The investigation of the evolution contributes to the *“discovery of new aspects and dimensions of the subject under examination”* and to its *“in-depth understanding”* (Tsiolis, 2011, p. 3).

Research Tool and Analysis Process

Thematic analysis of policy texts is used as a research tool. Thematic analysis *“consists of the systematic recognition, organization and understanding of recurring patterns of meaning”* (Braun & Clarke, 2012; Tsiolis, 2018, p. 98), but it *“does not evolve in a linear and mechanical way [as] the researcher often returns to previous steps/stages, revises decisions and tries out new ideas”* (Tsiolis, 2018, pp. 121-123).

Via the analysis of the policy texts and the data produced, three *codes* are emerged, which are conceptual definitions (Bryman, 2008, pp. 283-288), *suitable* for answering the research question (Braun & Clarke, 2012; Tsiolis, 2018, p. 98). Through their semantic processing, a *theme* is formed, that is a *common semantic core* (Tsiolis, 2018, p. 115) as a *version or aspect of the answer* to the research question (Tsiolis, 2018, p. 113).

Table 1: Theme and Codes for Thematic Analysis

Theme		Evolution of Doctoral Studies (Europe - Greece)
Code	1	Organization of Doctoral Studies
Code	2	Industrial Doctorates
Code	3	Joint Doctorates

The findings are presented by the codes per decade, first at the European level (EU, the Bologna Process, EUA, ESU) and then at the Greek level (legislation and prior research).

ANALYSIS - FINDINGS

European Level

European Union (European Commission):

Within the EU, the European Commission is one of its institutional bodies, responsible for proposing laws and ensuring their proper implementation¹. This research was based on two searching criteria. The first one concerned the type of texts, which was about to be analyzed via thematic axes, selecting institutional documents, with an emphasis on *Law, Case Law, Publications, Regulations, Directives, Decisions*. The second one referred at the period of time used, i.e. from 1999 (the date of the Bologna Declaration signing) up to 2024 (the date of the completion of our research).

Code 1: Organization of Doctoral Studies

1st decade². The European Economic and Social Committee (2004, pp. 12-13) referred to the organization of Doctoral Studies, emphasizing the process of *“writing a doctoral dissertation”* and *“awarding a doctoral degree”*, indirectly noting the only available way for writing a Doctoral Thesis at that time, the connection of a candidate with a supervisor.

¹https://commission.europa.eu/about/role/law_en

² The analysis is organized per code thematically (Code 1, Code 2, Code 3) and into periods chronically (1st decade: 1999-2009, 2nd decade: 2010-2019, 3rd decade: 2020-2024).

3rd decade. Doctoral Programs are organized differently in different countries, ranging from “*individually organized training*” to “*standard training programs*”, including *doctoral schools*. Organized studies tend to be particularly well developed in countries such as Scandinavia, the Netherlands and the United Kingdom, while in others, such as Germany and Spain, they are on an experimental basis (Commission of the European Communities, 2023, p. 15).

Code 2: Industrial Doctorates

2nd decade. In the context of the EU’s economic recovery, a “*business-oriented research and development*” was one of the “*typical areas of support*”, announced by the Commission (European Commission, 2012, p. 76). This strategy heralds the entry of industry into Higher Education’s research activities and the emergence of a new doctoral model, Industrial Doctorates.

3rd decade. Within the Marie Skłodowska-Curie Actions (MSCA), *Industrial Doctorate Programs* are organized in such a way that research experience, position and supervision are shared equally between academic and non-academic area. In the EU, Industrial Doctorate Programs are an example of interaction, serving the needs of industry for “*highly skilled talents*” (European Commission, 2023, p. 16).

Code 3: Joint Doctorates

1st decade. In the transition from the 1st to 2nd decade, within the framework of the Erasmus Mundus 2009-2013 mobility program, the Call for Proposals, dated 10/02/2009 (p. 1) included the Action *Joint doctoral programs*, which aimed to “*support postgraduate programs of outstanding academic quality*” and, by extension, the “*attractiveness of European higher education*” (Education, Audio visual and Culture [EAC] Executive Agency, 2009, p. 21). The reference to postgraduate programs as a framework demonstrated the lack of autonomy of Doctoral Programs at that time.

2nd decade. By a Resolution (European Parliament, 2010, p. 20), Parliament called for “*emphasis to be placed on the need to establish joint european doctoral programs*” with a view/purpose to creating a single (joint) framework for the establishment of a European Doctorate.

3rd decade. The Council (Council of the European Union, 2022, pp. 8, 18) advocates the implementation of “*innovative joint educational programs at all levels*”, which will increase their “*visibility, attractiveness and reputation*” and enable them to award “*joint degrees at all levels*”. The analysis of each body/stakeholder is followed by a table, into which all the data is gathered and presented by code and per decade.

Table 2: Evolution of Doctoral Studies by code and per decade: EU

Decade Code	1st	2nd	3rd
1: Organization of Doctoral Studies	[European Economic & Social Committee]	-----	[Commission of the European Communities] Different organization in different countries.

	Noting the only option available for writing a Doctoral Thesis.		
2: Industrial Doctorates	-----	[European Commission] Business-oriented research being typical area of support.	[European Commission] Research experience /position/supervision be equally shared between academic and non-academic area. Needs of industry for highly skilled talents.
3: Joint Doctorates	[Education, Audiovisual and Culture [EAC] Executive Agency] Aim to support postgraduate programs of outstanding academic quality.	[European Parliament] Creating a single (joint) framework for the establishment of a European Doctorate.	[Council of the European Union] Implementation of innovative joint educational programs at all levels.

The Bologna Process:

With regard to the Bologna Process, the analyzed documents are the final Ministerial Communiqués³.

Code 1: Organization of Doctoral Studies

1st decade. In the Bologna Declaration (1999), reference to Doctoral Studies was made through the second cycle, which “should lead to the master and/or doctorate degree”. The role of the second cycle tended to be strengthened and the choice of the term *doctorate* was considered as appropriate, because Doctoral Studies imply the organization of education, which was not the case at the time. At 2003 (Bologna Process, 2003, p. 4), the possibility of access to Doctoral Studies in the context of restructuring of European studies was noted, due to “a diversity of individual, academic, and labor market needs”. In the ministers’ Communiqué (p. 6), the establishment of a *third level* was clearly referred for the first time. The Bergen Communiqué (Bologna Process, 2005, pp. 2, 4) highlighted the adoption of the “framework for qualifications” in the EHEA, which included three cycles and was based on “learning outcomes and competences”. The increase in the number of structured Doctoral Programs was noted in the London Communiqué (Bologna Process, 2007, p. 2). It was recommended as a “good progress” both at the national and the institutional level, toward strengthening one of the objectives of the EHEA, namely a system of degree acquisition through three distinct cycles. At 2009 (Bologna Process, 2009, pp. 2-3), the modernization of Higher Education was approached from various perspectives, such as “the adoption of a three-cycle structure”. For the third cycle of studies, “new approaches to teaching” and study programs more clearly focused on the students were required.

2nd decade. The Paris Communiqué (Bologna Process, 2018, p. 2) stated that *thematic peer groups* would focus on “key commitments”, which are vital for strengthening cooperation within

³<https://www.ehea.info/page-ministerial-declarations-and-communiques>

the EHEA. The strengthening of a *three-cycle system “compatible with the overarching framework of qualifications of the EHEA”* (p. 2) would be one of them.

3rd decade. At 2020 (Bologna Process, 2020, p. 6), the internationalization of programs or the *“participation in innovative international environments”* within the institutions is promoted as a way for Higher Education’s graduate. It included those in the third cycle, which was about to *“experience some form of mobility”* (p. 6). The Tirana Communiqué (Bologna Process, 2024, p. 3) does not make any specific reference to Doctoral Studies. It reiterates the *“key commitments”* of the Paris meeting, reaffirming the implementation of the *three-cycle system*, with the note that it applies to both of programs and degrees. The reference to the third cycle seems to explicitly indicate the strengthening of Doctoral Studies and the addition of programs indirectly suggests the establishment of Doctoral Schools.

Code 3: Joint Doctorates

1st decade. In order to further strengthen the European dimensions of Higher Education, the Prague Communiqué (Bologna Process, 2001, n.d.) called for the development of modules, courses and study programs *“at all levels”*. It referred especially to those offered in collaboration with other institutions of other countries and (those) leading to a recognized joint degree. At 2003 (Bologna Process, 2003, p. 6), the promotion and development of *“integrated study programs and joint degrees”* was extended to the third level. In the next one Communiqué (Bologna Process, 2005, p. 5), the ministers highlighted the consideration of *“the awarding and recognition of joint degrees”*, including Doctoral Degrees. Finally, at 2009 (Bologna Process, 2009, p. 4), the need to create mobility opportunities within each of the three cycles was noted by readapting the structure of study programs. The creation of joint degrees and programs was proposed as the most *“common practice”*.

Table 3: Evolution of Doctoral Studies by code and per decade: the Bologna Process

Decade Code	1st	2nd	3rd
1: Organization of Doctoral Studies	<p><i>[Bologna/1999]</i> Reference to Doctoral Studies through the 2nd cycle.</p> <p><i>[Berlin/2003]</i> 1st clear reference to the establishment of a 3rd level.</p> <p><i>[Bergen/2005]</i> Adoption of the framework for qualifications in the EHEA including three cycles.</p> <p><i>[London/2007]</i> Strengthening the system of degree acquisition through three distinct cycles by increasing in the structured Doctoral Programs.</p> <p><i>[Louven/2009]</i> Adoption of a three-cycle structure.</p>	<p><i>[Paris/2018]</i> Strengthening of a three-cycle system compatible with the overarching framework of qualifications of the EHEA.</p>	<p><i>[Rome/2020]</i> Participation in innovative international environments including the 3rd cycle as experience in mobility.</p> <p><i>[Tirana/2024]</i> Reaffirming the implementation of the three-cycle system including both of programs/degrees.</p>

	For the 3rd cycle new approaches to teaching and study programs more focused on the students.		
3: Joint Doctorates	<p>[Prague/2001] Development of modules/courses/study programs at all levels leading to a recognized joint degree.</p> <p>[Berlin/2003] Integrated study programs and joint degrees extended to the 3rd level.</p> <p>[Bergen/2005] Consideration of the awarding/recognition of joint degrees including Doctoral Degrees.</p> <p>[Louven/2009] Readapting the structure of study programs by the creation of joint degrees/programs as common practice.</p>	-----	-----

Stakeholders: European University Association (EUA):

The EUA, representing more than 850 universities, plays a key role in influencing EU policies on Higher Education, research, innovation and is a central player in the Bologna Process. Official discourse is produced through the policy documents being published. The relevant to the topic of the article discourse is analyzed and coded then.

Code 1: Organization of Doctoral Studies

1st decade. According to EUA (2005, p. 6), the “complexity of doctoral education” at national and institutional level was observed as a common feature of institutions. They highlighted important issues, such as the organization of Doctoral Studies. At 2007 (pp. 9-10), EUA claims that there was a need for the emergence of *doctoral/graduate/research schools*. Each one was defined as “*an independent organizational unit with effective administration, strong leadership, and specific funding supporting this structure*” and included only Doctoral Students.

2nd decade. According to Bitusikova (Hasgall et al., 2019, p. 8), EUA surveys⁴ confirmed the increasing implementation of reforms, one of which concerned “*changes in the organization of doctoral education through structured programs and doctoral schools*”. Furthermore, Hasgall et al. (2019, pp. 7, 33 [EUA-CDE]) highlighted the need to create “*special structures and instruments*” as noteworthy “*flexible regulation*” and (need) to establish *doctoral schools* to promote Doctoral Education. Although the collaboration with a “*supervisor or supervisory team*” remained important, the role of the Doctoral Degree had evolved as institutions had begun to take a more active role into it (Hasgall et al., 2019, p. 6 [EUA-CDE]).

⁴ 2009, 2011, 2013, 2015.

3rd decade. In the context of a EUA-CDE research, responding to the challenges spotted by the Covid-19 pandemic, the majority of institutions (Hasgall & Peneoas, 2022, p. 21) consider the “*digital provision*” of Doctoral Education to be successful, noting its advantages (attractiveness, acceptance, ability to integrate more candidates, access to a range of trainers internationally).

Table 4: Evolution of Doctoral Studies by code and per decade: EUA

Decade Code \ Decade Code	1st	2nd	3rd
1: Organization of Doctoral Studies	<p>[EUA/report] Complexity of Doctoral Education be observed as common feature of institutions and Doctoral Studies as important issue.</p> <p>[EUA/report] Need for the emergence of Doctoral/graduate/research Schools as independent organizational units.</p>	<p>[EUA/surveys] Changes in the organization of Doctoral Education through structured programs/Doctoral Schools.</p> <p>[EUA-CDE/survey] Need to create special structures/instruments and to establish Doctoral Schools.</p> <p>[EUA-CDE/survey] Evolution of the role of Doctoral Degree and more active role by institutions.</p>	<p>[EUA-CDE/survey] Successful digital provision of Doctoral Education.</p>

Stakeholders: European Student Union (ESU):

The ESU is the “*professional advocacy and capacity building organisation*” of almost 20 million students at “*all key European decision-making bodies*”⁵. In the context of this research, references to the third cycle were found in sub-categories of the ESU website: *Strategic Political Priorities, Policy Papers, Activity Reports, Bologna with Students' Eyes*.

Code 1: Organization of Doctoral Studies

1st decade. Throughout Europe (ESIB, 2007, n.d.<https://esu-online.org/policies/2007-policy-paper-degree-structures/>), there were “*different approaches*” to the organization of the third cycle, which stemmed from the “*tradition*” of the country or the field of research.

2nd decade. From the perspective of “*Bologna with Students' Eyes*” (ESU, 2012, pp. 18-19), Doctoral Education tended to be organized within *doctoral schools* and most of the programs were “*structured*”. These usually corresponded to 180 ECTS (Central Europe), 240 ECTS (Northern Europe), 180 to 240 ECTS (Portugal) and an average of 260 ECTS (Latvia), depending on the Doctoral Program. Also, at 2017 (p. 11), ESU claimed that there should be “*flexibility*” between *second and third cycle studies*, which would facilitate the admission of second cycle graduates, enable those without a second cycle degree to transfer, recognize prior learning and make use of ECTS.

3rd decade. In the Report “*Bologna with Students' Eyes*” (ESU, 2020, p. 5), it is mentioned that, although the three-cycle system is in place, there is a real need to make efforts to ensure that the qualifications of programs of all cycles are “*truly comparable with similar qualifications of other EHEA member states*”.

⁵<https://esu-online.org/about/our-history/>

Table 5: Evolution of Doctoral Studies by code and per decade: ESU

Decade Code \	1st	2nd	3rd
1: Organization of Doctoral Studies	[ESIB/policy paper] Different approaches to the organization of the 3rd cycle.	[ESU/Bologna with Students' Eyes] Organization within Doctoral Schools and most programs structured with differentiation of ECTS. [ESU/policy paper] Flexibility between 2nd and 3rd cycle, admission of 2nd cycle graduates, recognition of prior learning and making use of ECTS.	[ESU/Bologna with Students' Eyes] Making efforts for qualifications being truly comparable with similar qualifications of EHEA member states.

National (Greek) Level

Institutional Level and Prior Research⁶:

Code 1: Organization of Doctoral Studies

1st decade. Under the Law 3685/2008 (article 1, paragraph 1), Higher Education Institutes had the “*additional authority*” to award Doctoral Degrees.

2nd decade. According to the Law 4009/2011 (article 39, paragraphs 1-6), the responsibilities of the institutions included the organization of the third cycle. The organization concerned the “*program monitoring*” of Doctoral Studies and included “*courses*” and the “*preparation*” of a Doctoral Dissertation (article 30, paragraph 4), through a Special Cooperation Protocol, “*drawn up by the cooperating departments - institutions*” and “*approved by the Senate and the collective governing bodies of the research centres*” (Vasilopoulos & Giotakou, 2022, p. 55). At the Law 4485/2017, for the first time, the possibility of organizing Doctoral Studies was given to *Departments of Technical Educational Institutes* (article 30, paragraph 4). In the case of *co-supervised Doctoral Theses* (article 31, paragraph 4), a Special Committee was formed (article 43, paragraph 1).

3rd decade. According the Law 4957/2022 (article 63, paragraph 1c), the third cycle concerns the organization of Doctoral Study Programs and possibly an “*independent course program*”, corresponding to at least thirty ECTS (article 90, paragraph 1). Third-cycle programs with joint supervision are organized by a department in “*collaboration with one or more departments of the same or another*” Higher Education Institution (HEI), (another) institution or institute in Greece or abroad (article 90, paragraph 2). Despite the legal provision in the Law 4009/2011, “*the establishment*” of *doctoral schools* (Vasilopoulos & Giotakou, 2022, pp. 55-56) has not been implemented yet. Although the traditional model “*continues to dominate*” (p. 58) in the context of Greek HEIs, the provision appears to represent progress, as it paves the way for a movement away from “*the interpersonal relationship between supervisors and doctoral candidates*” (*apprenticeship model*) (p. 54) and the transition from *Doctoral studies* to *Doctoral education* (p. 57).

⁶ Based on the coding of this research, the findings of a previous research (“*Doctoral Studies in the context of the Bologna Process: Industrial Doctorates in Greece*”) published in the European Journal of Education and Pedagogy, May, 2022) are utilized and analyzed.

Code 2: Industrial Doctorates

2nd decade. Vasilopoulos & Giotakou (2022, p. 56) state that in 2017, for the first time in Greece, industrial research scholarships were introduced for Doctoral Candidates. Through the sponsorship by the “Stavros Niarchos Foundation”⁷, the “National Center for Scientific Research Demokritos”⁸ announced the implementation of *Industrial PhD and Post-Doctoral/Adjunct Researchers Fellowships* (p. 56).

3rd decade. Under the Law 4957/2022 (article 96, paragraph 1), candidates who meet the requirements for enrollment in a Doctoral Studies program, may apply to write a Doctoral Dissertation on the subject of “conducting industrial or applied research” through collaboration “with a company or industry based or operating in Greece”. The protocol is signed among the institution, the enterprise/industry and the Doctoral Candidate (article 96, paragraphs 3, 6 and 8). Through this emerging form of Doctoral Education, the *Industrial Doctorates*, “the European trends are gaining ground” in Greece, as Vasilopoulos & Giotakou (2022, pp. 57-58) underline.

Code 3: Joint Doctorates

1st decade. In the Law 3404/2005 (article 23, paragraph 1), Doctoral Degrees were considered as “automatically equivalent to those awarded by partner Institutions”, with which joint postgraduate programs were operated. Vasilopoulos and Giotakou (2022, p. 56) found that the cooperation with other universities both in Greece and abroad was already provided for “in the context of the objectives of the EHEA and EU funding”.

Table 6: Evolution of Doctoral Studies by code and per decade: National (Greek) Level

Decade Code	1st	2nd	3rd
1: Organization of Doctoral Studies	[Law 3685/2008] HEI having the additional authority to award Doctoral Degrees.	[Law 4009/2011- prior research] Monitoring of Doctoral Studies including courses and preparation of Doctoral Dissertation through Special Cooperation Protocol. [Law 4485/2017] 1st time possibility of organization by Technical Educational Institutes. Co-supervised Doctoral Theses be organized by Special Committee.	[Law 4957/2022] Possible independent course program corresponding to ECTS. Joint supervision with departments of the same/another HEI/institution/institute in Greece/abroad. [prior research] Doctoral Schools not be implemented yet. Traditional model supervision dominated. Transition from Doctoral studies to Doctoral education.
2: Industrial Doctorates	-----	[prior research] 1st time introduction of industrial research	[Law 4957/2022 - prior research] Possible application to write a Doctoral Dissertation on conducting industrial/applied research and

⁷“international non profit organization” based in Greece (<https://www.snf.org>).

⁸“the largest multidisciplinary Research Centre of Greece” (<https://www.demokritos.gr>).

		scholarships for Doctoral Candidates.	emerge of industrial Doctorates gaining ground.
3: Joint Doctorates	[Law 3404/2005 - prior research] Doctoral Degrees automatically equivalent to partner Institutions. Joint postgraduate programs already provided in the context of EHEA/EU.	-----	-----

Convergences-Divergences between European and National Level

From the findings of the previous analysis, it can be observed that the European and the national Higher Education areas constitute two areas with a common point in the evolutionary course of Doctoral Studies, but with a different approach based on the culture of each one and a different “outcome” based on the “pace” of development. The European area conveys a sense of readiness for change and immediate modernization through continuous dialogue. However, although the national area monitors developments in Europe and adapts to them to a considerable extent at institutional level, it tends to show a bit tendency toward delay in implementation.

Regarding *Code 1 (Organization of Doctoral Studies)*, there are convergences in terms of organizational disposition, modernization efforts and the definition of the general framework of Doctoral Education. The divergences include the different cultural approach of the organization and its different degree of evolution. In Europe, progress seems to be emerging through a dialogue between policy documents with common points of reference⁹ and is reflected in steady steps¹⁰. However, in Greece, evolution appears to be as the result of legislative regulation without specific reference point through dialogue outside the law¹¹. Also, it is reflected in more “massive” changes¹². In terms of implementation of developments, the European area tends to move faster¹³ and with relative “coordination” of the actors¹⁴. On the contrary, the national area does not seem to be very active in practice¹⁵. Generally, in Greece, coordination with European developments takes place mainly at the institutional level. At the

⁹e.g. for Doctoral Schools: the Bologna Process, EUA, ESU.

¹⁰ e.g. gradually: completion of a Doctoral Degree through the second cycle, establishment/strengthening of a third cycle, establishment/strengthening of Doctoral Schools, internationalization of Doctoral Programs, automatic recognition of qualifications, digital provision of Doctoral Education.

¹¹e.g. assigning the awarding of Doctoral Degrees to HEIs.

¹²e.g. the possibility of attending independent course Doctoral Programs, utilization of ECTS, alignment with the Qualifications Framework: all are noted to one law/Law 4957.

¹³e.g. during the same decade/at the first one: transition from second to third cycle, establishment of third cycle, emergence of Doctoral Schools.

¹⁴e.g. EU, EUA, ESU: different organization, diversity of Doctoral Education, different approaches.

¹⁵e.g. for over a decade: Doctoral Schools had been established by the law, but without implementation within the universities yet.

time being, it does not have strong continuity and application in the field of implementation. Two characteristic indications of deviation could be added at the discussion, which stem from: (a) the totality and different nature of the actors and (b) the type of policy texts. As regards the first point, while there is a variety of actors involved in the EHEA¹⁶, in Greece, action is clearly taken at the institutional level with no (obvious) participation of stakeholders. As regards the second point, at the European level there are texts not only selected by legislation but also formed as reports¹⁷ or publications/editions¹⁸, which make dialogue among themselves. However, at the national level, mainly laws are identified, which contain detailed reference to the changes that are voted on.

Regarding *Code 2 (Industrial Doctorates)*, it appears that the identified convergences are related to the orientation of research towards industry and (to) the establishment of Industrial Doctorates. According to the divergences, there is a growing debate at the European level, which identifies highly skilled talents, while the national level institutionalizes the process of developing and introduces industrial research scholarships. Generally, Europe tends to have a “process” of dialogue, which provides more substantive references with further focus, beyond the formal process. For instance, some interest in the high profile of candidates and the resulting search for forms of excellence (identification of highly specialized talents) are emerged from this (dialogue). However, in Greece, there is a tendency to emphasize the formalism of the process itself (not an ongoing discussion) and the need for its institutionalization.

Regarding *Code 3 (Joint Doctorates)*, it seems that the two areas jointly establish the Joint Doctoral Programs, which lead to the awarding of Joint Doctoral Degrees. The discrepancy lies in the fact that the European level develops Doctorates independently of master's degrees and through innovation. However, at the national level, the analysis shows that Doctoral Degrees are still awarded through joint postgraduate programs, at least for the time being.

The European area tends to monitor Doctoral Studies in such a way, that it evolves them gradually and methodically. In other words, it does not limit itself to offering joint Doctoral Programs through postgraduate studies or (to) just establishing autonomous programs, but it incorporates it into its evolutionary process and brings innovation to the forefront. On the contrary, at the national level, it appears to be a kind of stagnation in the development of Joint Doctoral Programs, with the discussion remaining focused on the schedule and the legislation of (just) establishing them.

CONCLUSION

Based on our research, it appears that with regard to the *Code 1* (the development of the *Organization of Doctoral Studies*), at the European level it is noted the strengthening of the second cycle studies' role, the establishment and strengthening of the third cycle, the establishment of Doctoral Schools, the possibility of co-supervision, the use of ECTS, the internationalization of Doctoral Study Programs, their digital provision and the support of students at all levels of learning. At the national level, in Greece, in addition to postgraduate

¹⁶ EU, the Bologna Process, EUA, ESU.

¹⁷ EUA: Report.

¹⁸ ESU: Bologna with Students' Eyes.

degrees, we observe the awarding of Doctoral Degrees by HEIs, the organization of Doctoral Studies by former Technical Education Institutes, the legal possibility of establishing Doctoral Schools, the possibility of co-supervision, the monitoring of course programs and the correspondence with ECTS.

Regarding to *Code 2* (the development of *Industrial Doctorates*), at the European level, there is a tendency for research oriented towards industry, the drafting of a co-operation protocol between the academic and non-academic spheres and an emphasis on identifying highly specialized talents. At national (Greek) level there are mainly (if not only) the legal provisions of developing Industrial Doctorates and the introduction of industrial research scholarships.

With regards to *Code 3* (the development of *Joint Doctorates*), the European area includes the development of courses leading to a Joint Doctoral Degree, the promotion of integrated Joint Doctoral Programs, the establishment of Joint Doctoral Programs among departments/institutions/countries, the implementation of innovative programs and their autonomous recognition. The national (Greek) area establishes Joint Doctoral Programs and "discusses" the process of developing them.

In conclusion, based on the present research and analysis, both the European and national spheres show interest in Doctoral Studies and their development. However, the different culture of the two levels seems to lead to different approaches and the different pace of engagement drives to different stages of evolution. For the time being, at the national level, in contrast to the European level, the changes appear to be limited to the institutional level. They have not progressed particularly in their implementation at the sub-national level, i.e. within universities.

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