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Opening the black box of the Dublin Descriptors: First steps towards an exploration

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Opening the black box of the Dublin Descriptors: First steps towards an exploration[1]

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The academic profession is nowadays challenged by multiple tensions. Quality assurance is one of the most relevant. Such processes emerged in the arena of higher education since at least the 1990s, with the articulation of the European agenda of 'knowledge economy' and the Bologna Process. The 'Dublin Descriptors' were assembled in such a context as a framework describing the typical learning outcomes at the end of each Bologna cycle. The purpose of this research is to explore the effects of the Dublin Descriptors policy artefact on the European space of higher education. Its genealogy will be traced by highlighting the associations among heterogeneous entities through which it reached its final policy form. Future directions for this research will also be sketched.

Multiple tensions challenge the academic profession today. Amidst compliance and micro-resistances, academia is restructuring. The issue of 'quality assurance', in particular, has taken on global relevance in the last decades (Machado-Taylor, Soares, and Teichler 2017). Standardisation processes are becoming increasingly pervasive under the action of heterarchical networks and agencies which exert soft governance by suggesting recipes, benchmarks and best practices (Gorur 2011a; Brøgger 2019). The journey of these non-human actors in global arenas and digital spaces contributes to the transnationalisation of educational processes and the prescription of normative visions about education (Landri 2018), often based on discourses of performance, quality and effectiveness.

As to higher education (HE), such processes arise at least from the 1990s. In such period, Delors' White Paper (Commission of the European Communities, 1993) and the Lisbon Strategy contributed to the articulation of a European agenda of 'knowledge economy', which fabricated a deep nexus between the issue of the 'quality' of education and its capacity of fostering economic development (Normand, 2016). The Bologna Process reforms emerge within this frame with the aim of improving the recognisability and comparability of degree certificates, so as to encourage the mobility of students of the European HE space and increase its competitiveness.

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1. THE DUBLIN DESCRIPTORS

The Dublin Descriptors (DDs) were assembled in such context as a framework providing generic statements about the typical expectations of the ordinary outcomes achieved by students for each of the Bologna cycle qualifications. Their aim is thus to provide clear points of reference for European HE systems for awarding such titles (BWG, 2005). They were presented at the 2005 Bergen Ministerial Conference as part of the Qualifications Framework of the European HE Area. The DDs framework is organised according to the Bologna cycle qualifications and five groups of learning outcomes (Fig. 1).

LEVEL	DESCRIPTOR
Short cycle (Associate degree)	**Knowledge and understanding** Have demonstrated knowledge and understanding in a field of study that builds upon general secondary education and is typically at a level supported by advanced textbooks; such knowledge provides an underpinning for a field of work or vocation, personal development, and further studies to complete the first cycle; **Applying knowledge and understanding** Can apply their knowledge and understanding in occupational contexts; **Making judgements** Have the ability to identify and use data to formulate responses to well-defined concrete and abstract problems; **Communications skills** Can communicate about their understanding, skills and activities, with peers, supervisors and clients; **Learning skills** Have the learning skills to undertake further studies with some autonomy.
First cycle (Bachelor's degree)	**Knowledge and understanding** Have demonstrated knowledge and understanding in a field of study that builds upon their general secondary education, and is typically at a level that, whilst supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study; **Applying knowledge and understanding** Can apply their knowledge and understanding in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study; **Making judgements** Have the ability to gather and interpret relevant data (usually within their field of study) to inform judgements that include reflection on relevant social, scientific or ethical issues; **Communications skills** Can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences; **Learning skills** Have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy.

Second cycle (Master's degree)	**Knowledge and understanding** Have demonstrated knowledge and understanding that is founded upon and extends and/or enhances that typically associated with the first cycle, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research context; **Applying knowledge and understanding** Can apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study; **Making judgements** Have the ability to integrate knowledge and handle complexity, and formulate judgements with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgements; **Communications skills** Can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously; **Learning skills** Have the learning skills to allow them to continue to study in a manner that may be largely self-directed or autonomous.
Third cycle (Doctoral degree)	**Knowledge and understanding** Have demonstrated a systematic understanding of a field of study and mastery of the skills and methods of research associated with that field; **Applying knowledge and understanding** Have demonstrated the ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity; **Making judgements** Have made a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, some of which merits national or international refereed publication; are capable of critical analysis, evaluation and synthesis of new and complex ideas; **Communications skills** Can communicate with their peers, the larger scholarly community and with society in general about their areas of expertise; **Learning skills** Are expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement.
Glossary	1. The word '**professional'** is used in the descriptors in its broadest sense, relating to those attributes relevant to undertaking work or a vocation and that involves the application of some aspects of advanced learning. It is not used with regard to those specific requirements relating to regulated professions. The latter may be identified with the profile/specification. 2. The word '**competence'** is used in the descriptors in its broadest sense, allowing for gradation of abilities or skills. It is not used in the narrower sense identified solely on the basis of a 'yes/no' assessment. 3. The word '**research'** is used to cover a wide variety of activities, with the context often related to a field of study; the term is used here to represent a careful study or investigation based on a systematic understanding and critical awareness of knowledge. The word is used in an inclusive way to accommodate the range of activities that support original and innovative work in the whole range of academic, professional and technological fields, including the humanities, and traditional, performing, and other creative arts. It is not used in any limited or restricted sense, or relating solely to a traditional 'scientific method'.

Fig. 1 – *The Dublin Descriptors (BWG 2005).*

According to the Bologna Working Group, the DDs are not meant to be prescriptive rules, nor they are benchmark or minimal requirements (ivi). Instead, they are intended as cross-discipline references, not to be restricted to specific academic or professional areas, and they should be read within the context and the use of language for every discipline.

In this paper, an attempt will be made to describe the assemblage of the DDs to their final policy form and their effects on the European space of HE. In the second paragraph, the objectives and methods for the research are described. The third paragraph is devoted to a genealogical analysis of the Dublin Descriptors. In the fourth paragraph, final remarks are drawn.

2. AIMS AND METHODS

In this contribution, the 'Dublin Descriptors' policy artefact will be engaged as a 'matter of concern' to investigate its effects in the European space of HE. Its journey into the space-time will be thoroughly looked upon to detect the entities (people, policies, discourses, inscriptions, etc.) that brought it together to its final policy form.

In order to do so, the assemblage of the DDs will be traced through a genealogic approach, drawing on a documentary analysis of 'grey' literature, scientific papers and other sources. Through such technique, it is possible «to untangle and make sense historically of the multiple, complex and sometimes contradictory or paradoxical iterations of an assemblage, or one of its elements» (Kitchin 2014:222). Concepts, decisions, constraints, actors, evolution, influences, dead-ends and failures (Williamson 2018) embedded in the inscription of the DDs to their final policy form will thereby be disentangled.

From a methodological standpoint, policies will be considered as precarious and relational assemblages of heterogeneous entities (Gorur 2011). They will be not dealt with as solid and steady entities, but rather as itchy and erratic chains of multiple actors, constantly on the verge of becoming something different. A translational policy model (Gherardi & Lippi 2000) will be used in which ideas or artefacts move by translating the interests of the actors in the network, and possibly co-evolve with them: «[i]nterpretations of the project cannot be separated from the project itself» (Latour 1996a:172).

3. THE DUBLIN DESCRIPTORS AS A MATTER OF CONCERN: FIRST STEPS TOWARDS A GENEALOGY

An attempt will now be made to take the first steps toward a genealogy of the Dublin Descriptors. This genealogy can't be but incomplete, and its starting point arbitrary, «but we see a point in beginning just there, because it is a narrative, a story that we want to spin» (Czarniawska and Joerges 1995:22).

4.1. *Behaviourist psychologists introduce 'learning outcomes' in the US*

A first starting point to trail the DDs's genealogy can be Ivan Pavlov's (1849-1936) model of 'classical conditioning'. John Watson (1878-1958) and Burrhus Skinner (1904-1990) followed Pavlov's path and were able to definitely affirm behaviourism as a psychological approach founded on the idea that all behaviours are reflex to the stimuli of the environment or consequences of the individual's history.

Behaviourism had an immense impact on teaching and learning discourses and practices, especially in the Taylor-Fordist North American society. Also, the behaviourist psychology might be

considered as the main epistemological source underlying the concept of learning outcome. The 'pedagogy of objectives' that took over the US in the 60s was openly behaviourist (e.g., Mager 1961). It promoted a shift from teaching to learning and from input to outcomes. It also emphasized the importance of measurability thus promoting the development of taxonomies of educational objectives.

3.2. *Bloom's taxonomy provides a new lexicon for learning*

Bloom's taxonomy of educational objectives (1956) has probably been the most influential theory among those inspired by the behaviourist epistemology. It is a theoretical framework aimed at formalising the stages of acquisition and familiarisation with sets of information or theories. It was published under the guidance of Benjamin Bloom to facilitate communication among educators and promote higher forms of thinking in education rather than just rote learning.

In Bloom's system, human cognition is categorised in three domains: i) cognitive; ii) affective; iii) psychomotor. The cognitive domain has itself been grouped in six levels of objectives, hierarchically arranged in a pyramid with higher-order cognition at the top (Fig. 2). Despite the holistic intent of the taxonomy project, the committee produced an accurate elaboration only for the cognitive and affective domains, while the psychomotor domain was nearly neglected.

This taxonomy has been one of the cornerstones of the American psychology of education. It has been widely used to define the stages of learning and to build the educational process. It is still frequently mobilised for the sake of curriculum designing.

Bloom's lexicon and its taxonomic intent can be found in many of the set of descriptors that spread in HE systems in the 90s, primarily in the British area.

4.3. *The UK debates around 'graduateness'*

In the early 90s, a fervent interest developed in the British area about the issue of determining the core attributes of graduates, regardless of the (sub)discipline of study. In 1995, The British Secretary of State for Education John Patten asked the Higher Education Quality Committee (HEQC) to investigate the comparability in the degrees offered by various British HE institutions (MacDonald Ross 1996, 1). The Graduate Standards programme was thus launched in the belief that «the most promising approach to establishing shared, explicit standards seems to lie in exploring the generic qualities that might be expected of any graduate – this has come to be called 'graduateness'». The HEQC thus published *What Are Graduates? Clarifying the Attributes of 'Graduateness': A Paper to Stimulate Discussion* (1996). The issue caused deep interest and was debated among policymakers, academics and professionals (Wheelahan 2003) in Europe, America and Asia (e.g. Library Association, 1996; Barnett, 1997).

3.4. *Learning levels descriptors spread across Anglo-Saxon HE national systems*

During the 90s and the early 2000s, Great Britain adopted national qualifications frameworks to foster quality assurance in higher education. Learning level descriptors were thus introduced as «[g]eneric statements describing the characteristics and context of learning expected at each level, against which specific learning outcomes and assessment criteria can be reviewed» (Gosling and Moon 2001:9).

3.4.1. The United Kingdom, 1996: The SEEC Descriptors

The main level descriptors initiative originated from the joint work of Southern England Consortium for Credit Accumulation and Transfer (SEEC) and Higher Education Credit Initiative Wales (HECIW), two projects funded by the UK Department for Education and Skills (Fig. 2). SEEC and HECIW carried out thorough research on existing practices (e.g., New Zealand's) and on influential educational concepts. For instance, Bloom's taxonomy provided lexicon for describing cognitive

skills and brought into use a new lexical toolkit composed of words such as 'comprehension', 'analysis', 'synthesis', 'evaluation' (Moon 2003). The definitive SEEC descriptors were launched in 1996 (SEEC 1996a, 1996b). The developing process was not straightforward (Moon 2003), as some voices raised concerns about the transdisciplinarity or the excessive genericity of the developed descriptors (e.g., Winter 1994).

LEVEL	DESCRIPTOR
1	While currently operating within defined guidelines and with limited autonomy, has acquired such knowledge/skills for discipline(s) and such proficiency or confidence of operation in a learning environment as to ensure further development of academic knowledge/abilities towards professional or other applications.
M (mastery)	Has depth of knowledge/mastery of skill in a specialised area and/or across applied areas of discipline(s). Confidently can apply full range of appropriate knowledge/skills to create response to any situation. May need to define/expand existing knowledge or techniques. Is autonomous in a professional context and may be responsible for the guidance/motivation of others.

Fig. 2 – *The British 1996 SEEC Descriptors, first and last qualification levels (SEEC 1996a, 1996b).*

3.4.2. The United Kingdom, 2001: The QAA Qualifications Framework

The Framework for Higher Education Qualifications (FHEQ) was published in January 2001 by the British Quality Assurance Agency for Higher Education. The FHEQ introduced a statement of outcomes and of the «wider abilities that the typical student could be expected to have developed» (QAA 2001). Its purposes were to foster public confidence in academic standards, maintain international comparability of standards, ensure international competitiveness, facilitate students' mobility, assist higher education institutions in finding points of reference for setting and assessing standards (ivi). Each level describes the standard of difficulty that learners have to engage with to qualify (Fig. 3).

LEVEL	DESCRIPTOR
Certificate	Will have a sound knowledge of the basic concepts of a subject, and will have learned how to take different approaches to solving problems. He or she will be able to communicate accurately, and will have the qualities needed for employment requiring the exercise of some personal responsibility.
Masters	Will have shown originality in the application of knowledge, and they will understand how the boundaries of knowledge are advanced through research. They will be able to deal with complex issues both systematically and creatively, and they will show originality in tackling and solving problems.

Fig. 3 – *The British 2001 QAA Qualification Frameworks, first and last qualification levels* (QAA 2001).

3.5. The Joint Quality Initiative inscribes the Dublin Descriptors

The Joint Quality Initiative (JQI) was an informal network for QA and accreditation of Bachelor's, Master's, Associate and Doctorate degrees in Europe. It originated in 2001 from a seminar in Maastricht among countries with comparable QA organisations which had introduced or were introducing the accreditation of Bachelor's/Master's (BaMA) programmes. The most important JQI's intake in HE policy and practice was the development of the Dublin Descriptors.

The JQI network was formed on the aftermaths of the Prague Ministerial Conference (19 May 2001), when the Ministers of Education of the Netherlands and Flanders announced their intentions of organising a conference about QA in the HE. They aimed at developing some 'reference points' for awarding the BaMa degrees among the heterogeneous European systems. They selected and informally consulted some countries with comparable QA organisations: Austria, Denmark, Germany, Ireland, Norway, Spain, Swiss, United Kingdom.

The outcomes of the informal consultation were studied in a joint meeting in Maastricht (24-25 September 2001). The participants concluded that they «were facing similar challenges and common problems» and «mutual and different answers to basic questions need[ed] to be found» (JQI 2003). The participants agreed that cross-borders QA activities had to be fostered, and «future co-operation should be geared towards 'action versus papers'» and «by the principle of learning from doing» (*ivi*). The issue of the conceptualisation of the BaMa descriptors was thus posed and problematised.

In the years that followed, the JQI network studied the descriptors already in used in global HE. After further research and discussion (ivi), the Dublin descriptors for the Bachelor's and Master's degrees were introduced (15 February 2002, 1st Dublin Summit). This set of descriptors was soon adopted by the countries involved in their development. Two years after, the JQI developed the descriptors for the Doctorate (2nd Dublin Summit, 23 March 2004) and for the Associate degree (3rd Dublin Summit, 18 October 2004). The DDs artefact thereby acquired its final policy form.

The JQI network began to leak when actors externals to the network began taking over actions that it started (ECAHE 2016:6). In the Bergen Ministerial Conference 2005, a proposal was made for a Qualifications Framework for the EHEA (QF-EHEA) where the full range of descriptors developed by the JQI was included as an appendix. The proposal was formally accepted (BWG 2005) and the Dublin Descriptors thus acquired legitimacy and formalisation as a European policy. The last meeting of the JQI was in 2006, concerning the conflict between QF-EHEA and EQF-LLL.

4. KNOWLEDGE AND POLICY: THE DUBLIN DESCRIPTORS AS A TECHNOLOGY OF QUALITY. CONCLUDING REMARKS AND WAYS AHEAD

In this paper, a preliminary attempt was made to explore the assemblage of the Dublin Descriptors to its final inscription as a European policy prescribing a qualifications framework with harmonisation purposes which links each Bologna level with learning outcomes categorised under five dimensions (Fig. 1).

The exploration carried out in this research shows that the DDs artefact, if engaged as a 'matter of concern', emerges as a technology of quality co-participating in the fabrication of the European area of HE and research (Normand, 2016). It builds on a heterogeneous assemblage of theories, policies, narratives that share behaviourist and 'knowledge economy' epistemologies and strives to conceptualise, classify, standardise and enact the master frame of 'quality' in education – this is the case of the learning outcomes theories, the Bloom taxonomy, the 'graduateness' debate, the invention and the enactment of the learning level descriptors. Like other technologies of quality, it was assembled within heterarchical and in/formal networks of experts across the border of the European policy space (Normand 2016; Peck and Theodore 2015; Thompson, Savage, and Lingard 2016) – with a prevalence for the Northern area.

The DDs can thus be intended as a policy technique (Le Galès 2016) travelling at the interface between knowledge and policy with non-neutral and complex effects. As an artefact, it does classification work (Bowker and Star 1999) on the learning outcomes of the European higher education thus designating and performing categories about knowledges and competences (Fig. 1). These categories apparently translate the behaviourist and Bloomian background of the DDs: knowledge and

its application are sharply distinct, a mentalistic view of knowing is evident, and bodily knowledge is absent from the framework (Gherardi 2009; Saari 2019).

The effects of the DDs are visible on at least two fields. On the one hand, its categories conceal and naturalise theories and values about what a 'quality' higher education is and what are its features. On the other, they define a standard curriculum for European HE that convey normative visions of what HE should be and do. The DDs artefact thereby emerges as a tool for transnational soft governance within wider processes of Europeanisation of higher education (Lawn and Grek 2012).

This contribution paves the ways for further questions. First, reflections could be set on the values and social theories inscribed in the DDs. This can be done by integrating this genealogy with documents, literature and interviews. Also, an effort could be made through documentary analysis, ethnographies and interviews to research on how the DDs are put into context – both as policies within higher education systems and as situated practices into higher education institutions – thus exploring their uses and resistances.

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