

Facing the Global-

Ambivalent Coping Strategies in the Algerian Academic Field

Inauguraldissertation

zur Erlangung des Akademischen Grades

eines Dr. phil.,

vorgelegt dem Fachbereich 02 Sozialwissenschaften, Medien und Sport

der Johannes Gutenberg-Universität

Mainz

cotutelle de thèse Université de Paris, Frankreich

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15. September 2020

:

Tag des Prüfungskolloquiums: 16.12.2020

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Abstract

This thesis in sociology and education sciences, thematically in the field of higher education studies, addresses the following main research question: Which implications does the degree of the Algerian higher education system nationalisation as well as internationalisation orientation have on institutional development as well as individual practices?

The theoretical and conceptual framework is three-fold, namely, Castells' functions of the university, Lüscher's ambivalences, and Bourdieu's forms of capital. The thesis' underlying hypotheses are as follows: There are system limitations related to a lack of institutional autonomy; research is a new social field; Algerian academics' agency is reflected in conducting research, on an individual level, by employing adaptation strategies; as well as, personal internationalisation experiences such as stays abroad correspond to successfully engaging in research as an expression of embodied cultural capital, and serve as a means of differentiation in national academia.

The thesis is empirically based on 15 semi-structured interviews with professors at Algerian universities and research institutes, analysed with qualitative content analysis. The thesis has found that Algerian academics are confronted with a situation of personal oscillation in engaging in research, induced by an ambivalent environment in a nationally-oriented institution due to a prevailing political and ideological outset of the higher education system versus the necessary international dimension of research. Algerian professors employ different coping strategies to deal with this setting, which can be subsumed under three categories of research engagement/prioritisation, minimum/no research, or alternatives in academia. Each of these strategies is an expression of underlying behavioural reasons on the micro, meso and macro levels. The motivation to obtain, and accumulate, cultural capital as a means of local differentiation is decisive in academics' choice of engaging in and pursuing, research. The findings have a broader impact on on-going and future university reforms and associated higher education policy shifts in African and Arab contexts from the background of transforming societies' transition into knowledge economies trend.

Keywords: Algeria, higher education, ambivalences, academic freedom, internationalisation

« Il n’y a pas des pays sous-développés, il n’y a que des pays sous-analysés »

(French original)

Jacques Augustin Berque

There are no under-developed countries – there are only under-analysed countries.

(English)

لا توجد دول متخلفة وانما هناك دول لم تخضع للتحليل الكافي

(Arabic)

Não há países subdesenvolvidos, só existem países sub-analisados.

(Portuguese)

ulac timura taddaynefliyin, anager timura ur nettwasleḍen ara akken iwata i yellan

(Tamazight)

Es gibt keine unterentwickelten Länder, sondern nur solche, die unteranalysiert sind.

(German)

Foreword

In the following paragraphs, I will give an overview over the activities I have undertaken in the framework of my research, which allowed me to acquire an understanding of Arab, African, and more specifically Algerian, higher education contexts. In this way, by direct experience, I was able to grasp the complexity of this field, as opposed to many desk-based studies, which often do not take into account the political and socio-economic environment context. Analysing this very field is essential, though, as the narrow-sighted look of the Western-biased assumption of a neutral, depoliticised and autonomous system in many cases does not do justice to both African and Arab contexts.

Given the synopsis, and my professional background in higher education management set-up, project implementation, and outcome monitoring with testing the application of concepts in practice, the thesis ascribes itself into an approach of “advocacy-by-design” (Muller et al., 2017), in that it seeks to portray reality by asking relevant questions, collecting data, analysing, and, based on the findings, communicating possible solutions to issues identified by stakeholders themselves. This concept integrates research with outcome recommendations by an empirical basis, therefore building the bridge between academia/science and data-driven, evidence-based policy-making.

First adopted by the *Higher Education Research and Advocacy Network in Africa* (HERANA) Projects, phases I-III, involving eight flagship universities on the continent (Cloete & Bunting, 2018), coordinated by the *Centre for Higher Education Transformation* (CHET) based in Cape Town, South Africa, the approach is based on four notions of the African university role in development, namely, “ancillary”, “self-governing institution”, “instrument for development agendas”, and “engine of development” (Muller et al., 2017, pp. 117–118). Correspondingly, it follows the model of the definition and application, of a systems-approach as a solution to higher education in Algeria as described by: “General Awareness and Definition of the Problems of the University System in Relation to its General Surroundings” (Daghbouche, 2008, p. 76). Further, it is expected that qualitative data produced and analysed inform “‘A Systematic Service-Oriented Approach’ to the University Role in Algeria” (Daghbouche, 2008, p. 79).

It is of paramount importance that the research presented in this thesis goes beyond being desk-based in that it is relevant, and applicable to, specific and even peculiar -as far as readers from Europe and North America are concerned- realities on the ground, embedded in the political context, which I commit to making accessible to a wider audience, within and

beyond of, academia. In this sense, this work also serves as an introduction to, and guide of, the Algerian higher education system, which remains little-known and, as will be shown, heavily under-researched as of now – more so, by non-nationals and non-Arabic/French speakers. It is, therefore, one of the first of its kind.

The trajectory of my doctoral research and the path I have taken may differ from others having a seamless transition after Master-level study. During five years following graduation, I worked in various capacities in international cooperation and development. With this project implementation background, coupled with a practitioner perspective, I advocate that impact in the sense of evidence-based reflection and adjustment – including, but not limited to, policy – is made through relation and trust-building, by meeting stakeholders on the ground, but also interacting with political entities as well as representatives.

Conceptually, however, I started back in 2010, as a Masters' student in Peace and Conflict Studies at the University of St Andrews, in Scotland/UK. In the framework of my Master's dissertation, I posited a South African application of the concept of Johan Galtung's structural violence (Galtung, 1969): to put it simply, there are victims, but no visible or identifiable perpetrators, and, hence, neither accusation nor prosecution. This type of violence is exercised by governance, policy, institutions, or, more broadly, structures. I was so fascinated by its impact that, over the next 2.5 years, I was exploring where and how to elaborate on this by definition applied concept.

After graduation, I went to India, where I worked in renewable energy supplies for rural areas programme, remote villages in the centre of the country, where hardly any foreigners come or have the opportunity to visit. The contrast to the headquarter's office location in New Delhi could not have been starker. By introducing social science participatory methods to otherwise technical biogas plants installations, we managed a much better so-called local ownership. In Benin, I worked as a junior development worker in rural electrification of 105 villages across the country, conceptualising and conducting workshops about the advantages and potentials of subscribing to the electric grid. Livelihoods such as small household-based shops were then established, and critical infrastructure, such as schools and hospitals, were since connected, helping considerably to reduce the rural exodus.

It was in Algeria then where I found the academic link. This was the time when I realised that – rather than politics or political sciences – higher education presented the chance to put the concept of structural violence into practice, and not treat it from a philosophical angle as

it had been done previously. My desire to create impact was reiterated by reflecting on how Algeria is perceived in the occident; negative news is dominating if there is any.

The origins of this work, my fascination with Algeria, and, subsequently, the potential and dynamic of its higher education system, started back in June 2014, when I first arrived in beautiful Tlemcen, a city of extraordinary historical heritage and cultural wealth, in the western corner of the country. As a consultant for Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ GmbH – German International Cooperation) with whom I had worked before in India and Benin, I was charged with Student Affairs in the framework of supporting the establishment of the Pan-African Institute of Water and Energy Sciences (including Climate Change) (PAUWES).

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Diese Dissertation wurde von der Deutsch-Französischen Hochschule gefördert/
Cette thèse a fait l'objet d'un soutien financier de l'Université franco-allemande (UFA).

List of Abbreviations and Acronyms

Nb. Abbreviations included here appear at least twice in the text

ASJP	Algerian Scientific Journal Platform
AU	African Union
CERIST	<i>Centre de Recherche sur l'Information Scientifique et Technique</i> (National) Scientific and Technical Information Research Centre
CODESRIA	Council for the Development of Social Science Research in Africa
CREAD	<i>Centre de Recherche en Economie Appliquée pour le Développement</i> Applied Economics for Development (National) Research Centre
DGRSDT	<i>Direction Générale de la Recherche Scientifique et du Développement Technologique</i> General Directorate of Scientific Research and Technological Development
DZD	Algerian Dinar (national currency)
FLN	الوطني التحرير جبهة <i>Front de Libération Nationale</i> National Liberation Front (Algerian independence party)
GDP	Gross Domestic Product
ICT	Information and communication technology
LMD	<i>Licence-Master-Doctorat</i> Bachelor-Master-Doctorate (in the context of the Bologna Process higher education reform)
MENA	Middle East and North Africa
MESRS	<i>Ministère de l'Enseignement Supérieur et de la Recherche Scientifique</i> Algerian Ministry of Higher Education and Scientific Research

OECD	Organisation of Economic Cooperation and Development
OPU	<i>Office des Publications Universitaires</i> (National) University Publications Editor
PNST	<i>Portail National de Signalement des Thèses</i> National Thesis Registration Portal
QDA	Qualitative Content Analysis (method/software)
SDG	Sustainable Development Goals
SHS	<i>Sciences Humaines et Sociales</i> Arts, Humanities and Social Sciences
STEM	Science, Technology, Engineering, Mathematics (group of academic disciplines)
TVET	Technical and Vocational Education and Training

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Part I – Contextualisation

Il est temps de développer une pensée pour une renaissance culturelle et scientifique du pays⁹ (Cherif, 2013, p. 13).

Le cas de l'université algérienne n'est pas unique dans son genre, mais s'applique, à beaucoup d'universités dans le monde et très certainement aux pays du Maghreb¹⁰ (Djeflat, 1990, p. 38).

1 Introduction

Tout porte à penser que notre pays ne peut pas faire l'économie d'une réflexion profonde sur l'université nationale à construire, une université qui soit en phase à la fois avec la société réellement existante, son histoire et sa culture et avec son environnement international. Cette réflexion est trop importante pour être laissée aux seuls politiques¹¹ (Guerid, 2010).

On the occasion of the 50th anniversary of Algerian independence in 2012, the Algerian Ministry of Higher Education and Scientific Research (*MESRS*) published a review of higher education in Algeria. The then Minister in office, Rachid Haraoubia, states:

La mission première de l'université est celle de forger les consciences, améliorer les aptitudes jusqu'à leur plus haut niveau de performance et faire valoir ce qui est fiable et juste. Les universités constituent le vrai levain de la démocratie, nous rajouterons, du progrès social et du développement économique¹² (Ministère de l'Enseignement Supérieur et de la Recherche Scientifique [*MESRS*], 2013, p. 25).

The absence of research as essential university function as well as activity can be observed in this discourse, which reflects Algeria's position within an African as well as Arab setting. In this context, a recent heated debate about the restitution of Algerian-born Nobel prize winners – Albert Camus, Literature, in 1957, and Claude Cohen-Tannoudji, Physics, in 1997, who were raised in Algeria and most of whose work originated in the country, exemplifies what is at stake in the Algerian higher education system. The former Higher Education Minister, Tahar Hadjar, stated that Nobel prizes would add nothing to Algerian university education, and that world-renowned Algerian scientist should not have any special status in the country (Ghanmy, 2018), which, upon announcement in a press conference, sparked a public outcry among Algeria's academics. As herewith illustrated, the lack of

Disclaimer: All English translations of quotes provided by the author.

⁹ It is time to develop a concept for a cultural and scientific renaissance of the country

¹⁰ The case of the Algerian university is not unique in its kind, but applies to a lot of universities in the world, and, certainly, to the Maghreb countries

¹¹ Everything suggests that our country cannot do without a deep reflection about the national university to be constructed, a university which should be aligned to the society as it actually exists, its history and its international environment. This reflection is too important to be conducted at the level of politicians only (*non-paginated newspaper article*)

¹² The premier mission of the university is that of forging awareness, enhancing abilities till their highest-performing level and promote what is trustworthy and just. Universities constitute the real fabric of democracy, to which we add, social progress and economic development.

appreciation of an academic's core professional tasks creates an ambivalent and paradoxical situation for higher education stakeholders trickling from top to down on the micro-level.

Since the first reform of the colonially inherited system in 1971 (Ministère de l'Enseignement Supérieur et de la Recherche Scientifique [MESRS], 1971), Algeria has been endeavouring to nationalise its higher education. However, the adoption and subsequent implementation of the Bologna Process from 2003 – commonly referred to as *Licence-Master-Doctorat (LMD)* reform in French-speaking contexts, points towards a change in policy towards internationalisation.¹³ This dual orientation, leading to conflicting and contradictory directives, is the starting point of an analysis of the role of the contemporary Algerian university, and its implications for central actors in its system – in particular, Algerian professors and scholars, where a deeper reflection as a macro analysis has not taken place yet. Since the 1970s until the present time, there have been numerous concepts referring to the identity of the Algerian university, which may co-exist, or have been prioritised by the government as will be highlighted in the following.

As pointed out by Algerian diaspora scholar Aïssa Kadri in the early nineties, historical analysis cannot be disconnected from any transformation of higher education in question (A. Kadri, 1991). This fact is reiterated by Algerian researcher Mohamed Ghalamallah in the new millennium: “La situation actuelle de l'université algérienne est le produit de son passé (...)”¹⁴ (Ghalamallah, 2006, p. 31). Accordingly, the research questions exposed below reflect a strong interlinkage with the historical dimension, and, indirectly, the influence and impact or lack of the so-called ‘*legs colonial*’¹⁵ (Bayard & Bertrand, 2006), while explicitly taking the present into account rather than only the past, in describing the status quo and determining the functions through their evolution.

One of the characteristics of emerging countries' universities has been the rhythm of socially-induced progress surpassing available financial and also human resources (Djefflat, 1990, p. 37). Within the past decade, there have been scholarly and political debates about the fact that “(...) education and training systems most commonly fail to achieve certain goals due to the absence of adequate scientific planning”, which, in the case of Algeria, means that “(...) universities have ‘to date’ not been organised effectively to further national development” (Daghbouche, 2008, p. 74). Hence, the “new” university as opposed to the

¹³ See chapter 2, Historical and political context

¹⁴ The present situation of the Algerian university is a product of its past

¹⁵ Colonial legacy

traditional university linked to European history as a reflection of its society, has been at the service of the economy, with its associated characteristics of a private enterprise, i.e. autonomy, competitiveness, employability, professionalism, efficiency (Guerid, 2012a, pp. 28–31).

At the same time, there is an increasing awareness about the absence of the voices of the so-called global South, as it is depicted in the following statement, which is indicative of a recent national intellectual re-ignition to stand one's ground and, while still lagging in global visibility, claim one's place also internationally;

Dans les sociétés du savoir, les ressources immatérielles, créations des hommes, prennent le pas sur les ressources matérielles et ce sont elles qui sont à la base du seul développement qui vaille: le développement humain. Dans ce grand mouvement, les pays du Sud dans leur grande majorité dont notre pays, sont dramatiquement, absents¹⁶ (Guerid, 2012b, pp. 5–19).

1.1 Research Desiderata

Higher education internationalisation and quality assurance trends

An increasing higher education internationalisation trend is which defined as a reaction to globalisation processes in “The incorporation of international factors into national policy processes to cope up with the forces of globalisation” (Woldegiorgis, 2015, p. 23) can be observed worldwide, beginning in the late 1990s in the global North (Knight & DeWit, 1995; DeWit & Knight, 1999; Attali & Brandys, 1998; Lanzendorf & Teichler, 2003; Hahn, 2004) with the momentum increasing post-2010 (King et al., 2011; Knight, 2016 (2004); Altbach & Teichler, 2016; Kehm & Teichler, 2016; Deardorff et al., 2012; Egron-Polak & Hudson, 2014; Kosmützky et al., 2015; Wedlin & Nedeva, 2015).

While African higher education internationalisation has taken place since the early 2000s, too (Mohamedbhai, 2003), its impact on regional integration in Africa is a phenomenon of the last decade (Jowi, 2009; Jowi & Huisman, 2009; Southern African Regional Universities Association [SARUA], 2012; Schoole & Knight, 2013; Knight, 2017; Knight & Woldegiorgis, 2017; Woldegiorgis, 2013, 2015; Langa, 2014). As one expression of these recent developments, both the impact on as well as the question of adoption versus rejection of the Bologna Process of European higher education harmonisation, starting from 1999, which is discussed as a “global template” (Vögtle, 2010) is topical in its criticism, including

¹⁶ In societies of knowledge, immaterial resources, peoples' creations, are the ones which take precedence over material resources, and are at the base of the only development that is worth: human development. In this great movement, the vast majority of the countries of the South, among these our country, are, dramatically, absent.

neo-colonial connotations, on the African continent (Charlier et al., 2009; Atimniraye Nyéladé & Akam, 2013; Khelfaoui, 2009; Obasi & Olutayo, 2009). Correspondingly, the trend is pertinent in the Arab world, too (Lamine, 2010; Romani, 2012), as well as the Maghreb region in particular (Gérard, 2006; Mazzella, 2008, 2009; Ghouati, 2011a, 2011b, 2012, 2014a, 2014b).

Internationalisation in higher education from a global North scholarly perspective, as reflected in the authorship above for global analysis, is most commonly defined as “integrating an international [and] global dimension into the purpose, functions or delivery of higher education” (Knight, 2008, p. 2)¹⁷. However, referred to as the crucial nexus, the concept put forward by Rumbley and Altbach at Boston College’s Center for International Higher Education (CIHE) highlights that the “global” dimension on various policy levels and the “local” aspect, on the institutional level, are interconnected in both practical and analytical terms (Rumbley & Altbach, 2016, p. 7).

It is based on the understanding that “while internationalisation in higher education is strongly connected to the globalisation of our society, it is at the same time deeply embedded in local political, economic and social structures, systems and cultures” (Jones et al., 2016, p. 1). This concept applies to the Algerian case; hence, a less generic analysis, fit for the Algerian context, will be proposed in the following. Algeria can be seen as a current example of the phenomenon of “(...) internationalisation, by becoming embedded in emerging countries, shifts away from the Western, neo-colonial concept it represented when first coined” (Wit, 2016, p. 16).

Likewise, quality assurance in higher education has gained increasing attention since the new millennium as exemplified by the Organisation of Economic Cooperation and Development (OECD)/US Forum in 2002 (van Damme, 2002). Notably, there exists both individual and institutional excellence (U. Schmidt, 2018), which corresponds to the principle that quality assurance goes beyond the technical process in its people-centred structures in data interpretation and consultation (U. Schmidt, 2007). In this context, the evaluation of universities, theoretically and thus methodologically founded (U. Schmidt, 2005) takes the form of system accreditation (U. Schmidt et al., 2014).

¹⁷ See also the ‘updated version’ of the definition, Knight (2015)

The link between the topical trends of internationalisation and quality assurance in higher education is then established by research, which becomes apparent in the concept of a so-called “flagship university” as an institution necessarily engaged in research (Cloete et al., 2015; Teferra, 2017), which had been highlighted already in the early 1970s (Yesufu, 1973a, 1973b). However, these preoccupations show that the status quo of absence or emergence of the university research function in the understanding of the Humboldtian research university is a continuing, yet, increasingly pressing, issue (Sawyerr, 2004; Atuahene, 2011; Muchie, 2009; Woldegiorgis & Doevenspeck, 2013), given that an African continental higher education mapping is comparatively recent (Teferra & Altbach, 2003), with the emergence of many universities in the new millennium. Not least, higher education research in Africa is a relatively new field (Lebeau, 2019).

Higher education institution governance typologies

Governance models in academia have previously been distinguished in an old – legislation – /new – coordination, standards, informal agreements – dichotomy. Those have since been amended to the more fluid three dimensions of the political: politics, policy and polity.¹⁸ “Interests” is then put forward as an analytical factor to account for the linkages as well as the causal relationship between modes of governance in the politics and polity versus the policy dimension, which had not been established empirically (Kritzinger & Pülzl, 2008). The decision-making process is generally characterised by the type and the profile of its participants, respectively, the presence or absence of certain actors to be possibly involved.

Politics, as a dimension, refers to participation, which, translated into governance mode, is either static (public), corporatist (social actors), or pluralist (private and public). Polity is concerned with authority: hierarchical direction versus majority consensus and negotiated agreement versus unilateral action. The governance process itself then may be either rigid in implementation, with the policy options coercion or targeting, or flexible, with framework regulation or voluntarism policy mode. The latter choice is variable and has been found to be determined by interests, namely, ease of coordination, the certainty of outcome, and degree of distributional conflict regarding power and available resources (Kritzinger & Pülzl, 2008).¹⁹

¹⁸ See Treib et al. 2007 cited in Kritzinger and Pülzl (2008) for an account of the three dimensions of politics

¹⁹ See table 2/3, p. 295, and figure 2/3, p. 302/304

At its base, a country's national higher education system is an expression of the institutional system and the nature of the relationship between the state and the individual, group and society in its entirety (Derguini, 2011, p. 101). Since independence, Algerian higher education policy emphasised, in continuous national development 5-year plans, and, "based on the principle of state guidance in the supply of trained personnel" (Daghbouche, 1982, p. 10), "(...) the quantitative rather than the qualitative side of education" (Daghbouche, 2008, p. 73). This has repercussions on "(...) an adequate capacity to respond to the requirements of the new generation", meaning its ability to adapt to 21st-century challenges.

Drawing on governance models and theories originating in political science, Algeria can be classified as "state system"²⁰, "state control model"²¹, "corporatist-statist"²² or "state regulation"²³, according to different typologies discussed (Hüther, 2010, pp. 108–119)²⁴ characterised by the state – rather than the institution or the market, for example, the centre of university governance in a national higher education system.²⁵ The features of a state-based system are, among others, "Universities are subject to the formal administrative control of the state and granted relatively little autonomy"; "(...) implementation of pre-determined national objectives"; "(...) rational instruments employed to meet national priorities"; and, as a broad summary,

The state generally exercises strong oversight over study content, while finances are allocated by the state in itemised fashion. The strong leverage of the state/ministry is reflected in the high degree of hierarchy and the fact that administrative staff is often appointed, not selected. Uniform legislation in combination with nationally standardised procedures – e.g. conditions of access and employment, pay scales – binds universities to the central government (Dobbins et al., 2011, p. 670).

Additionally, "(...) very strong traces of its legacy can be identified in France²⁶ (...), Turkey²⁷ (...), and post-communist Romania²⁸ (...) and Russia²⁹" (Dobbins et al., 2011, pp. 670–671).

²⁰ Based on Clark 1983, p. 136 cited in Hüther (2010)

²¹ Based on van Vught 1997, p. 120 cited in Hüther (2010)

²² Based on Braun and Merrien 1999, pp.22 cited in Hüther (2010)

²³ Based on Schimank 2002, pp. 4 cited in Hüther (2010)

²⁴ See Hüther (2010, in German) for a detailed description as well as an overview of underlying theories by the authors cited

²⁵ See Dobbins et al. (2011) for a comparative framework of the institutional balance of power in the university system, higher education funding mechanisms, personnel autonomy, and substantive autonomy

²⁶ See Kaiser 2007 cited in Dobbins et al. 2011

²⁷ See Mizikaci 2006 cited in Dobbins et al. 2011

²⁸ See Dobbins and Knill 2009 cited in Dobbins et al. 2011

²⁹ See Meister 2007 cited in Dobbins et al. 2011

Academic freedom and institutional autonomy

The notion of academic freedom dates back to the Humboldtian educational ideal of the unity of teaching and research in Germany. It is connected to the concept of the modern research university. It traditionally encompasses three components: freedom of inquiry and research, freedom of teaching, and freedom of expression and publication (Atkinson, 2004). First spelt out on the other side of the Atlantic by Brown (1900) and taken up by the American Association of University Professors – the majority of whom European-educated – in 1915, it was reviewed in 1925 and reiterated by the *1940 Statement of Principles on Academic Freedom and Tenure*.³⁰ In Europe, academic freedom was developed further conceptually based on the experience of Karl Jaspers in Nazi Germany (Iqbal, 1972) and his contemporary Michael Polanyi in Britain (Baker, 1978); the latter having co-founded the ‘Society for Freedom in Science’ in 1940.³¹ Polanyi later famously manifested a ‘Republic of Science’ as a ‘free society’ model (Polanyi et al., 2000) and the scholarly debate was subsequently resumed in an international scope (Birley, 1972). This extended understanding was then first extended to India and African countries as Commonwealth members after independence (Ashby, 1966a, 1966b).

The concept, which is traditionally argued in a consequentialist way (Andreescu, 2009) applies to the micro – individual as well as the macro-system, in the form of higher education institutions-level.³² As a right of faculty to teach and research freely, it is guaranteed in the constitution or by specific laws in most European, North American – as the 1st amendment in the much-discussed case of the USA – as well as several Asian, Latin American, and African countries. For the European Union states, following a comparative analysis towards the end of the last decade (Karran, 2007), a ‘Magna Charta’ has been put forward as an attempt of a unifying definition, given the legal challenges in the USA (Karran, 2009a). Accordingly, in 2019, at the Council of Europe headquarters in Strasbourg, the “Global Forum of Academic Freedom, Institutional Autonomy and Democracy” participants adopted and issued a Declaration.³³ Since 2000, a globally-operating organisation safeguarding

³⁰ See <https://www.aaup.org/file/1940%20Statement.pdf> (with interpretative comments as of 1970)

³¹ See McGucken (1978)

³² While now dated, as of 2009, for countries in Europe, North America, and Australia, there exists an extensive open-access research bibliography created by Terence Karran: <http://eprints.lincoln.ac.uk/id/eprint/1763/2/AcademicFreedomResearchBibliography.pdf>. See also Kuhn and Aby (2000) for a US context-focussed, edited collection on an academic freedom literature review in the beginning of the millenium.

³³ <https://rm.coe.int/global-forum-declaration-global-forum-final-21-06-19-003-/16809523e5>

academic freedom, *Scholars at Risk*³⁴, providing temporary so-called ‘safe havens’ abroad and promoting the comparatively recently developed ‘Academic Freedom Index’,³⁵ adopts the following definition:

At-risk scholars at risk include professors, researchers, doctoral students, institutional leaders and other members of higher education communities who are threatened and/or attacked as a result of the content of their work, their status as academics or as a result of their peaceful exercise of the right to freedom of expression or freedom of association (Scholars at Risk [SAR], 2020).

Another area of intervention which remains topical and applies internationally has been the issue of government-sponsored research, first coined at the beginning of the 1960s (Mainzer, 1961).

While previously claimed based on the European experience (Karran, 2009b), the notion of academic freedom is not universal, however, as it is context-related and interdependent. Consequently, considering that

(...) it is the recognition that arguments based on principles that evolved in one culture or set of societies may not be credible or even plausible in others. Even the prospect of scholarly inquiry can be perceived to threaten the foundational collective identity, dignity and power (...) (Heisler, 2007, p. 352),

there has been a debate on influential factors external to academia recently (Gerstmann, 2006), acknowledging that regions, respectively, continents – the Middle East, Africa and Asia (Akker, 2006) – are confronted with circumstances not comparable to Europe or North American contexts.

For African settings, a composite theory is proposed, stipulating that freedom must extend to non-academic actors such as members of the civil society and that students are to become ambassadors for civil values such as democracy, human rights and the rule of law in this very society (Appiagyeyi-Atua et al., 2015). Accordingly, African-based scholars, likely more often or intensely than their colleagues from the so-called global North engage in non-academic fields, such as consulting, either out of financial necessity or in fact by choice, which, in any case, raises the question as to which activities, performed in which circumstances, the notion of academic freedom applies (Heisler, 2007). This notion of academic freedom, then, can be subsumed as “between local powers and international donors” (Khelifaoui & Ogachi, 2011).

³⁴ <https://www.scholarsatrisk.org/>

³⁵ See report as of March 2020, https://www.gppi.net/media/KinzelbachEtAl_2020_Free_Universities.pdf, and working paper, https://www.v-dem.net/media/filer_public/0d/a3/0da3981c-86ab-4d4f-b809-5bb77f43a0c7/wp_spannagel2020.pdf

As is shown by the case of Algeria, higher education systems cannot be analysed in isolation of their socio-political, cultural, religious and linguistic context (Khelfaoui, 2012). Violations or threats of their academic freedom have since prompted several social sciences researchers on the African continent to opt for exile or emigration. Among many, examples of well-known African scholars in the field of higher education include Ali Mazrui and Mahmood Mamdani from Uganda, and Ngũgĩ wa Thiong'o and Paul Zeleza from Kenya (Zavale & Langa, 2018). Based on their personal experience, they have since become advocates on the protection of academic freedom.³⁶ Perhaps less explicitly, there have been Algerian Aïssa Kadri and Ahmed Ghouati, as well as the deceased Houcine Khelfaoui and anthropologist Fanny Colonna, too.

In addition to offering and safeguarding the affiliated individual's freedom, higher education institutions are competent to take and execute academic decisions, such as staff appointment and tenure, as has evolved as a principle as well as default right in the post-war decades in the United States (Leslie, 1986). In a dedicated 'Bill of Rights', three basic freedoms are to be granted to institutions, namely, non-government interference in institutional mission and strategy, budget autonomy, and definition of organisational structure and administration (Shirley, 1984). In principle, applying to public higher education institutions since the early 1990s (Ambrose, 1990), protecting the individual from any institutional paradigms – state or other, such as faith-based organisations – has been argued, again in a United States-originating debate, drawing on liberal democracy on the one hand, as well as corporate pluralism on the other (Gutmann, 1983). Likewise, traditional rationales refer to secular principles, which, however, have limitations in their actual application as they are primarily aimed at, e.g. serving a particular group's interests, or spreading intra- or supra-societal values (Kirk, 1977, 1955). The effect of a particular dominating culture on academic freedom has also been exposed in states with a conservative orientation within the USA (Williams, 2006). Influence of this kind, among others, has given way to an increasing American legal debate on the issue (Alexander, 2006).

Comparative studies on university autonomy have mainly been conducted in continental Europe and the Anglo-American countries or between the regions (Anderson & Johnson, 1998; Estermann et al., 2011; McDaniel, 1996). Asian and African countries have been included in the analysis to a lesser extent and only comparatively recently. Related studies

³⁶ Among others, see Zeleza (1997) and Mazrui (1975). See also Ndiaye (1996) for a West/francophone African assessment.

have been commissioned and funded by international bodies, with autonomy being discussed in the framework of higher education (system) reforms (UNESCO & Varghese, 2013, 2016). Corresponding to the observation that academic freedom is neither clearly defined, nor agreed upon, and not widely institutionalised (Altbach, 2001), institutional autonomy is much less common worldwide, with many universities featuring limited self-governance while structurally depending on the tutelage of the respective political entity; in most cases, the national Ministry of (Higher) Education/Research.

Indeed, the commonly employed North American setting is ‘atypical’ (Heisler, 2007). In contrast, authoritarian and bureaucratic university administration more appropriately characterise various so-called non-Western higher education contexts, where

Public policies dealing with the education sector are the product of the economic, political and social contexts in which they are constructed, and they cannot be evaluated separately from the impact of global changes on the local economy, and from local ideological and social processes (Cruz e Silva, 2010, p. 1).

The rationale for the *Dar Es Salaam Declaration on Intellectual Freedom*³⁷ and the *Kampala Declaration on Intellectual Freedom and Social Responsibility*³⁸ in 1990 has become topical again: external, i.e. one-party system-induced censorship of pedagogy within institutions; although new threats are now observed internally, in the form of neo-liberalist directives (Ogachi, 2010).³⁹

1.2 Research Questions and Outline

“(…) you cannot define the what, how, and outcome of internationalisation strategies without first having answered the ‘Why’” (Wit, 2016, p. 17).

This thesis seeks to take up and build on a recent momentum arising in Algerian higher education research as is exposed below; Algeria is under-researched or has only been the subject of enquiry comparatively recently. Literature that exists tends to be outdated and treats higher education issues from an economic or purely managerial perspective, rather than a basis from education sciences or sociology. The formulation of the research questions derives from the conclusions drawn from the literature state of the art, yet, they have evolved in an exploratory manner through data analysis. They counteract the lack of empirical –

³⁷ <http://hrlibrary.umn.edu/africa/DARDOK.htm> See part III on ‘Autonomy of Institutions of Higher Education’.

³⁸ <https://digitallibrary.un.org/record/520822>

³⁹ See also Sawyerr (1996)

especially, qualitative – information about the past, present and new and future issue of the role of the university as defined through its – accepted and negotiated – functions.

As for researcher positionality, the author is external to context studied; however, familiar with historical and cultural elements from having worked and lived in the country over three years. Furthermore, as has been detailed in the foreword, through collaboration and initiatives as well as activities, there has been extensive trust-building, leading to open doors. From own experience, an outsider perspective – in this case, a German – is conducive to pursuing research in the form of qualitative data collection: the author has previously been perceived as neutral and pragmatic, which has facilitated access and cooperation, as opposed to contrasting connotations associated with France-affiliated researchers. At the same time, she has been subject to censorship, respectively observed attempts thereof, in the course of her research,⁴⁰ which leads to the conclusion that freedom is restricted. Based on this rationale, the subject refers to individuals conducting or engaging in research in the context of higher education politicisation, the notion of which will be framed in the following. In this way, the presently missing link between the macro and the micro levels will be identified and established.

Research questions

The questions addressed are as follows:

“Which implications do the degree of the Algerian higher education system nationalisation and internationalisation orientation have on institutional development as well as individual practices?“, and, specifically, the subquestions;

- Which functions does the present-day Algerian university incorporate, including in international comparison?
- How do Algerian academics cope with system implications?
- Why do Algerian academics act in this manner?

The operationalisation of the research question requires a concept of positioning which can be found in a definition of university functions over the time of higher education institutions’ global development from medieval to contemporary times as a frame of reference independent of national or political contexts. Therefore, Manuel Castells’ sociological

⁴⁰ See chapters 5.2/5.3

theory of the four traditional university functions (Castells, 1993), which were reviewed in an African context since the early 2000s (Castells, 2001, 2017), has been identified as suitable. It is complemented by Lüscher (2011a, 2011b) and Bourdieu (1986) as adequate from the data analysis, which accounts for the individual academic's micro perspective as opposed to the macro, system level.

Although numerous types of higher education institutions⁴¹ do exist in Algeria, the study focuses on the comprehensive university status institution only, as the scholarly literature has been focusing on this type, and as the full university is the only form within the national higher education system featuring both teaching and research in its vocation.

Outline

Following the introduction and framed by the conclusion, the thesis is organised into three parts, namely, contextualisation, object of study, and empirical analysis. Part I comprises of chapter two, contextualisation of the Algerian higher education system via different perspectives from a historical and political background, and a system development approach in chapter three.⁴²

Part II is made up of the object of study and the conceptual approach. Chapter four starts with a description of three theoretical concepts, beginning with Castells' four functions of the university, followed by Lüscher's ambivalences, and concluded by Bourdieu's forms of capital as the theoretical and conceptual background. In the last subchapter, the operationalisation by an adapted analytical framework derived from the above is proposed, comprising two parts: the analytical approach is being detailed, and hypotheses are put forward. The methodological design follows it in chapter five, including an overview of the data collection phase and the empirical material basis as well as qualitative content analysis (QDA) employed.

Part III is devoted to the empirical study. Firstly, in chapter six, results of the data analysis are presented in the form of the first frame of analysis, i.e. university functions. In the following chapter seven, system and personal ambivalences are being identified and detailed with reference to coping strategies before academics' motivations are exposed. They are

⁴¹ See chapter 3.1

⁴² A guide for reading: due to the chronological integration in chapter 2, followed by a thematic approach in chapter 3, there exist redundancies to an extent, e.g. in the form of referring to historical events already mentioned.

followed by a synthesis and discussion. The thesis concludes with chapter eight, consisting of a reflection, policy recommendations, and an outlook.

1.3 Focus: The Arrangement of Academic Freedom in Politicised Contexts as a Reflection of the Relationship Between Power and Science

Higher education in transforming societies

Education is nowadays recognised as a primordial investment in any country's social as well as economic future. As part of the *Sustainable Development Goals* (SDGs) – No.4 “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”, it constitutes primary social infrastructure which provides human capital needed for the advancement of societies. Target 4.3 addresses higher education specifically: “By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university”.⁴³

In the beginning second decade of the new millennium, transforming societies (Tan, 2017)⁴⁴, most of which are classified as upper or lower middle-income countries with 75 % of the world's population and still 62 % of the world's poor, but also producing one-third of the world's gross domestic product (GDP)⁴⁵, face numerous challenges in their national education systems. In the global post-industrial age, they strive for the knowledge economy (Powell & Snellman, 2004; Smith, 2002), as is exemplified by the case of Algeria (Babes, 2009). Consequently, the further development of higher education systems⁴⁶ plays a key role.

Transforming societies can frequently be labelled as welfare states (M. G. Schmidt et al., 2007), in which the public financing and thus free provision of education makes up the fabric of national ideology, in addition to social security (Schmid, 2010; Schmid et al., 2016). This is reflected in the quasi-absence, or only slow roll-out, of private, non-state higher education

⁴³ <https://sustainabledevelopment.un.org/sdg4>

⁴⁴ The term was first coined in a Southeast Asian context. The subtitle reads: “Strategies for Social Development from Singapore, Asia, and Around the World”

⁴⁵ <https://www.worldbank.org/en/country/mic/overview> The GDP measures, as sum of market values of finalised goods and services, economic activity in a country within a given period of time.

⁴⁶ Higher education refers to university-level as opposed to other forms of tertiary education. Higher education systems may be understood by a “triangle of forces”, namely, professional-collegial, governmental-managerial and market, and are organised around the elements of task, belief, and authority (Clark, 1983). While these factors are abstract components on a macro level, more recently, the notion of higher education systems as conforming to societal expectations has been introduced (Teichler, 2004).

providers (Huisman et al., 2018), due to continued, firm state control by central governance, such as is the case in many former Soviet Union countries – resisting the Western, neo-liberal notion of higher education privatisation. This status quo is noteworthy, considering the otherwise strong rise of privatisation as well as private higher education globally since the mid-last decade (Varghese, 2004; Bjarnason et al., 2009).

Accordingly, transforming societies in the Arab world are in the process of building knowledge economies for job creation (Djefflat, 2009). They have had to deal with social demand for access to education, as is reflected in, e.g. universities' civil role (Al Amin, 2016), community service (Arifi, 2016), or, yet, with regards to the reproduction of social elites in academia (Sabour, 1988, 2001)⁴⁷. As can be observed in the Arab higher education space, there is a dilemma of “publish globally and perish locally” and vice versa (Hanafi, 2011) – meaning that those scholars who are visible internationally by publications are not recognised or successful academically at home – as well as a topical “crisis of research and global recognition” in Arab universities (Almansour, 2016).

In this context, transforming societies are also increasingly confronted with external influences on their national education systems as an expression of globalisation processes, which may be in either an open form, as transnational education exports by public or private entities from third countries, such as Germany as a new actor (Fromm, 2017; Fromm & Raev, 2020), or, more indirect, as a means of foreign cultural diplomacy as is shown in the case of India (Hampel, 2015). However, educational cooperation and partnership with transforming societies such as Algeria remain imbalanced from the perspective of the so-called global South, which is reflected in often unilateral funding approaches, conditions imposed, and the lack of reflection in the adaptation of frameworks developed by the so-called global North (Benstaali, 2019a; Sebihi & Schoelen, 2019).

North and South African postcolonial settings

Education may indeed be taken as an indicator of decolonisation of a given society (Salaün, 2019). In the Pacific, for instance, the indigenous population faces the colonial legacy by French educational institutions (Salaün, 2013, 2014) and cultural education in Oceania, for example, is “articulating local, national and global agendas” (Jourdan & Salaün, 2013),

⁴⁷ The former article entitled *Homo Academicus Arabicus* refers to Pierre Bourdieu's famous work *Homo Academicus* (1984).

which points at a hybrid environment, confronted with non-science influence. This again means that research itself is to be conducted in a decolonised manner as well as open avenues for this very decolonisation (Gagné & Salaün, 2013; Vernaüdon & Salaün, 2014). With regards to France, this acknowledgement is all the more significant in the context of the education reform in 2005. Its political leader, former premier François Fillon, later on used the phrase “sharing of cultures” with reference to colonialism in school curricula (Chhor, 2016).

On the African continent, colonial rule was rampant and lasted longer than in any other context. The last countries became independent – often after fierce liberation wars lasting several years – only in the 1990s, such as Namibia, and, the end of apartheid in South Africa as late as 1994. Today, almost every country in Africa has been experiencing a postcolonial situation of a duration of half a century on average, which has repercussions on what makes up any nation-state, i.e. the judicial system and political governance, and, again, national education policy. Many countries have since undergone internal conflict, which prompts governance shifts and realignment, such as Islamism, neo-patrimonialism, among others, in the case of Sudan/South Sudan (Babyesiza, 2015).

As illustrated by higher education transformation in post-apartheid South Africa, universities in a postcolonial context are confronted with a “dual problem”: “The challenge (...) was that the ‘system’ as it was then, was fragmented and modelled on an outdated version of the post-school education system in the United Kingdom (UK). This model had by then been radically revised and massified in the UK” (Muller et al., 2017, p. 4). At the time of higher education institutions’ creation in former colonies in the first and second quarter of the 20th century, it was elites’ applied training for public administration which was sought after both in Europe and, hence, in Africa, too.

At independence throughout the mid-1950s for most African countries, the colonially implanted and aligned system remained, although with very varying institutional development depending on the British, French or Portuguese systems and education traditions, roughly in descending order. The present-day issue is that “In too many cases, that is all they still do” (Muller et al., 2017, p. 28). Likewise, in South Africa, lessons learned include that there was “no attention to development and knowledge production, research and innovation”, and that policy did not start “with a reflection on the roles and functions of a higher education system” (Muller et al., 2017, p. 4). The underpinning thesis of this need for

knowledge-creation is that “If knowledge is the electricity of the new informational international economy, then institutions of higher education are the power sources on which the new development process must rely” (Castells, 1993, p. 66).

In North Africa, Algeria was not yet considered “advanced” in the early 2010s as not characterised by a knowledge society by one of its most prominent sociologists as is shown in the following:

(...) la part du capital intangible (les investissements consacrés à la production et à la transmission des connaissances ainsi que les investissements qui améliorent les caractéristiques du capital humain comme les dépenses santé et d’éducation) dépasse la part du capital tangible (infrastructures physiques et équipements, stocks, ressources naturelles) (...) Dans les pays avancés, on est passé des économies industrielles aux économies fondées sur le savoir⁴⁸ (Guerid, 2012b, p. 15).

There are indeed more parallels between the South African post-apartheid and the present Algerian higher education situation, notably when looking at so-called massification. In South Africa, “After all, black students had for too long been denied the fruits of an education in general and higher education in particular. Who would deny their moral right to higher education, a right enshrined in the Freedom Charter and the Constitution? Massification was the necessary vehicle to deliver this right (...)” (Muller et al., 2017, p. 18). This state of affairs is comparable to colonial Algeria where Algerians had been barred from access to higher education altogether for decades in a racist system of elite recruitment of which percentages of less than ten or even five per cent of the total enrolment rate is proof.⁴⁹

Algeria’s revenues and thus economy continue to be based on raw material exportation as was the case in South Africa before the post-millennium shift in policy which brought about the concept of “an advanced information-based society which would be the engine for a knowledge economy, moving South Africa away from its endemic dependency on mined resources” (Muller et al., 2017, p. 8). In fact, to move from dependency to development, a greater focus on the research and knowledge production function is needed in African universities (Muller et al., 2017, p. 12). Indeed, the “Higher Education Research and Advocacy Network in Africa” (HERANA) project, for the first time, provided empirical evidence for Castells’ presupposition that the focus of African universities had been on elite formation and training (Muller et al., 2017).

⁴⁸ (...) the share of intangible capital (investment in knowledge production and transmission, and investments that improve the characteristics of human capital such as health and education expenditures) exceeds the share of tangible capital (infrastructure physical and equipment, stocks, natural resources) (...) In advanced countries, we have moved from industrial economies to knowledge-based economies.

⁴⁹ See chapter 2.1/2.2

Algerian higher education research state of the art

To begin with, a considerable amount of past and present literature on Algerian education focuses on school-level rather than higher education, which explains the latter's comparative novelty, respectively, scarcity. As will be shown in the following, authors of publications over a period spanning forty years were almost exclusively Algerian or Algerian diaspora. In fact, as for the literature research carried out and presented here, to date, there is no contemporary work by a foreign author either in or outside of Algeria.⁵⁰ The author reads in her native German, English and French, and has taken sources in those three languages into account for this literature review. In contrast, assistance for initial screening and subsequent summarising overviews by a social sciences professor based at a West Algerian university was obtained for Arabic publications.

A total of 30 existing doctoral dissertations were identified by Algerian authors internationally. All but three are written in French and were defended at French – mainly Parisian – universities. It is striking that there are only five dissertations from post-2005, while the majority dates from the early 1990s or late 1980s. In this context, the only English-language dissertations covering different decades are “Effects of Independence on higher education enrolments in North Africa” (El-Khalli, 1987); “Arabisation and Islamization at the Algerian university” (Coffmann, 1992), and “Academic Freedom in Arab universities” (Taha-Thomure, 2001), with the first and the third exclusively incorporating Algeria as part of a regional comparative study. Otherwise, there is only one comparative study Algeria-France (Boucif, 1986) and only one by a French author (Geneste, 1983).

The earliest publication identified in Algeria was written in the discipline of economics at the University of Constantine in the late 1970s. Although co-authored, below doctorate level, for the then bachelor degree, *Licence*, it is about the vast topic of planification in Algerian higher education (Guezoul & Benzerroug, 1977). Equally well, the earliest publication abroad deals with “Higher Education in Algeria – strategical problems” (Daghbouche, 1982) (in English, defended to obtain the degree of Magister at the University of Cardiff), whose objective is to “identify and analyse the problems of higher education in Algeria and to suggest solutions which could improve the present situation” (Daghbouche, 1982, Abstract). Nowadays, Nadia Daghbouche – in addition to representing one of the few female authors, remains the only scholar who publishes on higher education in Algeria in English. There are

⁵⁰ This claim cannot be made for literature in Arabic in its entirety

two early dissertations dealing with psychology, respectively law teaching at Algerian universities as an example for the higher education system as a whole (Ait-Sahalia, 1998); (A. Kadri, 1992). Comparably, a cost-efficiency analysis at the University of Constantine (Benarab, 1997) is employed in the field of economics.

The rising number of theses in the field of management which can be observed today is very recent, as only one related dissertation from the early 1990s, about a new concept of organisation and management of Algerian higher education and research institutions (Benzagouta, 1992) could be identified. Within the last thirty years, two dissertations on development and the education system, respectively, the university in Algeria (Dziri, 1987); (Benaissa, 1988), two dealing with an economic analysis of higher education politics (Djoudi, 1993), and, more contemporary, the economic re-foundation of the education system (Nekkal, 2015) drawing on the macro level in their broad scope. A study about the interlinkages and conflict between willingness to modernisation and continuation of the colonial model (M. Kadri, 1995) is the only one to date.

It is only in the early 2000s, too, that system analysis approaches were taken up again, although, as of now, those works have not been completed.⁵¹ There are only three completed dissertations treating higher education defended at Algerian universities as of today as per the national information technology and bibliometrics research centre *Centre de Recherche sur l'Information Technique et Scientifique (CERIST)* database.⁵² Despite a website function to download theses defended on the national thesis portal, it was not possible to do so. However, it must be taken into account that the most recent theses – in Arabic by default – are unlikely to have been indexed yet. An example of this case is a thesis on the *LMD* implementation at the University of Mostaganem, available at the private library *Centre de Documentation Economique et Sociale (CDES)* in Oran, as well as several others at the University of Algiers 1 library.

⁵¹ Akrou, M. S. (verified 2006). Analyse comparative des systèmes d'enseignement supérieur: gouvernance, procédures d'évaluation et application au contexte algérien. Retrieved from <https://www.pnst.cerist.dz/detail.php?id=26204>

Ammrani, A. M. (signalled 2002). Analyse théorique et pratique de l'inefficience de l'enseignement supérieur en Algérie par références aux universités du centre et de l'est algérien. Retrieved from <https://www.pnst.cerist.dz/detail.php?id=20277>

⁵² Bouhidel, A. (2002). La pédagogie à l'université: essai d'analyse de la formation pédagogique des enseignants universitaires. Université El Hadj Lekhder de Batna.

Ghomari, L. (2013). Vers une Ontologie de Référence pour le Domaine de l'Enseignement Supérieur, HERO "Higher Education Reference Ontology". Retrieved from <https://www.pnst.cerist.dz/detail.php?id=76587>

Hernan, N. (1987). The contribution of knowledge management to improving the quality of higher education: study of a sample of Algerian universities. Retrieved from <https://www.pnst.cerist.dz/detail.php?id=876080>

The overwhelming majority of theses dealing with the Algerian university or the national higher education system date from 2010 onwards and are still-ongoing – while some might have been abandoned since and, though mentioned, can therefore not be taken into account. With some exceptions, they generally do not feature empirical elements. More recently, there is a clear focus on, firstly, quality assurance aspects,⁵³ and, secondly, information technology application or indeed their interlinkages.⁵⁴ Those theses in progress which are signalled in the national thesis portal *PNST/CERIST*⁵⁵ are written in both Arabic and French with approximately 50% each. After having been introduced by a diaspora scholar in Canada as one of the first in the early nineties (Khelfaoui, 1991), since the early 2000s, the use of information technology has been on the agenda at Algerian universities, prompting a two-volume special issue by national applied economics research institute *Centre de Recherche en Economie Appliquée pour le Développement (CREAD)* (Tefiani, 2005). This trend is furthermore reflected in the recent national university publisher (*OPU*)⁵⁶ range (Baddari et al., 2013), which can be seen as an indicator of its significance in higher education studies in Algeria, too.

The national science system has been explored from a historical perspective from independence till the late 1990s: (Labidi, 1988; Khiari, 1996; Yacine, 2012). There is one pioneering study on the use of scientific information technology systems (Dahmane, 1990),

⁵³ Bahri, B. (validated 2016). The role of the quality of the composition of graduates of higher education on the operational - case study (in Arabic) -دراسة حالة- دور جودة تكوين خريجي التعليم العالي على التشغيلية- Retrieved from <https://www.pnst.cerist.dz/detail.php?id=888197>

Fourar, I. (validated 2017). La démarche Assurance Qualité dans un contexte de changement organisationnel au sein des établissements d'enseignement. Retrieved from <https://www.pnst.cerist.dz/detail.php?id=888582>

Hennane, Y. (validated 2013). Les outils de la qualité pour l'amélioration pédagogique dans l'enseignement supérieur. Retrieved from <https://www.pnst.cerist.dz/detail.php?id=72497>

Musette, Y. (signalled 2015). Assurance qualité et réactions des acteurs dans l'enseignement supérieur en Algérie. Retrieved from <https://www.pnst.cerist.dz/detail.php?id=883333>

Saif al-Din, J. (signalled 2017). Evaluation of quality management system in higher education institutions in Algeria under the official texts (in Arabic). تقييم نظام إدارة الجودة في مؤسسات التعليم العالي بالجزائر في النصوص نصوص الرسمية. <https://www.pnst.cerist.dz/detail.php?id=894202>

⁵⁴ Hadhbi, A. (signalled 2016). La stratégie blended learning dans les établissements d'enseignement supérieur en Algérie : changements, défis et perspectives. Retrieved from <https://www.pnst.cerist.dz/detail.php?id=888867>

Harnane, N. (validated 2012). Exigences de la gestion des connaissances dans l'amélioration de la qualité de l'enseignement supérieur. Retrieved from <https://www.pnst.cerist.dz/detail.php?id=56301>

Mansouri, A. (signalled 2016). Change Management in Higher Education Institutions A Case Study of the LMS System at the University of Algiers (in Arabic) 3. إدارة التغيير في مؤسسات التعليم العالي دراسة حالة نظام أل أم دي. Retrieved from <https://www.pnst.cerist.dz/detail.php?id=888880>.

Tolbi, R. (verified 2015). Activation of the mechanisms of communication for quality assurance in institutions of higher education field study for a group of universities (in Arabic). Retrieved from <https://www.pnst.cerist.dz/detail.php?id=881331> تفعيل آليات الإتصال لضمان الجودة في مؤسسات التعليم العالي دراسة ميدانية لمجموعة من جامعات

⁵⁵ See chapter 3.2

⁵⁶ See chapter 3.2

serving as a base for a much more recent publication on the foundations of the national scientific information systems by the same author (Dahmane, 2014). The significance of university teaching and research support infrastructure, e.g. the status of libraries in Algerian higher education, was also taken up in the early 2000s (Ali-Pacha, 2004), which may be seen as the manifestation of the field of library and information sciences.

Furthermore, it is noteworthy that, although numerous theses have been defended in sociology – mostly on a systems analysis level mentioned above, there is only one, dated, which works with at least partly qualitative methods, dealing with the ideology of development and students' opinions by interviews (Benali, 1987). Indeed, social sciences in their broad sense including economics and law have only been taken up as interest of research by both *CREAD* as institutional editor and individual authors post-2010 as is shown by, e.g. an edited volume which spans their genesis and application in the country since (Benguerna, 2011). More broadly, Arabisation in the social sciences (Sebaa, 1996) was also analysed more than two decades after the first reform in higher education, *La Refonte*. Sociology, in particular, is described as a discipline without a history in Algeria (Chachoua, 2010). Among the numerous publications by famous French-Algerian sociologist and anthropologist Fanny Colonna (1934-2014), one of her late chapters in the same publication treats obstacles for the practice of social sciences inherent in the organisation of Maghreb societies (Colonna, 2010). Like Sebaa's work, this edited volume was published in France rather than Algeria.

It can also be observed that there are only a few scholars who presently work on the national higher education system in the country (Ghallamallah, Daghbouche) after the passing of Djamel Guerid, respectively, pioneer Hocine Khelfaoui in 2015/2013. The majority of reflections in the form of monographs are published by former politicians or even Ministers themselves, of which *Le défi du savoir en Algérie* ('The challenge of knowledge in Algeria') by the former Minister for Higher Education and Scientific Research, Mustapha Cherif (2013), is a prominent example.

Likewise, two other former Ministers published their analysis in the form of a synthesis of their experiences and perspectives, Mourad Benanchenhou's *Vers l'Université Algérienne: Reflexions sur une Stratégie Universitaire* ('Towards the Algerian University: Reflections about a university strategy') in 1980, and Mustapha Haddab's *Dimensions du champ éducatif algérien: Analyses et évaluations* ('Dimensions of the Algerien educational field: Analyses

and evaluations’) from 2014, which presents a collection of previously published articles on different levels of education in Algeria between 1979-2011. Out of the 14 contributions, it is remarkable that though several articles are concerned with higher education to varying degrees, the three articles with *enseignement supérieur* in the title date from 1986, 2007 and 2011, leaving almost two decades between the first and the second, and only four years between the second and the third.

It is only in 2011 that an edited collection entitled *L’Université algérienne et sa gouvernance* (‘The Algerian university and its governance’) appears, compiled by *CREAD* (Ghalemallah, 2011a)⁵⁷. In the introduction and the subsequent first contribution “Université, savoir et société en Algérie”⁵⁸, he acknowledged that recent malfunctioning of the Algerian university is in fact a symptom of a larger societal governance crisis which must be seen in a historical context and at which base is “(...) faute de se doter des instruments cognitifs pour se connaître s’est refusé la capacité de se gouverner efficacement et de se projeter dans l’avenir” (Ghalemallah, 2011a, p. 8).⁵⁹

The Algerian sociologist Djamel Guerid (1937-2015) was one of the first who, throughout his life as a professor in Algiers and later in Oran, had been interested in the university as a subject of study. A tribute was dedicated to him in the recent past (Bachir, 2017), which is evidence of his national acceptance both as an author and scholar in general and in higher education in particular. It was him who, with the support of colleagues as well as the University of Oran’s administration, coordinated a symposium entitled *Répondre à l’Université* (‘Rethinking University’) in Oran in 2012 (Guerid, 2014) as the first, most topical and – with 11 presentations from Algeria and diaspora in France and Canada – the most comprehensive of its kind. It is noteworthy that this was purely scholarly as opposed to a political initiative, without involvement or funding from government representatives.

Daghbouche’s article from 2008, entitled “A Systematic Approach: A Solution to Algerian Higher Education”⁶⁰ stands out as the most recent in terms of conceptual macro analysis. Her systematic approach is defined as different from the systems approach in management theory (Daghbouche, 2008), and, hence, sociological in that it seeks to conduct a “General

⁵⁷ Bilingual introduction; out of the nine contributions, seven are written in French and two in Arabic.

⁵⁸ University, knowledge and society in Algeria

⁵⁹ (...) lack of cognitive instruments to get to know each other means refusing the ability to govern oneself effectively and to project oneself into the future

⁶⁰ The article was republished in identical form in 2011: *Journal Academia* 1 (1) pp. 32-39.

Awareness and Definition of the Problems of the University System in relation to its General Surroundings” (Daghbouche, 2008, p. 76).

Overall, there is a quickly rising interest in research on higher education in Algeria since 2015 as can be seen from the numerous theses signalled above. For the most part, results are not available yet. Nevertheless, the majority of existing dissertations have economics, management or computer science/technical background. Although sociology or education sciences as disciplines do appear as well, all of those works with an empirical basis employ an exclusively or dominantly quantitative rather than qualitative approach. Quality assurance issues, science, technology, pedagogy, and lecturers’ internal and external organisation have all been treated, whereas a macrosystem analysis including the social and political context has only taken place pre-1985 or post-2000: (Ghalemallah, 2006; Daghbouche, 2008; Guerid, 2012a, 2012c). Besides, almost all available publications are in either French – more dated – or, more recently, in Arabic. While both these languages are important in science, they nevertheless restrict the potential readership and publications are not always widely distributed. They may also be difficult to access outside of Algeria, and quality is an issue which came up during the literature review.

Ambiguous politicisation in Algerian higher education

In the context of individual academic freedom and institutional autonomy as outlined above, the notion of politicisation in the sense of attributing a political meaning or dimension of higher education, or of the university, seems contradictory. Hence, it is ambiguous and polysemous. Its meaning varies depending on the context in which it is mobilised. The politicisation of higher education, from an organisational point of view – especially in the context of incorporating higher education institutional autonomy, and from a more traditional point of view – can mean that individuals, in the function of their representing an institution, are speaking on political issues, i.e. on public policy beyond the academic or scientific sphere in the strict sense (Bloland, 1969). However, the opposite may very well apply, i.e. state intervention in academic affairs by institutional control, or politicisation of scholarly discourse (Wilson, 1997). It is this latter meaning which is of interest in the scope of this work, and which will be referred to frequently throughout.

As described in the analysis entitled “Higher Education and Differentiation on Knowledge: Algeria’s Aborted Dream” (Khelfaoui, 2012)⁶¹ power is exerted by those holding political influence, having repercussions on the country’s higher education system and its operation. In an environment where the state has long monopolised not only the provision of higher education but also taken on decisions on scientific matters (Khelfaoui, 1996), and where political legitimisation and social control have since superseded academic functions (Khelfaoui, 2003), the notion of politicisation equally highlights the ambiguous relationship of actors outside of the formal political sphere, such as academics, to politics. From this background, there is a question of connotations and allusions of what it means to politicise a topic, or what is the desired or unintended significance of something being politicised, why and by whom. In Algeria, there exists a negative connotation of the term, and it is employed by individuals as a means of distancing oneself. Thus, the political is not perceived as neutral but portrayed as an assessment of a policy choice or political decision, for instance, which an individual denounces as illegitimate in their understanding.⁶²

In the academic field, it can have a range of meanings: First of all, it may refer to the fact that politicians or state authority-affiliated representatives take decisions unilaterally. Secondly, it may refer to the fact that choices are not of academic but of ideological nature. Thirdly, it may point towards directives coming from actors close to political power circles in the sense of the ruling party. Like the notion of *le pouvoir* / ‘power’, in the recent so-called *hirak* movement of Algerian societal protest against the government – which may refer to the state in general, but also a particular group of people taking control after independence, it is both an abstract entity and an actual group of people at the same time. This observation is reiterated by the previously referenced national higher education system macro analysis with the result of the political being superior to the academic (Khelfaoui, 2012) in the form of:

(...) the political sociology within which one can account for the effects of geopolitics and globalisation on the articulation of academic frameworks within academe (...) academic freedom, and the ability of academics to ‘speak truth to power’ are situated within the web of cultural, political, and institutional practices that enact them (Mazawi & Sultana, 2012, p. 28).

⁶¹ The book chapter was previously published as a journal article in French; see Khelfaoui (2010). It was first presented during a CODESRIA conference, *Academic Freedom and the Social Responsibility of Academics and Researchers in Africa: What are the new challenges?*, Oran, Algeria, 9-11 March 2010. See <https://www.codesria.org/spip.php?article674&lang=en> for the agenda including proceedings.

⁶² Based on the analysis of the data. See part III, empirical study.

As a consequence, there is a conflict between “professionalisation autonomy” and “institutionalisation control”, which, in the case of Algeria, characterises the existence of, and the extent of the relationship between the scientific and political worlds (Khelfaoui, 2004).

2 Historical and Political Context

C'est bien en effet dans la dialectique de l'ancien et du nouveau, dans ce qui persiste d'ancien dans le nouveau, dans l'identification des ruptures du nouveau avec l'ancien mais aussi dans ce qui n'est pas nouveau dans les mutations observées que peut être le mieux cernée la signification et la validité des actions qui touchent à l'institution universitaire⁶³ (A. Kadri, 1991).

In the following, the historical and political context provides an overview of the People's Democratic Republic of Algeria. Drawing on the introduction, it sets the scene by first outlining Algeria's higher education history and policies in chapter two, as well as its higher education system development in particular in the subsequent chapter three. The country's contextualisation starts with a profile and socio-historical overview before focussing on historical developments relevant to higher education.

2.1 The People's Democratic Republic of Algeria Socio-Historical Overview

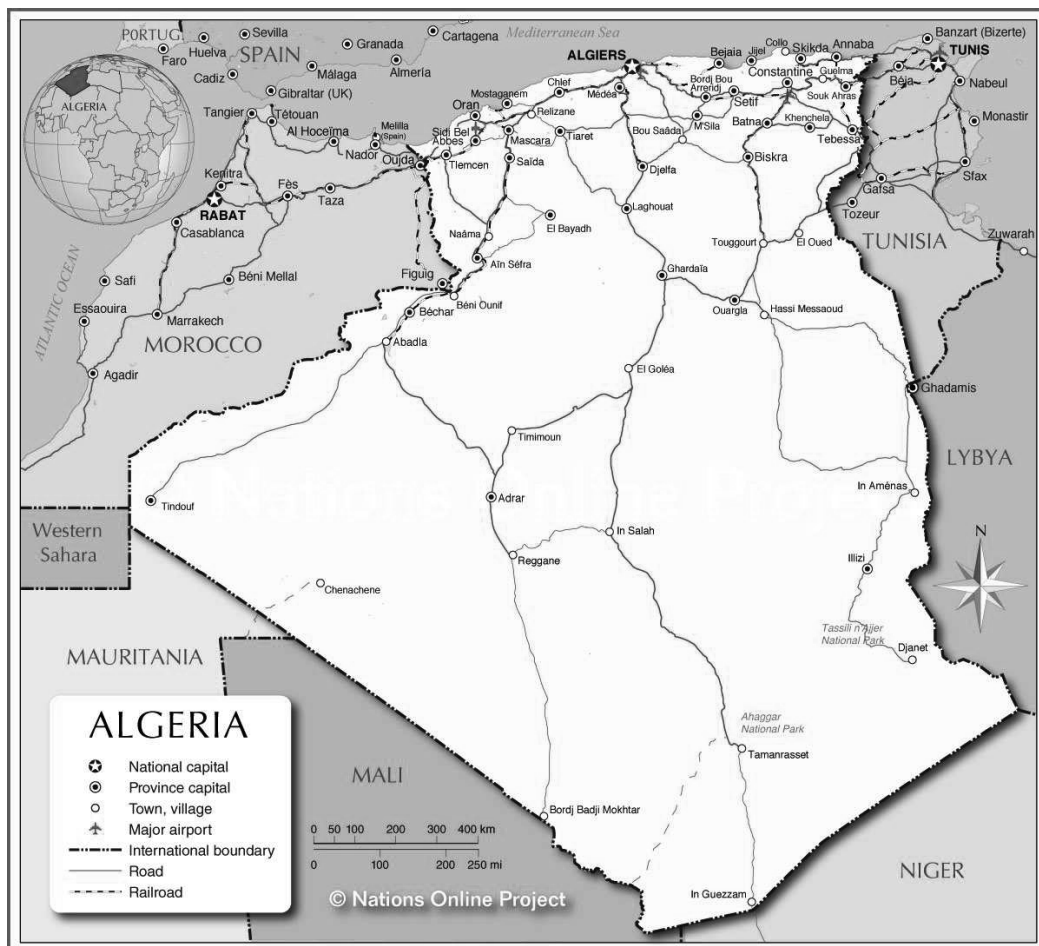


Figure 1: Map of Algeria including the Maghreb region, the Mediterranean and its location on the African continent⁶⁴

⁶³ It is indeed in the dialectic of the old and the new, in what persists from old to new, in the identification of the breaks of the new with the old but also in what is not new in the observed mutations that the meaning and validity of actions, which affect the academic institution, can be best understood

⁶⁴ Source: https://www.nationsonline.org/oneworld/map/algeria_map.html

For centuries, the People’s Democratic Republic of Algeria (Arabic الجزائر: *Al-Djazair*, ‘rocky islands’) has been strategically positioned, with more than 1,000 km of coastline at the Mediterranean Sea separating Europe and Africa. This geopolitical location has also brought about – contrary to many other countries formerly colonised by France – a unique status as an integral administrative part of France during its occupation for more than a century, starting in 1830. Today, more than half a century after independence in 1962, the emerging People’s Democratic Republic of Algeria, as the biggest country of the African continent by area, is an essential actor in the Maghreb region and a member of the influential Arab league. In terms of urban and scientific infrastructure – for instance, with over 70,000 km of roads and almost 4,000 km of railway tracks, as well as hospitals, schools, universities, training centres, research laboratories and journals – Algeria ranks among the first countries in Africa and the Arab world.

Algeria’s population of more than 43.5 million as of 2020 is predominantly young, with the majority under 30 years of age and almost 30% under 15. Its political system can be classified as a presidential Republic. National holidays are celebrated on the 1st of November, the day of the revolution, and the 5th July, day of the proclamation of independence. Algeria’s official languages are modern standard Arabic – with the spoken Algerian dialect *Daridja* – and Tamaziyt/Tamazight (so-called ‘Berber’), since 2016 constitutionally, after being awarded national language status in 2002. French continues to be widely used in administration, (higher) education and commerce. English is not widespread as of now. However, the academic integration of the South, where neither French nor the Northern-dominating – Kabyl – a variety of Tamazight is wide-spread, has led to a push for more English in the country’s higher education system, as have representatives of science disciplines (Bensouiah, 2020b). In 2018, there were some 300,000 graduates against a backdrop of an illiteracy rate of 18.6% and an estimated 15% unemployment rate⁶⁵, although the informal labour sector plays a role not to be underestimated.

Overall, Algeria’s Human Development Index (HDI) classifies as “high human development”, and ranks the country in the lower first half, at position 82 out of 189. While above-average for the Arab states, it is slightly less for females when compared to males due to differences of income and women’s significantly less participation in the labour market at

⁶⁵ There are no specific statistics available on graduates’ unemployment rate. See part III, especially chapter 6.5.1, for empirical evidence related to the issue of the lack of data.

15% versus 67% (United Nations Development Programme [UNDP], 2019). As can be seen in the graph, its index rose by 30% since 1990.

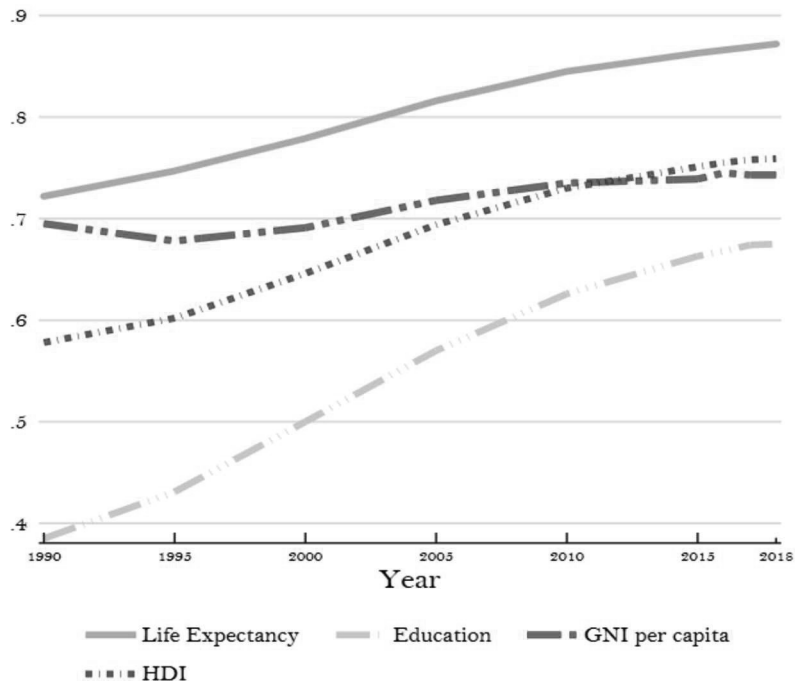


Figure 2 Trend in Algeria's HDI component indices 1990-2018 (UNDP 2019, p.3)

Notably, Algeria is not a member of the World Trade Organisation (WTO). Its ease of doing business index is

in the lowest quarter of 190 nations and its global competitiveness index in the last third of 141 countries (Germany Trade and Invest [GTAI], 2020)⁶⁶. 95% of its state revenues are based on exports from state companies' fossil fuels exploitation in the vast Sahara, which is indicative of a trade orientation towards Europe rather than the neighbouring Maghreb or sub-Saharan African countries. Nevertheless, alternatives in industry and services, such as construction, transport, logistics, communication and technology, are under development and increase by approximately 5% each. Imports are made up by half of foodstuffs, machinery, and chemical products, which mainly come from China as well as four European countries, although exports, as well as imports, with the latter, are in decline. Public and private investment makes up close to 50% of the gross domestic product, 0.5% of which is spent on research and development, whereas debt accounts for almost half. Foreign investment is characterised by a joint venture approach of 51% mandatory Algerian ownership. Likewise, foreigners cannot own land without a local counterpart.

A brief historical overview – which necessarily remains fragmented though milestones in education and science are mentioned – has been included to account for Algeria's millennia-old history to comprehend its importance as a melting point of cultures, societies, knowledge and languages between the Orient and the Occident, which is still true today. Algeria occupies a prominent place in the panorama of world prehistory. The number and the quality

⁶⁶ The figures mentioned in the remainder of this paragraph are taken from the same source

of its traces, from the oldest Paleolithic to protohistory, give it an exceptional position and make it one of the first cradles of humanity. The first traces of human occupation, which marked Algeria's Prehistorical area, begins 2 million years ago and ends with the first Libyan texts called Tifinagh, in the 1st millennium before time.⁶⁷ The



Figure 3 Ahaggar mountain range near Tamanrasset ⁷⁰

so-called Tighennif Man is the oldest known fossil human in North Africa.⁶⁸ Algerian 'indigenous'⁶⁹ population dating from sometime in the myriad before time, has been incorrectly referred to as 'Berbers', a term derived from the Roman label 'Barbarian' in addition to another group, 'Moors', since the century-later Arab Muslim presence and indeed to this day. In fact, what is routinely portrayed as one people were many different civilisations – Moors (Mauri), Mauretians, Africans, and many tribes and tribal federations such as the Leuathae or Musulami, none of whom share a common ancestry, culture, let alone language (Rouighi, 2019a). The modern, acceptable term for members of peoples in a multitude of countries is *Imazighen* (plural)/*Amazigh* (singular) (Rouighi, 2019b).

⁶⁷ See Sahnouni, M. "The Site of Ain Hanech Revisited: New Investigations at this Lower Pleistocene Site in Northern Algeria", *Journal of Archaeological Science*, 1998, vol. 25, pp. 1083–1101, and Balout, L., Biberson, P. and Tixier, J. (1970) "L'Acheuléen de Ternifine (Algérie), gisement de l'Atlanthrope", in: *Actes du VIIe Congrès International des Sciences Préhistoriques et Protohistoriques*, Prague, UISPP, 21-27 août 1966, pp. 254-261.

⁶⁸ See Dutour, O., "Le Peuplement moderne d'Afrique septentrionale et ses relations avec celui du Proche-Orient [archive]", *Paléorient*, 1995, vol. 21, n° 21-2, pp. 97-109.

⁶⁹ The author disapproves of this terminology, which is marked by quotation marks, due to its colonial connotation, yet – lacking alternatives – its use is adopted.

⁷⁰ Source: <https://www.atlasobscura.com/places/assekrem>. Photographer Azzedine Rouichi.

⁷¹ Source: http://www.tipasa.eu/tipasa/tombeau_02_files/Tombeau_de_loin_1.jpg

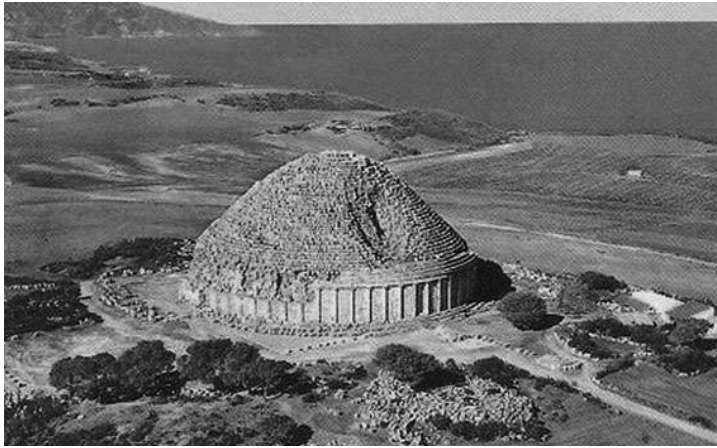


Figure 4 Royal Mausoleum of Mauritania/Tombeau de la Chrétienne, Sidi Rachid, Kabyl region⁷¹

Ancient North Africa is divided into three groups with shifting boundaries. To the West, Mauretania, which includes present-day Morocco and the Algerian West; in the centre, in the North, Numidia, and the country of the Gétules in the South; beyond the mountains, there are other nomadic 'Berber'

peoples; as well as to the East, the Punic space, where the Carthaginians dominate. The history of ancient Algeria is linked to that of the Mediterranean. The Libyan-'Berber' populations, whether nomadic or sedentary, participate in the economic and cultural movements of the region. Before the arrival of the Romans, Numidians ('Berbers') and Punic (Carthaginians) mingle in what corresponds to Eastern Algeria.

Algeria, in Antiquity, is marked by the emergence of kingdoms, in the Iron Age, over a period of approximately 1,500 years. The Phoenicians, in their efforts to extend their commercial network throughout the Mediterranean coast, established direct relations with the populations of the North of Algeria from 1,250 before time until the flight of Princess Elyssa (called Dido by the Romans) from the Eastern Maghreb



Figure 5 Roman Ruins of Djémila, UNESCO World Heritage Site⁷³

(present-day Tunisia) who founded Carthage there in 814 before time.⁷² The son of Juba I, named Juba II, was taken to Rome, where he received a very advanced education, which allowed him to master several languages perfectly. He later married Cleopatra Selênê, daughter of Cleopatra VII of Egypt and Marc Antoine, General and friend of Julius Caesar. Holy Augustine, Bishop of Hippo Regius (today Annaba; 354-430 after time), the most

⁷² There is evidence that the Gétules - direct descendants of the branch of the Caspian civilization having emigrated to the Sahara around 3000 before time - are probably those who had the first relationships with the Carthaginians; the Prince of the Gétules proposed to marry Elyssa.

prominent philosopher and theologian of early Christianity, laying some of the conceptual foundations of the Western school of thought and culture, was born, educated, wrote, preached and died in what is today Algeria. After his lifetime, a people called Vandals, Scandinavian-origin tribes, having been driven out of Europe, settled in Algeria for approximately one century (430-533) before their conquest by the East Roman Emperor Justinian I, thus making North Africa a Byzantine province.

The Arabisation of present-day Algeria took place through two (of a total of seven) large flows of populations arriving from the Arabic peninsula during the period of Islamisation. The first stage directly followed the Islamic conquest of the 7th and 8th centuries. This Arabisation is only superficial since it concerns only the conquered cities, where the Arabs settled, and constituted a scientific and aristocratic class which allowed access to language, power and science to the rest of the inhabitants of these cities (Remaoun, 2000). The countryside remained purely 'Berber'. The dialects dating from this time are called pre-Hilalian (Meynier, 2007).

The second stage is the result of Bedouin incursions in Algeria in the 11th and 12th centuries, principally, the Banu Hilal and the Banu Maqtil. This Arabisation was much stronger and deeper than the first, since it affected not only the cities but also the high plateaus, the plains and certain oases, thus causing the gradual Arabisation of the country between the 15th and 18th centuries (Russell & Russell, 1999). The 'Berber' languages were maintained in the 19th century in the densely populated mountains, the adjacent plains, and in certain oases of the south called 'Ksours'. The dialects resulting from this Arabisation are referred to as post-Hilalian (Hamet, 1932; E.B., 2001).

However, it should be noted that the influx of population from the Middle East has never been large enough to Arabize a majority of Algerians; assimilation rather



Figure 6 Sidi Boumediene Mosque, Tlemcen⁷⁴

⁷³ Source: <https://whc.unesco.org/en/list/191/gallery/>

⁷⁴ Source: <http://cnra.dz/atlas/mosquee-de-sidi-boumediene-et-dependances/#!>

took place through acceptance of the Arabic language by the local population on religious grounds. Linguistic Arabisation was therefore done mainly through the *Zaouïas* and religious brotherhoods, who used Arabic as the liturgical language and language of instruction, as well as by the political powers of the different medieval kingdoms of the Maghreb – who, with some exceptions, all used Arabic as the one-and-only official language.

Consequently, in the mid-14th century, a university in the modern understanding with disciplinary departments, academic staff, visiting researchers, student residences, and scholarships, was established in Tlemcen (cf. Wadad Kadi)⁷⁵, in the West of Algeria, by one of these scholars, Abū l-'Abbās Aḥmad b. Yaḥyā b. Muḥammad b. 'Abd al-Wāḥid al-Wansharīsī, as the first institutionalised form of higher education.⁷⁶ Algerian groundbreaking intellectual and commonly regarded founder of modern sociology (Soyer & Gilbert, 2012), Ibn Khaldoun (1333-1406), publishing a history of the Maghreb detailing successive Arab and 'Berber' dynasties as well as their Eastern and Western contemporaries called 'The Book of Examples' (in Arabic) had taught there. It was similar in its academic programmes to medieval European universities of the time.

In the following century, in 1501, the Portuguese first launched an expedition to try to dock on the Andalusian beach. After the occupation of the port of Mers-el-Kebir (1505), and that of the city of Oran (1509), the city was deserted, and then completely occupied by Spanish troops. Their presence was short overall and marked by rivalry with the Turks then installed in Algiers. Despite a Moroccan alliance against the Turks, the Spanish were then definitively expelled in 1555 by the Ottomans led by Salah Raïs pasha. In 1575, Miguel de Cervantes, considered Spain's national poet to this day, while sailing, was attacked by Turkish ships, taken to Algiers, and, subsequently, declared a slave. However, as a bearer of letters of recommendations, Cervantes was considered by his captors to be someone from whom they could obtain a high ransom. He was, to use the expression of the time, a 'redemption slave' (Garcés, 2005).⁷⁷

⁷⁵ This university concept was then perfected and implemented in Fes, modern Morocco

⁷⁶ Barely disseminated, novel finding based on an unpublished script of an (undated) lecture available to the author, entitled "The Madrasa in the Maghreb from the Sixth/Twelfth until the Ninth/Fifteenth Century" given by Wadad Kadi, Professor emeritus at the University of Chicago

⁷⁷ There is a theory according to which Cervantes would have started to write his most famous novel, *Don Quixote*, in Algiers. See Miguel de Cervantes (Author), Barbara Fuchs (translator), "The Bagnios of Algiers" and "The Great Sultana": Two Plays of Captivity (2012), University of Pennsylvania Press; and Ahmed Abi Ayad, « Alger : source littéraire et lieu d'écriture de M. De Cervantès », *Insaniyat / إنسانيات* [online], 47-48 | 2010, first published online 08 August 2012, <http://journals.openedition.org/insaniyat/4956>.

The Ottoman Algeria, 1516-1830, marked a period of a distinct, tradition-oriented Sufi culture and a maritime rule orientation, seeking to prevent North Africa's conquest by European Christians, as opposed to the Muslim Spanish Andalous-conquest. Rulers, who called the states of the region the 'Maghrib' as the Muslim West for the first time, overwhelmingly lacked knowledge of the Arabic language, and, hence, there was little recognition of the importance of learning, intellectual development and progressivist science beyond religious curricula. Coupled with political instability and bad governance, it led to the failure of educational institutions in the late 18th and beginning 19th century and widespread isolation. This state of affairs was reinforced by the Napoleonic conquests in Egypt,



Figure 7 Algiers around 1900⁷⁸

arising widespread hatred against Europeans. There was also a second wave of Jewish immigration from modern Spain, in an inverse movement, after having originated from Algeria, who, having escaped inquisition, used Hebrew in their synagogues. Overall, the Enlightenment movement of the time on the other side of the Mediterranean did not reach Algeria, and, therefore, educational reform needed did not take place. Nevertheless, before French colonisation, the Arabic-language illiteracy rate was as low as 14% (Ladjal & Bensaid, 2014).

The French arrived in Algeria in 1830, to start what would be a 132-year occupation, until independence after a bloody eight-year liberation war, 1954-1962. After a brutal war and defeat of leader Emir Abdelkader in 1847 and annexation of the Kaybl region 1855, all subsequent uprisings by the local population were quelled until full control of the North of the country by 1881. Three regions, *département*, were then declared French territory. Algeria had had a special status in the French colonial Empire, which lasted from 1534 with the conquest of territory as *Nouvelle-France* in modern Canada, until 1980, with the independence of Vanuatu: it was a *Département outre-mer* (after the second world war, *DOM-TOM*), and, therefore, an integral part of France, as opposed to other occupied countries in North or West Africa, such as Morocco or Senegal, which were protectorates.

⁷⁸ Source: https://commons.wikimedia.org/wiki/File:The_harbor_from_the_lighthouse,_Algiers,_Algeria-LCCN2001697802.jpg

The French colonial systematic impacts gradually destroyed Algerian identity through prohibition or eradication of cultural, religious and social structures. The population at the time was divided by discriminatory land ownership, language and religious policies (Merrouche, 2007) in a ‘split-to-rule’ approach, inciting long-lasting animosities between Arabs, ‘Berbers’, and Jews. As French subjects, they had no citizens’ rights, so “Algeria became a part of the French national saga branded with phantasms of racialist ethnicism” (Meynier, 2014, p. 13).

Educational failure was such that, by 1901, there was a higher than 90% illiteracy rate due to suppression and confiscation of endowments allowing operation, closing existing local, Islamic institutions (Ladjal & Bensaid, 2014). A segregationist school set-up, combined with an aggressive *francophonie* policy, and the colonial administration’s primary interest in exploiting the country’s vast natural resources led to total neglect, to the extent that, as late as during the first world war, the rate of school-age Muslim children in primary school was less than 10% of an age cohort (A. Kadri, 2007), and, at the time of independence, 90% of the population was still illiterate.⁷⁹

While Algerians fought for the French during the second world war, there was no sign of granting independence afterwards. The 1st of November 1954 then marks the beginning of the Algerian Revolution in a bloody eight-year war of independence. 1.5 million people were killed both in Algeria and in France, making up one-fourth of the population at this time. To this day, France has not formally apologised for the atrocities committed. In the months before and following independence, sealed by signing the *Evian accords* in March 1962, one million French and Europeans (so-called *pieds noirs*) as well as 100,000 so-called *harkis*, Algerians having supported the French government and army, left Algeria overnight due to fear of retaliation, including lynching, even though they were legally protected.

⁷⁹ See chapter 2.2. See Kadri (2007) for a comprehensive history and detailed statistics of school-level education in colonial Algeria

⁸⁰ Source: <https://qph.fs.quoracdn.net/main-qimg-eee42b7c6e18c0e468f42bd283db1057>. Photographer Abbas Mouffok.

As a brief outlook, independent Algeria's foreign policy can be characterised by "National Liberation Promoter to Leader on the Global War on Terrorism" (Zoubir, 2015) as roles which it took on within the framework of the Organisation for African Unity (OAU), the African Union (AU)'s predecessor.

Advocating African nations' increased influence in global politics as an advantage for the developing world in decolonisation and fighting neo-colonial occidental interventionism, the People's Democratic Republic of Algeria represented, and aligned with, so-called "revolutionary"



Figure 8 Contemporary Algiers, Martyrs' Memorial
Maqam Echahid ⁸⁰ مقام الشهيد

states in the 1960s and 1970s. By the end of the decade, it already had 11 embassies in sub-Saharan countries (Mortimer, 1970). An example is the support of Zimbabwe's cause – formerly called Rhodesia – to quell British rule, by repeated high-level delegations at the United Nations (UN), and boycotting the General Assembly in protest over apartheid.

Although it remains little known in the Occident, in then-President Ahmed Ben Bella's international orientation, it hosted several important continental conferences, among those, the Pan-African cultural festival in 1969, with Cuban and Brazilian revolutionaries in attendance, too, and served as military training camps, such as for the Mozambican independence party led by Eduardo Mondlane, or even exile government residence as in the case of Angola. Algeria's diplomatic action and support in mediation also extended beyond the continent. With later President Abdelaziz Bouteflika as the then young Minister of Foreign Affairs, it played a mediator role in the Vietnam Conflict. The "Algiers Accord" settled the border disputes between Iraq and Iran in 1975, for instance, and it hosted the non-aligned movement of bloc-free states during the cold war. While in the 1980s, Algeria's integrational endeavours shifted towards the Maghreb region, and, in the so-called 'black decade' of the 1990s, a national focus took over (Mortimer, 2015), nowadays, Algeria remains committed to Pan-Africanism and ranks among the highest contributors to both the AU and the Arab League – both budget-wise and in terms of staff.

To sum up, this section has given an overview of the country as an object of study. The People's Democratic Republic of Algeria reveals much more than is widely known or assumed, for example, in terms of its rich history, which is still too often reduced to colonial

times in Western perception. In this sense, media in Europe and beyond mostly portray negative aspects, to the extent that they barely have any press correspondents in Algeria, a practice which is ignorant of its rich culture and diversity as well as its significant economy and its strategic geopolitical position in Africa, the Arab world, in the Mediterranean and indeed worldwide. Therefore, it is justified that Algeria receives the global acknowledgement due in academia, literature, and the arts, in the endeavour of which the Algerian diaspora will hopefully contribute by taking on a more active role.

2.2 Islamic and Colonial Era

Al-Djazair est la patrie des hommes respectueux du savoir, insurgés et fondateurs d'une Nation symbole. Avant 1832, la majorité des Algériens savait lire et écrire l'arabe. En 1962, l'analphabétisme concernait près de 90% du peuple. Le colonialisme a tenté de priver les Algériens de savoir, de mémoire et de les couper de leur identité culturelle⁸¹ (Cherif, 2013, p. 11).

Algeria had had a long-standing tradition of education before the arrival of French colonisers in 1830.⁸² In the Muslim-Islamic tradition there had been koranic schools at first level, *madrassas*, teaching the Qu'ran and literacy in the Arabic language, and secondary school types – *zaouïas* in rural and *medersas* in urban areas, religious schools providing knowledge in Islamic literature, theology, law and history at the secondary level (Kateb, 2014)⁸³. Importantly, education was provided for and available to males only.

However, since the 14th century, the University of Tlemcen⁸⁴ ceased to exist for yet unknown reasons, outside of intellectuals' circles in principal Mosques of main cities, there had been no formalised higher education in Algeria for centuries, with students being sent abroad to Islamic institutions of higher learning in Egypt, Morocco, or Tunisia, to pursue tertiary-level studies (Daghbouche, 1982; Dahmane, 2014). While Algeria was only granted its full university from 1909 as French public institution, both Morocco and Tunisia had had private, i.e. non-French but local-administered institutions, with religious and Arabic instruction as central elements. Those, El Azhar University in Cairo, Karaouyne University in Fes, and

⁸¹ Al-Djazair [Algeria] is the homeland of the knowledge-loving men, insurgents and founders of a symbol Nation. Before 1832, the majority of Algerians knew how to read and write Arabic. In 1962, illiteracy affected almost 90% of the people. Colonialism tried to deprive Algerians of knowledge, memory and cut off their cultural identity

⁸² See Faruqi (2006) for an account of "Contribution of Islamic scholars to the scientific enterprise" and James (1992, c1954) *Stolen Legacy* for an alternative history of Greek-attributed philosophy originating in Egypt. See also Zeleza (2006) for a historical contextualisation of African universities from a global South perspective.

⁸³ See primary source Turin (1971) for detailed statistics on primary and secondary-level education in Algeria, precolonial as well as 1830-1880

⁸⁴ Algerian intellectual Ibn Khaldoun had taught there. It was similar in its academic programmes with European medieval universities of the time.

Zitouna University in Tunis, continued to be frequented by so-called ‘indigenous’/*musulman* (Muslim) Algerians in the first half of the 20th century (Kateb, 2014).⁸⁵

Concerning pre-higher education, according to Thomas Campbell (1777-1844),

Before 1830 the Algerians were clearly more educated than the French colonisers, this historical but embarrassing truth passed over in silence and ignored by the Algerians themselves, noted by a French historian in 1830. ‘All of the Algerians mastered reading, writing and ‘arithmetic’’. When we arrived, Campbell noted, there were over a hundred primary schools in Algiers, 86 in Constantine, 50 in Tlemcen. Algiers and Constantine each had six to seven secondary schools, and Algeria had ten *zaouïa* (universities). Each village had its school. Our occupation meant an irreparable blow. 10 years later Mgr Dupuch informs us that in 1840 he found only two teachers for the whole province of Algiers. 50 years later, in 1880, there were only 13 (I mean thirteen) Franco-Arab schools for all of Algeria. ‘We have,’ says our great orientalist George Marcais, ‘been wasting this universal Muslim heritage, it was an eyesore, it was a veritable cultural extermination. Our only superiority over them is our artillery, and they know it. Algerians had more wit and sense than Europeans’ (...) (Habart, 2013, pp. 137–139)⁸⁶.

It is essential to highlight the discrepancy between political discourse and (non-)action taken in that the colonial doctrine dispersed by Paris is to be differentiated from the concrete colonial experience in the case of Algeria. French colonial ideology of assimilation was supposed to be reflected in, and implemented by education,⁸⁷ yet, from the time of settlement until the second world war, schooling of the local population was almost non-existent. The French closed existing schools in the years following the occupation and replaced them with institutions after the French model, aimed at educating European settlers, not local people (Ageron, 1968). There were never enough schools built for Algerian school-age children, who had the status of so-called ‘indigenous’/ *indigenat*.⁸⁸

First public instruction at primary school level was established in Algeria in 1832 and complemented by the secondary level 1835.⁸⁹ While free-of-charge and laic primary education for the so-called ‘non-indigenous’ children as French citizens became mandatory already in 1883 by the law *Jules Ferry*; this marked the end of Arab traditional schools and

⁸⁵ Alternatively, lacking local higher education institutions, universities in France were frequented by a marginal number able and willing to pursue French-modelled higher education from the early 19th century already

⁸⁶ Translated from the French original by the author

⁸⁷ Cf. Heggoy (1973)

⁸⁸ The *Code de l’indigénat*, subsuming 27 related decrees, was first introduced in Algiers in February 1875. It specified a so-called *sujet* ‘subject’ status for local populations (so-called *indigènes* / ‘indigenous’) in French colonies and territories, as opposed to constitutional provisions to those of the occupying French citizens, European settlers, and Algerian Jews, who were equally granted French citizenship. It remained valid until after the second world war. See Balandier (1951) for the theoretical underpinning of the colonial situation of a minority achieving to subvert 90 % of the population.

⁸⁹ See Kateb (2014) for an extensive account on the French colonial education system in Algeria, 1833-1962, including statistics. Since the focus, and scope of this thesis is on higher education, primary and secondary-level institutions are not treated in more detail here. For their emergence and development, and a typology of the multitude of then existing schools, see Colonna (1975).

the beginning of two official systems of primary schooling (A/B). Simplified, system ‘A’ as French school means Europeans’ education and System ‘B’ as Qu’ran school refers to ‘indigenous’ instruction in the form of the so-called reformist religious and Algerian cultural schools, mostly in the cities, and more rural, informally organised instruction, picking up from what was left of earlier structures after the destruction by the French (Colonna, 1972). What added to the complexity of the situation, is that while non-European children were in principle admissible to the ‘A’ stream, percentages of their enrolment remained negligible until independence⁹⁰, even when the two streams were officially merged after the second world war.

However, contrary to what the dichotomy suggests, systems of secondary schooling co-existed and were mutually dependent on each other in the colonial society. On the secondary level, the emergence of a so-called middle section, ‘indigenous’ elites, were needed to manage the large population of ‘subjects’ vis-à-vis the very few Europeans, in what can be labelled a model of “correct distance principle” (Colonna, 2008).⁹¹ This elite had to be French-speaking. Hence, for secondary education from the age of 10-12, the two pathways were continued in principle; however, there was a variety of institutions in the continuum of accepting versus refusing French state instruction, ranging from the French *lycée*, leading to French universities – including Algiers – *écoles* as higher school institutions, via state-recognised *medersas* in the middle, for French colonial public administration positions, and Arab universities outside of Algeria to rural *zaouïras* to become local autonomous leaders and koranic lecturers (Colonna, 1972).⁹²

Although the *medersas*⁹³ were established as Muslim secondary education institutions in Tlemcen, Medea (transferred to Blida and then Algiers shortly after) and Constantine by decree in 1850, they were aimed at dispensing instruction of a professional nature⁹⁴ by training assistants or mid-level civil servants for the colonial administration only, which is shown by the fact that they were put under military authority – and, hence, directors and

⁹⁰ For figures and statistics from the end of the 19th century until independence, see Colonna (2008)

⁹¹ See Colonna (2008), Table 1: “Educational Possibilities ‘for the natives’ in Algeria between the Jules Ferry Reform and WWII”, p. 293

⁹² See Colonna (1972), diagramme p. 211 for a graphical representation, and diagramme p.218 for an illustration of a hierarchical structure of education in colonial Algeria from primary to higher level, and associated careers

⁹³ See Bettahar (2008) for an inventory of primary sources on higher education in colonial Algeria available at the *Archives Nationales d’Outre Mer (ANOM)* in Aix-en-Provence, France

⁹⁴ This is also shown by the fact that, finally in 1951, they were transformed into *lycées* preparing for the *baccalaureat* as university entrance diploma (Kateb (2014), thus equivalent to grammar school in the system of secondary education.

professors were appointed by the then French Ministry *de la Guerre* (War), following a proposal by the *Gouverneur général* (Kateb, 2014). They were integrated in the Academy of Algiers as the French public instruction system in 1876 and underwent reforms in 1895, reinforcing French-language instruction in addition to Arabic, to the detriment of theological education. From that year, too, only *medersas* graduates were admitted for Muslim civil servant recruitment in the colonial administration. Out of approximately 100 candidates taking the *concours*, the entrance examination⁹⁵, half were retained. At the beginning of the 20th century, there were about 150 students/graduates each year, with peaks around 200 in the first decade. By 1949, there were 144 *medersas* country-wide with 40,000 students in total (Kateb, 2014) and in 1955, as many as 193 were recorded by their *Oulemas* association; albeit with fewer students overall – 35, 150 (Pervillé, 2004).

The first Algerian teachers were therefore trained at the *École Normale Supérieure (ENS)* in Bouzareah, Algiers – which exists to this day – from 1883 until 1939, alongside Europeans, though, in some form of ‘apartheid’ (Colonna, 1975). This further illustrates the fact that the objective of separation between Frenchs and Algerians was achieved in a double-manner, with the latter not quite like the Europeans, yet, admitted to their institutions, the elite among the locals (Colonna, 1975). Accordingly, the concept of French higher education in colonies⁹⁶ was to establish institutes of tertiary education covering specific needs of the European settler society, the *écoles supérieures*, rather than implant the system present in Paris at the time. As early as 1832, the *École de médecine* was established, although it was only operational four years before reopening in 1858, requiring authorisation by the French Minister *de la Guerre* for all non-French students, i.e. Maures, Turks and Jews (République Française, 1960). In that “Elle devrait contribuer à la conquête des indigènes et à leur soumission”⁹⁷, it had a clear-cut ideological as well as missionary function of colonial supremacy (Guerid, 2010).

The foundation for Algerian comprehensive institutional colonial higher education was then laid by law in December 1877, separating theory-focussed institutions and those with a more practical orientation (République Française, 1960). Two years later, the central library of the later University of Algiers was established, although a medical and science library had existed prior, from 1857. Likewise, in 1880, the *Écoles* of *Lettres*, *Droit* and *Sciences*,

⁹⁵ This type of examination for admission to postgraduate studies or professional positions in civil service is the default approach in both France and Algeria

⁹⁶ See Singaravélou (2009) for an overview of higher education in former French colonies worldwide

⁹⁷ It should contribute to the conquest of the natives and their submission

respectively, were founded, completing all disciplines necessary for the training of the colonial administration of so-called *France nouvelle*. Those were controlled by the French state, financed by Paris for investment costs, and complemented by the local Governor, the city of Algiers, and the three *départements* in terms of the operating budget (Bettahar, 2014). Resistance against a full-fledged university institution in Algeria as such, however, was fierce, as there was fear of a triumph of “l’algérianité” over “la francité”⁹⁸ on the one hand, and, the “Français de l’Algérie” of Southern European origin, who would benefit from the institution, were considered as second-class citizens in the *métropole*, on the other (Guerid, 2010). A mission by the then Higher Education Minister in 1897, assessing whether Algeria should have its own university and thus partake in the transformations in mainland France, remained without effect, as did several other delegation visits after the turn of the century.⁹⁹ Between 1879/80 and 1908/09, as little as 178 diplomas were delivered across all four *écoles* (Pervillé, 2004). Therefore, it took nearly eighty years since occupation until the establishment of the first comprehensive, university-type institution of higher education.

Modern-day higher education, including its postgraduate training and research mandate, in colonial Algeria, thus begins with the founding of the University of Algiers as well as its two annexes in the west of the country, Oran, and in the east, Constantine, in 1909. By this act, the former *écoles* were transformed into faculties of the new institution. In its early times, only law and medicine continued to be proposed for higher learning (Mélia, 1950). Within the first five years of its existence, 129 diplomas were delivered across the four faculties, among them the first two medical doctoral degrees (Pervillé, 2004).¹⁰⁰ In later years, a total of 12 affiliated institutes were established, with most established only in the 1940s and even as late as the 1950s (République Française, 1960). Not least, the modern French ‘National Library of Algiers’ was only inaugurated in 1958, too, after a predecessor institution dating from 1835.

In line with its ideological outset of promoting, and sustaining colonialism, the university was mainly aimed at educating settlers of European origin (Ronze, 1930). Therefore, Algerian Muslim students only made up as little as approximately 3% between 1880 – then in the *écoles* – and at the university until the 1920s, and were thus de facto absent. At the

⁹⁸ Algerianity/Frenchness

⁹⁹ See Bettahar (2014) for historical events, actors involved, and details on the more than a decade-long founding process as well as the evolution over the following decades until independence

¹⁰⁰ See Khelfaoui (1996) for a historical-sociological overview of the emergence of and developments in the scientific community in Algeria spanning the period 1962-1992

same time, there was emigration to Syria in particular, in order to escape from European instruction for those who could afford it – mainly financially comfortable families from the former intellectual capital Tlemcen (Bettahar, 2014). While there are insufficient and thus unreliable records, their number is estimated at a few dozens before 1914, rising to 47 in 1920, 65 in 1925 and 150 in 1935. Out of those, throughout the years, as little as seven female students were recorded; between 1936 and 1938 (Pervillé, 2004). Only from 1950 onwards, there is a slight increase, though, in 1954 still, in absolute numbers, they counted a meagre 500 or 10% of the total registered at the time (Kateb, 2014). It is noteworthy that Algeria only attained full judicial independence from France at the end of 1947 by the legal *Statut organique de l'Algérie*, including full French citizenship and associated civil rights.

While student numbers were stagnating or declining overall due to preference for Paris or beginning civilian departure from Algeria in the war situation, there was no significant change in this distribution in the years leading up to (République Française, 1960), and, until independence, either (Guerid, 2010). Notwithstanding, it must be considered that, despite fluctuations, generally, as many or indeed more students were in *France métropolitaine* – beyond Paris, among the most frequented, Montpellier and Toulouse – at any given time, effectively at least doubling the numbers.

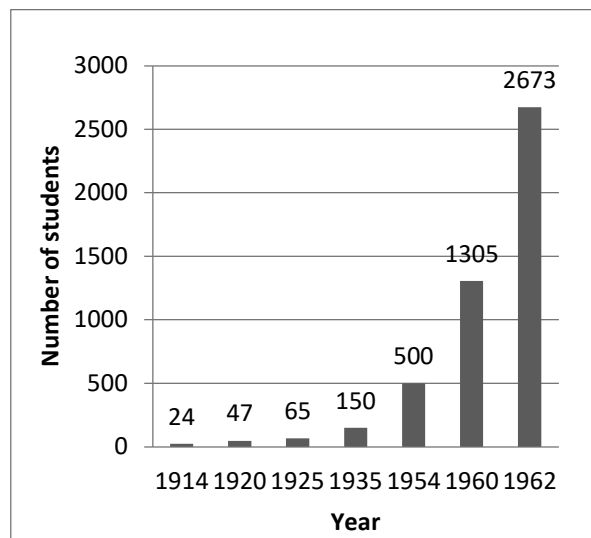


Figure 9 Total number of Algerian students 1914-1962 (compilation by the author based on figures cited)

In 1960, the final year of available statistics pre-independence, ‘indigenous’ Algerian students accounted for 18% of a total of 7,248 students at the University of Algiers (including its annexes) (Kateb, 2014; Pervillé, 2004). However, it is noteworthy that more Algerian students studied in France at this time: a total of 1,230, in addition to 1,883 Algerian scholarship holders around the world in the academic year 1960/61, with approximately half in neighbouring Morocco and Tunisia, one quarter in the former Soviet Union, Yugoslavia and well as the German Democratic Republic, and, to a lesser extent, in the USA, Switzerland and the Federal Republic of (West) Germany (Pervillé, 2004).

The *Fac Centrale* ('Central College') then assumed a leading role during the 1954-1962 war of independence¹⁰¹: Already in 1956, the general strike had all Algerian students¹⁰² leave university to join the *maquis*¹⁰³ (Drif, 2013), for many never to return. In the 1940s, a majority of the nascent national movement members were graduates or advanced students at the University of Algiers, such as the former president of the *Association des étudiants musulmans nord-africains (AEMNA)*¹⁰⁴, pharmacist Ferhat Abbas, who proclaimed the *Gouvernement de l'Algérie combattante (GPRA)*¹⁰⁵ in Cairo in 1958, as well as his successor Benyoucef Benkhedda during the last year of war before independence, then integrated into the political party *Front de la Libération Nationale (FLN)*¹⁰⁶. The few Algerians who prepared and monitored the *Évian accords* – the Evian agreements, a treaty between France and the Provisional Government of the Algerian Republic, formally ending the Algerian war of independence, signed 18 March 1962 in Évian-les-Bains, France – were law or medicine graduates, too (Bedjaoui, 2018)¹⁰⁷. Ferociously, the university library was put on fire in June 1962 – days before the referendum – by pro-French paramilitary organisation *Organisation de l'Armée secrète (OAS)*, destroying more than half of its 500,000 volumes of what was the second-largest collection of French libraries at the time, after the *Sorbonne* in Paris (Kateb, 2014).

Notably, the Evian agreements foresaw and determined the continuation of French interests through cooperation, which is detailed as follows in Chapter II, "Cooperation Between France and Algeria", Part B, Article 3: "French personnel, in particular teachers and technicians, will be placed at the disposal of the Algerian Government by agreement between the two", and, in the attached *Declaration of Principles concerning Economic and Financial*

¹⁰¹ See Wallon (2014) for the role of the following two national student associations in the war of independence and a detailed chronology of events 1955-1962

¹⁰² See Pervillé (2004) for a historical analysis, providing a comprehensive statistical, sociological and political account of Algerian students as well as the ideology of Muslim intellectuals, 1880-1962

¹⁰³ Algerian Resistance fighters – the political group associated with the place (name)

¹⁰⁴ Association of North African Muslim students, to be differentiated from The *Union Générale des Etudiants Musulmans Algériens (UGEMA)*, founded in Paris in 1955, dissolved by the French government in 1958, and subsequently operated from Lausanne and Tunis with wide international recognition. It constituted an alternative representation in contrast to the oldest student association in the world, since 1907, the *Union Nationale des Etudiants de France (UNEF)*, which took up an ambiguous position during the war, proclaiming its support for the Algerian cause only in mid-1960.

¹⁰⁵ 'Government of Algeria in combat'

¹⁰⁶ National Liberation Front, Algerian political party founded at the beginning of the Algerian war for independence, which it won in 1962; former ruling party until Presidential elections in December 2019

¹⁰⁷ Although academics involved were not as numerous as elsewhere in independence movements, such as in the former Federation of French colonies in West Africa (*Afrique-Occidentale française – AOF*)

Cooperation, Title 1, “French Contribution to the Economic and Social Development of Algeria”, Article 1/2 (Algeria, 1962)¹⁰⁸:

In order to make a lasting contribution to the continuity of the economic and social development of Algeria, France will continue her technical assistance and preferential financial aid. For an initial period of three years, renewable, this aid will be fixed in conditions comparable to and at a level equivalent to those of programs now underway.

French financial and technical aid will apply notably to the study, execution or financing of the public or private investment projects presented by the competent Algerian authorities; to the training of Algerian cadres and technicians; and to the assignment of French technicians. (...)

Hence, the presence of French was legally agreed upon for an extended period post-independence, which also included the new country’s higher education system in laying the foundation for the so-called *coopération technique* by lecturers starting in the academic year 1962/63.

2.3 Independence and State-Building Era

Avant toute chose, il faut admettre ceci: l’université algérienne d’aujourd’hui n’est pas détachable de son histoire et le poids de cette histoire continue de peser sur le présent. Jusqu’ à la réforme de 1971, c’était une université libérale et élitiste, expression fidèle de la société coloniale puis de la société de l’Algérie de la première décennie de l’indépendance¹⁰⁹ (Guerid, 2012a, p. 36).

The development of the Algerian higher education system as a whole and its individual institutions, in particular, is inextricably tied to historical events, shaping policy. Most literature available takes a historical or political approach covering post-independence to the present.

Culminating in a bloody eight-year war for independence 1954-1962, the French *Département d’outre-mer* of the past emerged as the Democratic Republic of Algeria. The first academic year following independence, 1962/63, was marked by a student body decreased by approximately 50% with 3,817 students, out of which more than three-thirds Algerian (Kateb, 2014) in the country’s only higher education institution, the University of Algiers. With the sudden departure of the vast majority of the French population in the early 1960s, the country found itself not only with insufficient numbers of *cadres*¹¹⁰ but, indeed,

¹⁰⁸ Reprinted from an English translation issued by the Press and Information Service, Embassy of France, New York, N.Y. The official French texts were published in the Journal Officiel of the French Republic on March 20, 1962. Cf. the French original: https://peacemaker.un.org/sites/peacemaker.un.org/files/DZ-FR_620319_AccordsEvian.pdf

¹⁰⁹ Above all, we must admit this: the Algerian university today is not detachable from its history and the weight of this story continues to impact the present. Until the 1971 reform, it was a liberal and elitist university, a faithful expression of the colonial society, and, subsequently, of the Algerian society of the first decade of independence

¹¹⁰ Overarching term for intellectuals, leaders, executives

with almost no tertiary education instructors, lacking their training over several decades due to prior negligence by the French. Consequently, for the rest of the decade, there were many *coopérants*, both from France and, from the 1970s, increasingly, Arab countries, with Egyptian presence being most prominent. Two other universities were founded from the already existing annexes in the West and East respectively, the University of Oran (today: Oran 1 Ahmed Ben Bella), and the University of Constantine (today: Constantine 1).

Throughout the 1960s then, higher education in Algeria remained French by curricula, academic staff, diplomas, and its elite orientation, to the extent that: “En cette période, rien ne distinguait l’université algérienne de l’université française” (Guerid, 2007, p. 282)¹¹¹. The inherited French law on the university remained valid until further notice (Mahiou, 2015, p. 14) and prominent sociologists from Europe, such as Pierre Bourdieu and Jean-Claude Passeron, taught during stays in Algiers. Hence, the (post) colonial university could be summed up as follows:

L’université héritée était dénoncée pour son élitisme malthusien: c’était une institution prestigieuse qui maintenait des standards élevés au niveau international, mais au prix de fortes déperditions. On lui reprochait son académisme, ses programmes abstraits et théoriques, son mépris de la formation professionnelle¹¹² (Ghalemallah, 2006, p. 33).

In fact, only protests by students prevented the proposed simultaneous Algerian adoption of a higher education reform in France in 1965 (Guerid, 2010). Constantine and Oran as former annexes remained dependent university centers until 1969, although an Algerian *École nationale d’administration* was founded as early as 1964. Nevertheless, still in 1966, there were seven French-modelled *Écoles Nationales*, one *École Normale Supérieure*, two *Écoles Supérieures*, as well as seven *Instituts Nationaux*, yet, only the four historic faculties (Ministère de l’Education Nationale. Secrétariat Général Service de la Planification et de la Carte Scolaire, 1966).

Most lecturers were French *coopérants* in the years following independence (Siino, 2014). In 1962, out of more than 30,000 over two decades, there were 15,000 in Algeria in this framework alone, most of whom continued as school-level teachers. University lecturers were far less numerous, yet, assured almost all teaching positions, and, counting 1,400, continued to do so in the majority until the 1970s (Laskaris, 2016). Urban youth, whose

¹¹¹ During this period, nothing distinguished the Algerian university from the French university

¹¹² The inherited university was denounced for its Malthusian elitism: it was a prestigious institution that maintained high standards at the international level, but at a heavy trade-off. The institution was treated with contempt for its academicism, its abstract and theoretical courses, and scant regard for professional training

parents had commonly been former employees of the colonial administration such as judicial clerks or traders, made up almost the entire student body (Sidi Boumediene, 2013) at the beginning of the 1960s. At the end of the decade, there were only about 10,000 students and still less than 2,000 Algerian academic staff¹¹³ at the beginning of the 1970s (Guerid, 2010). In 1970 too, as little as 811 university diplomas were awarded to Algerians (Kateb, 2014). Up until the beginning of the 1980s, there were 9,000 foreign lecturers, exceeding 75% of the total (A. Kadri & Ghouati, 2006).

The university community was thus in sharp contrast to the majority of Algerian youth whose socio-economic profile was predominantly rural and illiterate at the time. This situation favoured the radicalisation of the political commitment of students and executives to a Marxist and populist ideology (Chachoua, 2015). The university campuses and especially university residences, isolated from the city, became spaces for ideological debates and sometimes violent clashes between various political trends, as was the case also between the arabophones and the francophones. In Algiers, back then considered as the Mecca of revolutionaries, the first groupings of the extreme left – Marxist and Maoist formed, as did the movement for the reclaim of the Berber identity and the Muslim brothers.

It was only in the beginning of the 1970s that a major reform was introduced, *La Refonte*. 1971 marked the year of the creation of the Algerian national university. During the dedicated press conference, the then Minister of Higher Education, Mohamed Benyahia, defines the objectives of the Algerian university, first of all, in “(...) former les cadres, tous les cadres dont le pays a besoin” (MESRS, 1971).¹¹⁴ Given the guideline that “Il est impérieux que l’Université se reconnaisse dans son peuple et que le peuple se reconnaisse dans son Université”¹¹⁵, he specifies its training and education mission as follows :

- a) Cadre engagé dans l’œuvre socialiste du pays.
- b) Cadre imprégné de la personnalité algérienne et des réalités socio-économiques nationales.
- c) Cadre dont la formation lui permet de faire face concrètement aux problèmes spécifiques du pays.
- d) Cadre dont la formation scientifique garantit un niveau permettant l’assimilation constante des progrès du patrimoine de connaissances Universelles.

(MESRS, 1971, pp. 12–13)¹¹⁶

¹¹³ See Khelfaoui (2000) for an account on the development of Algerian staff framework conditions 1962-1998

¹¹⁴ (...) train the executives, all the leaders that the country needs

¹¹⁵ It is imperative that the University recognises itself in its people and that the people recognise themselves in their university

¹¹⁶ a) Leaders engaged in the socialist work of the country.

b) Leaders imbued with the Algerian personality and national socio-economic realities.

c) A leader whose training enables him to face the specific problems of the country in concrete terms.

The reform core was thus the democratisation of higher education (Djefflat, 1990, p. 37) and the concept of integration on three levels: training and teaching, structure and nation (Benachenhou, 1980, p. 28). The first concept of “teaching and training” refers to obtaining a position in the economic, social or technical sector after graduation. Therefore, the curriculum needs to feature both fundamental/basic knowledge and advanced, scientific knowledge units. Notably, it meant a shift from the annual colonial system of evaluation of students learning in place until the 1970s, to a modular system of the assessment characterised by the implementation of continuous monitoring (*contrôle continu*) as the main feature of the evaluation system. Students can only pass or fail modules and get access to a higher level if prerequisites allow it. Since the mid-1980s, by a new university charter, an annualisation of the evaluation system was implemented, allowing students to compensate between modules and pass to the next year, which would be retained in with the adoption after the Bologna Process from the early 2000s.

The second concept covers a reorganisation of the internal structure of the university according to teaching requirements rather than the individual lecturer’s preferred subject matter, which implies administrative centralisation. Finally, the university is re-integrated into society at which service the institution ought to be, instead of imposing its own abstract programmes. The university, which is itself in constant evolution, is newly shaped by the revolution as an agent of change (Benachenhou, 1980, pp. 29–35). In this context, inspired by the Anglo-Saxon model of basic and applied science, the former Faculty of Sciences was split into several institutes, one for each discipline. The first university since independence – *L’Université des sciences et de la technologie Houari Boumediene (USTA/from 1980 USTHB)* was founded in 1974 on the outskirts of Algiers. In 1976, postgraduate-level education was introduced, and research first began to be institutionalised.

At the end of the 1970s, two of the French *coopérants*¹¹⁷ gave an account of their experience of several years teaching at the Algerian university. Initially wondering why Algerian students volunteered to do farm work during the Agrarian Revolution, they describe a “technocratic” environment, yet without technology, or, indeed, the transfer of only equipment but not knowledge (Glasman & Kremer, 1978, p. 3), leading to a new dependence on foreign – technical rather than managerial – expertise in the processing industry as well

d) Leaders whose scientific training guarantees a level allowing the constant assimilation of progress in the heritage of Universal knowledge.

¹¹⁷ See Siino (2014) for an account of lecturers in this framework in the Maghreb countries, 1960-1980

as education (Glasman & Kremer, 1978, p. 245). However, alternatively, this experience might be seen as a national internship experience to become aware of difficulties faced by farmers, and the 1970s and 1980s produced senior executives, engineers and doctors, many of whom are still in institutional leadership positions.

Although funding was comfortable due to flourishing fossil fuels exploitation, implementation of the reform, accordingly, due to the “double décalage – historique et institutionnel” (A. Kadri, 1991, p. 161)¹¹⁸ was slow and would take another decade. In a national meeting on higher education in Algiers in 1980, it was found that, despite the policy measures formally implemented according to “Algerians living in a socialist society and keeping with the principles stated in the national plan” (Daghbouche, p. 5), still, “(...) ‘coopérant’ teachers are used to replace Algerian assistant teachers. This action hinders the recruitment of Algerian assistant teachers and again slows down the Algerianization of staff” (Daghbouche, p. 7). It must be stressed, however, that this practice only applied where there was a shortage in specialised fields.

Yet, overall, the 80s constitute the end of the colonial legacy in the Algerian university (Lardjane, 2007). First-degree holders were more numerous but not yet massive, and the number of university centres were increased to some large cities in the north, yet not to all other regions (MESRS, 2013). This decade is also marked by the phenomenon of university unemployment in Algeria and the banalisation of the institution (Benghabrit & Haddab, 2008). The university centre of Tizi-Ouzou, opened in 1977, is a symbol of this political transition from colonial university to a national and even regional university (A. Kadri, 1991). The capital of Kabylia region was the scene of the first social movement and the first open demonstration in the history of independent Algeria, following the ban of a Kabyle poetry conference by the anthropologist-writer Mouloud Mammeri on March 10, 1980. This student movement became known as the *printemps berbère* (‘Berber Spring’) (Ait Larbi, 2010).

Ordinary young people and sons of peasants, increasingly, were returning from Algiers, Oran, or Annaba as doctors, lawyers or engineers. These professions, formerly out of reach for the Algerian rural world, became the *métiers de rêve*¹¹⁹, and thus the disciplines with the highest social prestige reflecting the transformation from a more elitist to a socialist

¹¹⁸ double shift – historical and institutional

¹¹⁹ dream professions

orientation historically in that order (Guerid, 2010). Still, the post-independence *futurs-cadres-de-la-nation*, those ranked on top of their graduation class, received state-sponsored scholarships at universities of Western countries. After completing postgraduate studies, they often returned to Algeria with a symbolic prestige, which entitled them to an executive position in the public service, academia or at one of the big national companies in the fossil fuels export and then newly founded process engineering industries, SONATRACH (petroleum), SONELEC (electricity and electronics) and the *Société nationale de sidérurgie* (SNS, steel), as well as government housing (A. Kadri, 2000).

These privileges internalised the official political opinion, and, therefore, even some senior executives who were politically active in the single party *FLN* were beginning to become part of the *bourgeoisie*, the middle class. The socio-economic crisis in 1985/86, caused by the global fall of the hydrocarbons, was followed by the revolt of October 5, 1988, one-week-long street riots by the Algerian Youth, spreading to several cities around the country. The biggest protest since independence was met with brutal regime resistance, and military shooting on the protesters killed or left several hundred injured. This event indirectly ended *FLN* rule in the aftermath by the legalisation of political parties, the permission of non-governmental organisations (NGOs), and the lifting of press censorship (Zoubir, 2019).

Furthermore, it socially impoverished university elites and, later, paved the way for fundamentalist terrorist violence after the cessation of the electoral process in January 1992 (Boukhobza, 1991). The leader of the largest opposition party, the *Front Islamique du Salut (FIS)* ('Islamic Salvation Front'), Abassi Madani, was a professor in the Department of Psychology at the University of Social Sciences in Algiers at the time. His demand for the immediate establishment of an Islamic Republic resulted in a terrorist wave (Gadant & Benkheira, 1990); Haroun, 2014) developing into an atrocious civil war that is today generally discreetly referred to as the *décennie noire* ('black decade'). Many activists, mayors and deputies of this party are the product of the national, reformed university. At that time, the central governing power is fluid in as far as it is impersonal as members of the public refer to as policy as Ministry, the public sector, foreign consultancies, among others (A. Kadri, 1991).

Arguably, this situation of the past still has an impact on today's political set-up. Also, the departure into exile, and the subsequent professional insertion of university professors in France and elsewhere in Europe and Canada was rampant, which cannot be compared to so-

called ‘brain drain’ in academia abroad as the economic situation in Algeria was comfortable for most lecturers (Guerid, 2007, p. 303). The emigrant population was at approximately 1.5 million in 1990, mainly dispersed in eight OECD countries – Belgium, Canada, France, Germany, Italy, the Netherlands, Spain, and the USA. It has remained at around 20,000 annually until 2000, when it suddenly doubled (Natter, 2020).¹²⁰

Students, already in the early 1990s, were conscious of likelihood of unemployment (Guerid, 2007, pp. 292–293) as a side-effect of the now prevailing massification. Although scientific activity came to an almost complete standstill, several institutional policies were implemented, among them, 1991-1992, the creation of so-called university centres of excellence, in 1995 the creation of regional academies (Centre, East, West), and, in 1999, the integration of information and communication technology (ICTs). The *Conférence nationale des universités (CNU)*, consisting of the three regional conferences Centre, West, and East, was founded in 2001.

2.4 Contemporary Era

The 2000s saw the rise of fuel prices and, with the arrival of the president serving 1999-2019, Abdelaziz Bouteflika, a 1970s re-edition of higher education politics, of which he was a major actor. Though under different circumstances, influenced by an ever-growing population, a liberal economy, a multi-party system, and information technology, his policy of *concorde civile* (‘social harmony’) has, in fact, once again supported a massive construction of universities in each Wilaya as regional administrative unit.

With student numbers at half a million in the academic year 2000/2001, it marks an impressive augmentation of 1,000% from just 500 in 1954 (Guerid, 2010). The policy allowed first-generation students to access university and, above all, gain a feeling of socioeconomic success by ascension and real modernisation as well as individual empowerment that has the effect of social peace (Merzouk, 2012). Combined with the successive adoption of the European Union-initiated Bologna Process of higher education harmonisation¹²¹ across participating countries from 2003 onwards, it has reached more inclusiveness in first- and second-level education and opened up the university to very broad layers of the population, newly covering the interior regions in the South, as well as a rising

¹²⁰ Notably, these figures have remained constant since, expect a decrease by approximately one-third in 2000. See also Natter (2014).

¹²¹ Locally, and in francophone contexts, generally referred to as LMD (system)

female participation, which even constitutes the majority nowadays, and indeed surpassed their male counterparts for the first time in 2005. By the end of the decade, student numbers already exceeded one million.

However, given the background of slow implementation of reforms from decades ago, it is equally not surprising that it is asked: “Why do we have to stick to any French educational system?” (Daghbouche, 2011, p. 468). Higher education, according to a highlighted contribution in Ghalamallah’s edited collection, occupies a primordial role in the reproduction of the social structure and may present an opportunity for a different one indeed (Derguini, 2011, p. 117). A second contribution proposes, in terms of measuring efficiency and effectiveness, “objectifs de démocratisation, d’arabisation, d’algérianisation et de scientificité”¹²² (Bakouche, 2011, p. 165). Likewise, Guerid exposes an “emprunt culturel” in the policy of industrialisation, which is regarded, and, as adopted, as orientalist universal model without “une réflexion profonde sur l’université nationale à construire”¹²³ (Guerid, 2012a, pp. 41–42). This state of affairs points towards the necessity of historical contextualising as well as its influence up to today. Nevertheless, Guerid claims that there is an “(...) absence d’une stratégie consensuelle et à long terme et partant d’une définition claire de l’université et de sa mission, dans la non-émergence d’un contre-pouvoir académique”¹²⁴ (Guerid, 2010).

Indeed, Guerid sees the underlying issue in the fact that there exists no knowledge society in Algeria as of now: “Est-il possible de construire une université de savoir dans une société qui n’est pas une société du savoir ni dans la réalité ni en projet?”¹²⁵ (Guerid, 2012a, p. 34). From a comparative perspective, “the Algerian university aims to serve the society’s needs, serve the scientific researches and seeks to adapt the technological development [sic]”, the description of which is portrayed as a combination of other major nation’s higher education system:

(...) while the German university regards that the university’s objective is looking for knowledge and science, the French university considers it to be serving the national and regional spirit, contrary to the Russian university which sees the main aim of the university is to fulfil the essential needs of the society, however; the American one sees that the university’s objective is serving markets which are subject to competition and development, unlike the Algerian university’s objective which is a mixture

¹²² Objectives of democratisation, arabisation, algerianisation and scientificity

¹²³ cultural imprint - A deep reflection on the national university to be built

¹²⁴ (...) absence of a consensual and long-term strategy and therefore of a clear definition of the university and its mission, in the non-emergence of an academic counter-power

¹²⁵ Is it possible to build a university of knowledge in a society that is not a knowledge society, neither in reality nor in planning?

of the previous ideas and prospects, something that is clear in the official speeches, recommendations and practical instructions [sic] (Benaissa, 2017, English abstract).

Present-day, though, an increasingly pressing reality is graduate unemployment with its adverse impact on the society's social cohesion, in addition to a generally lower level of competences and, consequently, so-called 'brain drain' (Cherif, 2013, pp. 30–31). The root cause portrayed as the massification of the system by ever-increasing student numbers is an issue which has been exposed by scholars since the late 1990s. In fact, in addition to the author of the claim, five more colleagues are presented, by citing an exemplary publication each, as agreeing to the status quo of a de-structured Algerian university, submerged by students since the 1980s (Ghalemallah, 2006, p. 32). The considerable augmentation in not only student numbers but higher education establishments since 2000 or even 2010 leads to an orientation of new, especially female students, to fields of study which are on offer at local universities rather than moving away, and thus the governance-induced promotion of the creation of "'élites' locales" (Haddab, 2014, p. 226).

By 2010, too, the overall degradation of their social status in society had many lecturers, and professors quit university for either the private sector or public administration or indeed emigrate altogether (Guerid, 2010). Nowadays, due to the new shortage of supervisory and teaching staff, young, low-skilled graduates barely having left their student status behind, are being recruited. Academic staff is made up to a large extent of lecturers in their thirties, mostly doctoral candidates or young PhD holders. Though in 2006, in the framework of revised public sector laws, academic staff wages were significantly increased – after counting towards the lowest in international comparison for decades – this change only applied to those with *fonctionnaire*, i.e. civil servant status, while it excludes the increasing number of *vacataires*, temporary as well as permanent contract holders. The teaching profession, in general, is undermined by the stakes of stages, funded short- or medium-term stays abroad, from two weeks to one year, as well as the desire to climb the professional ladder to obtain professor rank, rather than remaining at the level of (assistant) lecturer with less social benefits. Alternatively, incumbents seek to receive a promotion as an administration executive in the form of Head of Department, Dean, Vice-Dean, Vice-Rector, Master programmes or Graduate School responsible, or member of administrative or scientific councils.

Consequently, as claimed by one of the country's most prominent social sciences representative already in 2010, a new era of the Algerian university, the *passage de*

*l'impératif quantité à l'impératif qualité*¹²⁶ (Guerid, 2010), i.e. a shift from a quantitative, number-focused, towards a qualitative orientation, is about to begin. While the Algerian university is still the principal means of elite reproduction, the way in which this process is taking place is entirely absent from the public debate, in line with discussions about decisions in other national policy fields, too. This state of affairs leads to the fact that there is still no societal consensus on the mission of the university (Guerid, 2010).

2.5 Conclusion: The Co-Existence of the Local and the Global in Algerian Higher Education

Local elements

One of the most recent publications titled “The role of the university in the development of the society” suggests that, “The university is regarded as the most important social institution that influences and is influenced by the social environment around it”; besides, there exist the functions of training “artistic, professional, political and intellectual leaders” (Barini, 2018, English abstract). At its base, therefore, a country’s national higher education system is an expression of the institutional system and the nature of the relationship between the state and the individual, group and society in its entirety (Derguini, 2011, p. 101)¹²⁷. Since independence, Algerian higher education policy emphasised, in continuous 5-year national development plans, and, “based on the principle of state guidance in the supply of trained personnel” (Daghbouche, 1982, p. 10), “(...) the quantitative rather than the qualitative side of education” (Daghbouche, 2008, p. 73). This emphasis has repercussions on “(...) an adequate capacity to respond to the requirements of the new generation”, meaning its ability to adapt to 21st-century challenges.

Overall, there exists the present-day dilemma of how to adapt to the society on the one hand, and, at the same time, adapting the society to the requirements of knowledge, while reconciling excellence with massification, as well as affirming that the society needs to be built on knowledge and competences (Cherif, 2013, pp. 6–7). Accordingly, although in principle everything is possible if the overall vision of the institution is agreed upon, balanced and open – the development of the university is linked to the type of governance,

¹²⁶ change from the imperative of quantity to the imperative of quality

¹²⁷ The discussion of the relationship between society and university is science-intrinsic. Therefore, the discourse is subject to change over time. In addition, there exist several aspects, which may go beyond these specific expressions.

both nationally and internationally (Cherif, 2013, p. 7). While governance is understood broadly as encompassing both external aspects such as the relationship between the state, private sector and civil society actors and internal elements, it is in the sense of management that is the core of the persisting problems of weak institutional capacities (Ghalemallah, 2011a, pp. 6–7). This situation presents itself as a paradox in a socialist state.

From a non-political background, scholar Mohamed Ghalemallah – then based at the University of Oran, nowadays at *CREAD* – reflects about the Algerian university’s mission and its associated functions. Referring to history, he identifies three main functions, namely, economical, critical, and, educational and cultural (Ghalemallah, p. 1). The latter two are of traditional ideological nature, in social and cultural conservation. In contrast, the first-mentioned is modern and includes the training of *cadres*, national executives and leaders (Ghalemallah, pp. 9–10). According to him, the university is between the two pillars of exercising autonomy and academic freedom and assuming social responsibility (Ghalemallah, pp. 7–8), which translates into its mission of research versus the pressure of social determinisms (Ghalemallah, p. 15).

In more general terms, the university has two principal missions, firstly, academic training aimed at employability, and, secondly, research (Ghalemallah, 2011b, p. 50). Consequently, strategic decisions must be made in contemporary times: should the university be oriented towards economic requirements, and train its students accordingly, or, in contrast, should the university favour critical thinking and research freedom? (Cherif, 2013, p. 47). However, in contrast, in an exemplary national journal article, the contemporary Algerian university is attributed a national unity function in terms of stability, social cohesion as well as value and norm-giving for individual, collective and international relations (Hayesh & Boubaker, 2016, French abstract). Another, new function proposed is the university open to, and creator of, innovation, which then again favours economic growth (Boumediene & Beddi, 2015, pp. 31–32).

While their predominantly national context can characterise these functions, it is acknowledged that human resources in the sense of teaching and training could not have been achieved without foreign universities as a form of broad international cooperation, the international aspect of the Algerian university thanks to its geographical position between Africa, the Arab world and Europe “au carrefour des cultures”¹²⁸ of which the membership

¹²⁸ at the crossroads of cultures

in the respective associations of universities – as early as the 1990s – is a proof (Djefflat, 1990, pp. 37–40).

Overall, the Algerian national university's relationship to society as the central element has not been clarified or applied to date as “The main problem is how the present system can respond purposefully to the development and needs of Algerian society itself and promote the direct participation of universities in economic, social and cultural level” (Daghbouche, 2008, p. 73). According to Daghbouche (Daghbouche, 2008, p. 82), as a result of these observations, too, governance aspects of the dominating rigid university system and structure are at the core of social demands versus workforce needs, in maintaining systematic links between higher and secondary education, employment, overall national planning, scientific research and society in general.

Global elements

While previously, international aspects of academia embodied by research practice played a negligible role, due to heavy teaching loads; “Thus the research situation has been adversely affected by the teaching and development role which the community has given the university”, which, again, translates into the need for “Rational planning of the teaching/research functions of the universities” (Daghbouche, 1982, p. 52). As for research as a function, the university should advocate a generalist, multi-disciplinary education in science over a purely technical one in the form of vocational professional training (Ghalemallah, p. 12) and, permanently surpass its knowledge generated by, not least, resisting demands in its environment and focussing on “valeurs d’objectivité, d’universalité, d’humanisme [comme] un instrument d’engagement (...)”¹²⁹ (Ghalemallah, p. 17). These statements present not least a plea for research and science, subsumed under the “critical spirit” as the central functions of the (modern) university.

Lately, the state has been reacting to quality issues (University World News/Algérie Press Service, 2018). It has successfully begun to participate in prestigious internationally competitive and selective higher education cooperation projects and institutions, such as the “Academy” project funded by the European Union’s INTRA-AFRICA academic mobility scheme coordinated by the University of Tlemcen, the United Nations University Institute for Sustainable Development (UNU-IRADDA) in Algiers in 2016, or the Pan-African

¹²⁹ Values of objectivity, universality, humanism [as] an instrument of commitment (...)

University Institute of Water and Energy Sciences (including Climate Change) (PAUWES) in Tlemcen since 2014. In September 2018, foreign private and international higher education providers were permitted to operate in Algeria for the first time, and some academies and institutes with a focus on economics or management and elements of foreign-language instruction have since emerged. The Higher Arab Institute of Translation (HAIT) was inaugurated by the Arab League already in 2005.

As with quality assurance, which relies on often supra-national standardisation and certification, the *LMD* has been included in state publisher's *Office des publications universitaires (OPU)* books' stock recently (Baddari & Herzallah, 2014), which may be regarded as evidence of its significance and topicality in scientific discourse. The significant past and continuing contribution of Algerian diaspora scholars – many of whom emigrated in the 1990s during the so-called 'black decade' of political unrest – around the world must be acknowledged. Nevertheless, as of 2015, some 54,000 academic staff of various ranks (Direction Générale de la Recherche Scientifique et du Développement Technologique [DGRSDT], 2015) at the country's higher education institutions are almost exclusively Algerian nationals at 99,7% in the 2005/2006 academic year (Guerid, 2010)¹³⁰, a status quo which is characterised by a pattern contrary to the global development of increasing faculty internationalisation, enabled by active recruitment and incentive policies.

Nevertheless, Algerian universities are hardly visible as, in addition to low research output, they presently rank low in worldwide as well as regional comparison. While international rankings must generally be examined critically in terms of, among others, methodology and their often inherent Anglo-Saxon system as well as English-language bias, as an indication, in the 2019 Times Higher Education Universities World Ranking edition, five Algerian institutions appear, out of which 2 are at the 800-1000th position and three at 1001+. In this classification, within African universities, those perform well in occupying the 17th-30th place, although there is only one, at 25th position, in the 2018 Arab World ranking (Times Higher Education (THE) World Universities Ranking, 2019). Out of close to 11,000 co-authored publications involving Algerian researchers analysed in 2000-2011, about 42% were written with France, while only 3% with the United States, 2% with the United Kingdom and less than 1.5% each with Canada, Tunisia and Morocco (DGRSDT, 2015).

¹³⁰ More recent statistics could not be obtained.

Like in other Arab countries, Algerian scholars, too, are among the two-thirds reported who would rather emigrate according to a recent study in the region (University World News, 2019). The Algerian higher education system has also been increasingly subjected to external pressure, mainly by an – even if masked – emigration trend by its graduate students, who enrol in French universities through the French public agency Campus France, established in 2010, which promotes France as a destination to pursue, or continue, higher education. Hence, a significant number of Algerian graduates is striving to go to Europe or North America – not primarily to study but to emigrate (Chachoua, 2018). Not least, to date, prior direct ministerial authorisation is required for institutions providing invitation letters to all foreign nationals in need of a visa for academic stays as Algerian researchers need to equally obtain approval by the authority for the same purpose abroad. The authors’ own experience of obtaining a visa shows that there is no policy of openness as of now.

Students have also been participating actively in the so-called *hirak* movement of weekly street protests since February 2019, then demanding the resignation of former President Abdelaziz Bouteflika – having taken place in April 2019, during a month-long university closure to prevent civil action upsurge (Bensouiah, 2019a) – and continued renewal of the countries’ leadership on all levels. Since delayed elections in mid-December 2019 resulting in a new government headed by the independent President Abdelmadjid Tebboune, demonstrations have become less well frequented, while they do continue. Most topical, with the arrival of a new Minister of Higher Education and Scientific Research in January 2020, lecturers have voiced their demands of considerably improving their salary, working conditions, and living allowances, however, not least, to discontinue the reformed *LMD* system in favour of the bachelor degree system, as well as to switch to English and abandon French as the language of instruction (Bensouiah, 2020b).

In this context, it is noteworthy that Algerian lecturers’ salary level is at a minimum of DZD 126,000/month (USD 980), with the maximum DZD 412,000 (USD 3,200); the average is DZD 262,000 (USD 2,000). In international comparison, they make up around one-third when compared to some central European countries, and a maximum of one-fourth of Northern European, UK, Canada, USA, Australia, and South Africa averages.¹³¹ With regards to overall low salary rates in other countries on the African continent, as well as the BRICS (Altbach et al., 2013), Algerian conditions compare favourably. Increases are in

¹³¹ Source: <https://naibuzz.com/10-countries-with-the-highest-professor-salaries-in-the-world/>

place after 2, 5, 10, 15 and 20 years, with progression percentages decreasing from 40 to 10 overtime.¹³² While many receive state/university accommodation on top, living costs rise sharply, and only very few benefit from the highest levels, reserved to professorial rank.¹³³ Those rates have not changed since 2008.¹³⁴

To conclude, within 50 years, the Algerian higher education system has grown from a marginalised minority to an overwhelming majority student youth, and from one single university to a large system incorporating more than one hundred institutions of various types. It not only passed but indeed replaced the colonial university with its national university. Finally, since the turn of the millennium, the Algerian university – while partly imposed for competitive, economic reasons due to globalisation as well as domestic civil pressure – has featured an increasingly liberal orientation. Nevertheless, it finds itself in an impasse between this international environment with its foundations still insufficiently rooted, not least by a language policy where implementation is lacking behind and is newly challenged by the gradual introduction of English (Bettahar, 2014). Consequently, Algeria is at crossroads at this moment in time. While potentials and promising developments can be identified, there are many open questions in higher education policy and institutional and system development. Therefore, a rationale has to be defined with regards to priorities to be tackled.

¹³² Source: <http://www.salaryexplorer.com/salary-survey.php?loc=4&loctype=1&job=6259&jobtype=3>

¹³³ See chapter 3.2

¹³⁴ See http://www.esrsalg.yolasite.com/resources/Version2_Nvelle_grille_salaires.pdf for a comprehensive compilation by the Algerian National Council of Higher Education Lecturers (CNES) as an overview of all ranks, categories, and differentiation between base salary and a variety of bonuses to be added, among others, teaching, research, and region. Again, those are most relevant for the higher ranks as opposed to the lower ones.

3 Algerian Higher Education System Development

3.1 University Landscape

Algerian higher education governance at the national level is organised via the central authority of the *Ministère de l'Enseignement Supérieur et de la Recherche Scientifique* (MESRS)¹³⁵, established in 1971, after having been incorporated post-independence in the Ministry of National Education. At present, it encompasses nine General Directorates, one of which is the Directorate of Scientific Research and Technological Development (*DGRSDT*) outlined below. As stipulated by law, the Minister is an appointee by the President¹³⁶ – as of July 2020. The Ministry has its own publication, the *Bulletin Officiel*, which appears every trimester, too. The most recent edition counts 733 pages.¹³⁷ It also makes available a compilation of laws governing the sector spanning the period 2005-2019 on its website (MESRS, 2019). Likewise, it has been operating its own publishing house since 1973, the *OPU*¹³⁸, which, as a public entity, features academic books across the spectrum of disciplines, for use at university or individual scientific work.¹³⁹

As of January 2020, the Algerian higher education system counts 106 institutions in 58 – since a district reform accounting for the great Southern region in December 2019 – Wilayas as administrative units, out of which 50 universities, 13 university centres, 20 *écoles nationales supérieures*, 10 *écoles supérieures*, 11 *écoles normales supérieures* and 2 annexes. Out of these, about 30% of Universities and 90% of University centres were founded since the millennium (MESRS, 2019). Those are divided into three regions, namely, Centre (11 universities), East (22) and West (17), with a governing body each, the regional conference of universities. No conference has been established for the Algerian South yet.

Institutions with university status' legal basis is the gazetted (*Journal Officiel*) *Décret exécutif n° 03-279 du 24 Joumada Ethania 1424 correspondant au 23 août 2003 fixant les*

¹³⁵ Like its French counterpart, governance structure has been centralised

¹³⁶ As of July 2020, the incumbent is Prof. Abdelbaki Benziane. His two predecessors each were in office for less than six months.

¹³⁷ <https://services.mesrs.dz/DEJA/Bulletin%20Officiel/%d8%a7%d9%84%d9%86%d8%b4%d8%b1%d8%a9%20%d8%a7%d9%84%d8%b1%d8%b3%d9%85%d9%8a%d8%a9-%d8%a7%d9%84%d8%ab%d9%84%d8%a7%d8%ab%d9%8a%20%d8%a7%d9%84%d8%ab%d8%a7%d9%84%d8%ab-2019.pdf> (Arabic only).

¹³⁸ <https://www.opu-dz.com/portal/fr>

¹³⁹ Those are much more affordable than commercial publishers by international standards. However, they are generally not exported, and foreign authors are rather unlikely to publish with them, so it essentially reflects research being done domestically.

*missions et les règles particulières d'organisation et de fonctionnement de l'université*¹⁴⁰ as well as its amendment 2007.¹⁴¹ Higher education institutions are defined as “public establishments of scientific, cultural, and professional character”, where the distinction is made between “public establishments of administrative character”¹⁴², such as the *oeuvres universitaires*, and the “public establishments of industrial and commercial character”, such as the *OPU* as service providers. It constitutes the first law since 1999¹⁴³ and stipulates their status as created by, and under the tutelage of the Ministry. Primordially, the latter decides about their seat, number and nature of faculties as well as eventual annexes. Any alternations are subject to the same conditions. Previous ‘higher education orientation’ laws date from 2000 and 2018¹⁴⁴, based on a law ‘planification of student numbers of the education system’ in 1984.¹⁴⁵

Institutional governance is regulated by a number of Ministerial decrees dating between 2004 and 2006, which for universities and university centres, in addition to Rectorate and general administration¹⁴⁶, stipulate the following self-administration: Institute council and scientific council, Faculty council and scientific council and Department scientific council.¹⁴⁷ For *écoles*, the scientific council and its administration were legally established only in 2018.¹⁴⁸

Écoles, modelled after the French type¹⁴⁹, are highly selective institutions of higher education aimed at training the national elite, often with employment guaranteed in various public administrations upon graduation in their respective field. Their legal reference is as recent as 2016.¹⁵⁰ Although the historical annexes in Constantine and Oran continue to be

¹⁴⁰ https://www.joradp.dz/JO2000/2003/051/F_Pag.htm pp. 4-13.

¹⁴¹ https://www.joradp.dz/JO2000/2006/061/F_Pag.htm

¹⁴² Cf. Chapter II: *Dispositif institutionnel et organisationnel du secteur de l'enseignement supérieur et de la recherche scientifique*, Section II, B 1) a) <https://www.mesrs.dz/fr/chapitre2>

¹⁴³ <https://services.mesrs.dz/DEJA/Ensemble%20des%20textes%20juridiques%20depuis%201%27ind%C3%A9pendance%20et%20publie%20dans%20le%20journa%20officiel%20loi99-05fr.pdf>

¹⁴⁴ <https://services.mesrs.dz/DEJA/Ensemble%20des%20textes%20juridiques%20depuis%201%27ind%C3%A9pendance%20et%20publie%20dans%20le%20journa%20officiel%20loi2000-04fr.pdf> /

<https://services.mesrs.dz/DEJA/Ensemble%20des%20textes%20juridiques%20depuis%201%27ind%C3%A9pendance%20et%20publie%20dans%20le%20journa%20officiel%20loi08-06fr.pdf>

¹⁴⁵ <https://services.mesrs.dz/DEJA/Ensemble%20des%20textes%20juridiques%20depuis%201%27ind%C3%A9pendance%20et%20publie%20dans%20le%20journa%20officiel%20loi84-05fr.pdf>

¹⁴⁶ https://services.mesrs.dz/DEJA/fichiers_sommaire_des_textes/55%20FR.PDF, pp. 15-21

¹⁴⁷ Cf. Chapter II, Section II, B 1. 1) b) *Organisation scientifique des établissements*.

<https://www.mesrs.dz/fr/chapitre2>

¹⁴⁸ https://services.mesrs.dz/DEJA/fichiers_sommaire_des_textes/57%20BIS%20%20FR.pdf pp.12-15

¹⁴⁹ Their structure and internationally distinct type of higher education institution is identical with the French system.

¹⁵⁰ <https://www.mesrs.dz/documents/12221/3751967/n%C2%B0%2016-176.pdf/06c0d6fb-c9e9-478d-890e-3102757f0d6f>

essential centres in the Algerian higher education landscape with several universities in each city, nowadays, Algerian students from any of the country's now 58 wilayas as regional administration units, including much less densely populated regions in the Algerian Sahara, have a higher education institution of either university or university centre status nearby.

While the conditions had already been set in 1999 and updated in 2008¹⁵¹, finally, since the end of 2016, private institutions of higher education are formally permitted by ministerial decree. This constitutes a novelty as, since independence, there have only ever been public universities in Algeria, in contrast to its neighbours Morocco and Tunisia which, despite their much smaller size and population, are host to several private institutions – among them branch campuses of foreign universities. Although there is no private comprehensive university in Algeria yet – a dozen of business-school type specialised institutions do exist – operations are expected to start in the near future and have the potential to mark the beginning of a new era in the Algerian higher education system. To complete the Algerian higher education landscape, provision has also been made for institutions not to be under the tutelage of the respective Ministry, but other Ministries.¹⁵² Also, there are national technical and vocational training (TVET) Institutes, such as the *Institut Algérien du Pétrole (IAP)*. Even though institutions and industries fund them, they are pedagogically dependent on the Ministry of Higher Education and Scientific Research for the accreditation of their academic programmes.

The 2018 operating budget¹⁵³ for higher education and scientific research is at 313 billion Algerian dinars, equalling around USD 2.65 billion, corresponding to approximately 7% of the entire annual national budget (Ministère des Finances, 2018). This amount is used to finance all institution administration, infrastructure, teaching, and research – including those national research centers attached to the Ministry – as well as students' social services, via the Ministerial agency *Office National des Oeuvres Universitaires (ONOU)*¹⁵⁴, which make up a large part of the expenses. All budget items are funded at 98% by fossil fuels exportation revenues, in accordance with the Algerian national budget. This status quo is testimony to one of the most significant investments in any national higher education system in recent

¹⁵¹ https://services.mesrs.dz/DEJA/fichiers_sommaire_des_textes/50%20FR.PDF, pp.33-37.

¹⁵² Cf. Chapter III, Section III *La formation supérieure hors du secteur de l'enseignement supérieur*. <https://www.mesrs.dz/fr/chapitre3> France has the same governance structure, e.g. the *École Nationale des Beaux-Arts* is under the tutelage of the Ministry of Culture.

¹⁵³ Newest available figures

¹⁵⁴ The French equivalent is the *Centre régional des œuvres universitaires et scolaires (CROUS)*

times. It constitutes a remarkable, increasing achievement of higher education access at the same time.

In the academic year 2019/2020, the Algerian higher education system integrates some 2 million students and more than 55,000 academic staff – including professors/researchers and doctoral candidates – (DGRSDT, 2019a) for a population of 43.5 million. For comparison, Nigeria, as the most populous country in Africa, presently features similar student numbers¹⁵⁵, as does South Africa, with Egypt and Germany, both double the Algerian population, counting 2.8 million. By 2030, as many as 3 million students are expected to be enrolled at Algerian universities nation-wide as per the opening speech on the occasion of the new Minister's inauguration (MESRS, 2020d).

According to data by UNESCO, in 2018, Algerian – like Chinese – tertiary education gross enrolment ratio¹⁵⁶, is at just over 50%, out of which almost two-thirds are female. It has continually risen from 30% at the beginning of the decade. First-degree gross graduation rate is at just under 30% in 2018, which remained almost unchanged compared to 2012. Throughout, since 2010, female graduates outnumber their male counterparts by one-third or more (United Nations Educational, Scientific and Cultural Organisation [UNESCO], 2020). For comparison, tertiary enrolment rates are at 28% in India, 35% in Egypt – similar to the Arab States average – at 22% in South Africa, and 9% for sub-Saharan African countries, in contrast to Europe's and North America's combined 77% (United Nations Educational, Scientific and Cultural Organisation (UNESCO)/ Institute for Statistics, 2020a). Organisation of Economic Cooperation and Development (OECD) countries' tertiary education attainment rate – men and women combined – is around 35% on average. However, figures vary widely from under 10 (South Africa) to close to 70% (Russia and Korea) (Organisation of Economic Cooperation and Development [OECD], 2020).

All *baccalauréat (bac)*¹⁵⁷ holders have access to 100% publicly-financed institutions, and, via the Ministerial agency *ONOU*, will receive accommodation in university residences for a nominal fee, on the condition that they live further than 30 km for female and 50 km for

¹⁵⁵ <https://www.pulse.ng/communities/student/national-universities-commission-nuc-says-there-are-19m-students-in-nigerian/3tgpcd7>

¹⁵⁶ Number of students enrolled in a given level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education. For the tertiary level, the population used is the 5-year age group starting from the official secondary school graduation age. See <http://uis.unesco.org/en/glossary-term/gross-enrolment-ratio>

¹⁵⁷ Default secondary school leaving diploma in Algeria - A-level equivalent - granting university access.

male students away from their place of study. In addition, there is only a symbolic price for catering on campus, with meals costing 1.2 Algerian dinars equalling USD 0.01 USD each on restaurant ticket booklets, as well as transport for 135 dinars or USD 1.11/year. Not least, most students, depending on parental income, receive a modest stipend for associated costs, which makes Algeria one of the few, if not the only, remaining country in the world which grants not only tuition-free studies – as is also the case in e.g. all continental European countries – but also fully finances living costs for the duration of first (Bachelor), second (Master) and even third-level (doctorate) courses for all domestic as well as any foreign students.

For the latter group, generally via bilateral government agreements with some sub-Saharan African countries – although they only make up 0.7% of the total registered stipend receivers in 2017. In the 2017/2018 academic year, close to half a million students were accommodated in public student residences, approximately 925,000 received a stipend and campus transport, and more than 1,155,000 meals were dispensed a day (Ministère de l'Enseignement Supérieur et de la Recherche Scientifique (MESRS)/Office National des Oeuvres Universitaires (ONOU) 2020)¹⁵⁸. These conditions of 95% national subsidy benefits, coupled with stagnation at the much lower price level of the time for the costs borne by students themselves, have remained unchanged since the 1970s.

With student numbers still rising, student selection and allocation, too, is “instrument” of higher education policy with clearly defined economic and social objectives (Haddab, 2014, p. 232). Accordingly, in the 2018/2019 academic year, for example, postgraduate – Master’s and doctorate level – access has been portrayed as highly problematic in terms of transparency and functionality of application processes and the disparity between over-subscribed cities and less frequented towns in the country (Bensouiah, 2018b). Since 1995, selectivity in the form of *bac* average marks¹⁵⁹ for popular, socially prestigious and highly sought-after disciplines like medicine, sciences, engineering, architecture and foreign languages has increased, while those with the lowest grades are generally attributed to the social sciences by a centrally administered national allocation system, which accounts for up to three-quarters of the student distribution.

¹⁵⁸ Newest figures available

¹⁵⁹ As is the case in France

According to an article in the student supplement in ‘El Watan’ national newspaper, the current dominance of social sciences and humanities (*SHS*) of approximately two-thirds of all Algerian students is not out of choice or preference but can indeed be traced back to a lack of alternatives related to lower marks in the *bac*, limiting the choice of medicine, science and engineering, for which higher grades are required (Staïfi, 2013). Not least, at the beginning of the academic year 2018/2019, the former Minister of Higher Education, Tahar Hadjar, announced that Political Science would be discontinued at 13 universities due to students’ lack of interest and poor employment opportunities – although journalism as political and information science was previously only offered at one national institute – with lecturers being integrated into law faculties (Bensouiah, 2018a).

Contrary to this claim is the analysis put forward by a previous Minister of Higher Education, Mustapha Haddab, who states that the so-called STEM (Science, Technology, Engineering and Mathematics) disciplines – basically aimed at a career in academia – make up for less than 15% of all graduates in 2005, largely due to the fact that they actually lack such a perspective of remaining at university given the low overall requirement of their profile (Haddab, 2014, pp. 229–230). SONATRACH, the biggest national enterprise engaged in petroleum engineering, has reacted to the lack of competences required by the graduates recruited with a one-year “induction” practical training (Guerid, 2007, p. 306). Consequently, a shift can be observed from basic research and productivity-oriented STEM disciplines towards a service industry with courses in management, business, communication and law now dominating the overall study structure (Haddab, 2014, p. 231).¹⁶⁰

After the adoption of Tamazight in 2016 as the second official language in Algeria, in addition to modern standard Arabic, first signs of a shift in policy can be seen by the decree for the creation of an Algerian Academy for Tamazight Language as of June 2018, followed by a commission set up at the African Union from November 2019 (University World News/Algérie Press Service, 2019).

¹⁶⁰ See these disciplines referenced in chapter 1.3

3.2 Research System

The Algerian science system is comparatively recent, although its former agencies, the National Organisation for Scientific Research (*ONRS*) and the National Research Commission (*CNR*) were established shortly after *La Refonte* – with the creation of the respective Ministry – in 1972 and 1973. Since 1962 until 1972, the Office of Scientific Cooperation (*ONS*) was co-administered with the French institution (Dahmane, 2014). Importantly, in 1976, the Institute of post-graduation at universities was established, corresponding to the cycle of studies post-first (*licence*-bachelor) level, to eventually have the local staff necessary at disposal, who were still rare in the 1980s, for both research and academic training. In 1986, following the dissolution of the *ONRS*, the High Commission of Research (*HCR*) was founded, which re-centralised research under the Presidency (Dahmane, 2014). In 1989, a national committee of programming and evaluation of scientific research (*CNEPRU*) was established¹⁶¹, and 1999 marks the beginning of the regulations of national research centres as statute type “public establishment of scientific and technological character”¹⁶², modified twice, in 2002 and 2009.

While the first five-year plan started in 1998 with the integration of lecturers-researchers at universities in research units, it was only ten years later that institutionalisation in the form of overarching governing agencies took place (DGRSDT, 2019a). The legal reference of present-day scientific research and technological development then is the corresponding ‘orientation law’ from December 2015. In the overview of laws governing the sector (MESRS, 2019), those addressed and concerned with research development appear mostly from 2016 onwards, such as the creation of new national research centres.¹⁶³ Importantly, the Algerian Academy for Science and Technology¹⁶⁴ was only established in 2015, too – by Presidential decree. Likewise, the Algerian Academy for Tamazight Language dates from 2018.

In terms of research governance, the *Direction Générale de la Recherche Scientifique et du Développement Technologique (DGRSDT)* is the national central agency attached to the Ministry, legally founded in 2008, which is charged with consolidating the national science

¹⁶¹ https://services.mesrs.dz/DEJA/fichiers_sommaire_des_textes/23%20FR.PDF

¹⁶² Cf. Chapter II, Section II, *Cadre institutionnel et organisationnel de l'enseignement supérieur et de la recherche scientifique*. B. 1. 3) 1) a) <https://www.mesrs.dz/fr/chapitre2>

¹⁶³ See the complete list: <http://atrst.dz/en/etablissements-de-recherche/>

¹⁶⁴ Cf. Chapter II, Section II, *Cadre institutionnel et organisationnel de l'enseignement supérieur et de la recherche scientifique*. A) 2) 1. <https://www.mesrs.dz/fr/chapitre2>

system, research programming and evaluation, finance, scientific human resources development, scientific cooperation, and research promotion.¹⁶⁵ Importantly, it hosts the secretariat and executes the decisions of the national council of scientific and technical research (*CRNSDT*) – last amended in 2008 after creation in 1992 – and it implements the respective national policy as stipulated by orientation law in 1998, for four years initially.¹⁶⁶

Already in 1992, meanwhile ten intersectoral commissions of research support, programming and evaluation were installed¹⁶⁷, modified in 2008 and complemented by permanent, standing sector committees in 1999¹⁶⁸. There are five national thematic research agencies,¹⁶⁹ established in 2012 with revised governing laws in 2019, aimed at basic research – overseeing 38% of research entities in the field of social sciences and humanities; 7 % in natural and life sciences; 6% in biotechnologies and food processing sciences; 44% in science and technologies, and 5 % in health sciences (DGRSDT, 2019b). In addition, targeted at applied research, there is a stand-alone national agency for the valorisation of research results and technological development (*ANVREDET*)¹⁷⁰, which has indeed existed since 1998, and the Algerian Space Agency (*ASAL*)¹⁷¹, founded by Presidential decree in 2002. Accordingly, the national council for scientific research and technological development was established in 2008, followed by the national council of evaluation in 2010.¹⁷²

Research funding as Gross Domestic Expenditure on Research and Development – for which the latest, and only, figures are available 2017 – adds up to 0,5% of the GDP, out of which 50% is on government, 43% on higher education and 6% on business. Government is with 93% the source of the overwhelming majority of funds. Roughly half is spent on engineering and technology, with approximately 2% each on natural sciences, medical sciences and social sciences. The remainder, more than 40%, is ‘not specified’ (United Nations Educational, Scientific and Cultural Organisation (UNESCO)/Institute for Statistics, 2020b).

¹⁶⁵ France features a similar structural set-up as Directorate-General within the Ministry:

<https://www.enseignementsup-recherche.gouv.fr/cid24148/www.enseignementsup-recherche.gouv.fr/cid24148/direction-generale-de-la-recherche-et-de-l-innovation-d.g.r.i.html>

¹⁶⁶ http://www.dgrsdz.dz/Pdf/Documents/Loi_98-11_du_22-09-1998.pdf

¹⁶⁷ https://services.mesrs.dz/DEJA/fichiers_sommaire_des_textes/77%20FR.PDF, pp.111/112.

¹⁶⁸ https://services.mesrs.dz/DEJA/fichiers_sommaire_des_textes/78%20FR.PDF, pp.3/4.

¹⁶⁹ Unlike in France, with its *Centre National de la Recherche Scientifique (CNRS)*, there is no overarching, multidisciplinary research institution, to which units or laboratories are affiliated.

¹⁷⁰ <https://www.anvredet.org.dz/>

¹⁷¹ <https://asal.dz/>

¹⁷² https://services.mesrs.dz/DEJA/fichiers_sommaire_des_textes/20%20FR.PDF/
https://services.mesrs.dz/DEJA/fichiers_sommaire_des_textes/18%20bis%20fr.pdf

The budget for research and development indicated stands at more than 100 billion Algerian dinars, the equivalent of USD 814 million. Starting in 1997, approximately two-thirds of the total has been allocated to universities, 28% to agencies and national research centres under *MESRS* tutelage, and the remaining 6% to those outside of the latter Ministry.

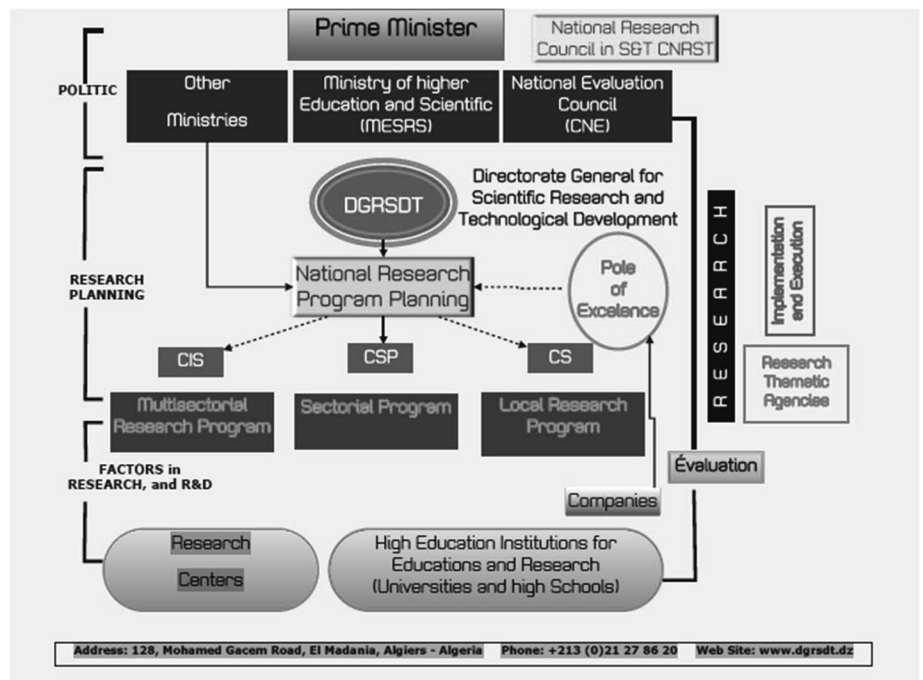


Figure 10: Algerian Research System (DGRSDT, 2019d)

However, there has been a decline since the peak in 2014 in funds overall, for both operational budget and equipment (DGRSDT, 2019a). A further differentiation, e.g. regarding institutions or single units, cannot be obtained.

As of 2020, the Algerian higher education system features 26 national research units¹⁷³ at universities and 25 research centres under the tutelage of *MESRS* and seven other Ministries, as well as more than 1,500 groups (*laboratoires*)¹⁷⁴ at universities, up from only 262 with a total of 13,150 researchers (including doctoral candidates) in 2000, their year of inception (DGRSDT, 2019a). Those are distributed somewhat equally among the national territory in the regions Centre (478), East (550) and West (428) (2018) (DGRSDT, 2019a). In 2019, their regulations were updated by Ministerial decree,¹⁷⁵ stipulating that there must be at least four teams of at least three researchers each. There is an online directory for the latter, *DALILAB*¹⁷⁶, searchable in French. In this framework, a recent quality assurance initiative can be noted with the closing of 72 laboratories following an evaluation at the end of 2018 (University World News, 2018), while, since 2000, a total of 137 entities have been closed¹⁷⁷ (DGRSDT, 2019b). At the beginning of 2020, then, 66 new laboratories were established at

¹⁷³ See the complete list : <http://atrst.dz/en/etablissements-de-recherche/>

¹⁷⁴ Structurally identical with the French system

¹⁷⁵ https://services.mesrs.dz/DEJA/fichiers_sommaire_des_textes/75%20bis%20fr.pdf, pp.6-10.

¹⁷⁶ <http://dalilab.dgrsdtdz/site/>

¹⁷⁷ Information on the criteria for this decision or the affected researchers' positions after closing is unavailable

a total of 44 universities, university centres, and *écoles*. The law also accounts for research teams, since 2013¹⁷⁸, and – as recently as 2019 – thematic research networks¹⁷⁹. As of the 1st quarter 2020, 2,731 projects are listed in the online database of national research programmes in 34 thematic areas defined in 2008. Out of those, 312 were selected as having a socio-economic impact.

There are a total of 2,107 permanent researchers and 889 auxiliary research staff at national research institutes in the country, out of which three-quarters at *MESRS*-governed institutes. At the same time, they represent only 4% of the entire Algerian academic staff of approximately 55,000 in 2018 (DGRSDT, 2019a). Out of these, 44% are female, whereas 56% are male. Interestingly – arguably, contrary to many other national science settings – women make up more than 60% of the total in chemistry and natural sciences and still attain 40% in engineering and physics (DGRSDT, 2019b). In addition to doctoral candidate status, there are five ranks, in ascending order: *Maître Assistant (MA) A/B*, *Maître de Conférences (MC) A/B*, Professor. These ranks are applicable for both university-based as well as institute-based researchers¹⁸⁰.

In this context, the present-day most significant proportion across all disciplines are doctoral candidates with 35%, followed by *MAA* with 27%, *MCA* with 12%, *MCB* with 11%, Professor with as little as 10%, and – of little significance – *MAB* with 5% (DGRSDT, 2019b).¹⁸¹ Therefore, it can be stated that Algerian university staff is mainly made up of those not having exercised research activities for long, as reflected in their lower scientific rank. The two categories of doctoral candidates and *MAA* have more than tripled since 2000 – although being negligible recently, while the highest growth rate can be earmarked 2001/2002 and 2011/2012. This fact also corresponds with the staff's age, with the highest distribution between 30-45 years across all disciplines (DGRSDT, 2019b). It is noteworthy, too, that only 40% of those affiliated with research institutes are doctorate (PhD) holders, whereas the majority hold a former Magister diploma. Likewise, 42% are active in the field of Engineering Sciences, with 11%, respectively, 9% in Arts and Humanities and Social Sciences (DGRSDT, 2019a). However, in terms of the total of researchers as academic staff, roughly one-third each are engaged in either of these two fields (DGRSDT, 2019b).

¹⁷⁸ https://services.mesrs.dz/DEJA/fichiers_sommaire_des_textes/76%20FR%20A.PDF, pp.7-9.

¹⁷⁹ https://services.mesrs.dz/DEJA/fichiers_sommaire_des_textes/71%20BIS%201%20fr.pdf, pp.15/16.

¹⁸⁰ France features the same ranks, in use mainly at universities, although there are further functions in higher education institutions, too.

¹⁸¹ See also DRGRDT 2019a, p. 10, table 5 – partly calculated from absolute numbers and rounded

Out of the 13 national research centres under the tutelage of the Ministry, three are in humanities, and ten are in other disciplines – such as, notably, physics, including the most highly staffed centre with 356 permanent researchers in 2018, the *Centre de Développement des Energies Renouvelables (CDER)*¹⁸². Two prominent non-science national research centres had existed before 2010, the *Centre de Recherche en Économie Appliquée pour le Développement (CREAD)*¹⁸³ and the *Centre de Recherche en Anthropologie Sociale et Culturelle (CRASC)*¹⁸⁴, established in 2006. The youngest national recent centre on Islamic Sciences and Civilisation dates from 2018 and has 37 members of staff. Among the national institutes, too, is a transversal research service, the Research Centre for Scientific and Technical Information (*CERIST*)¹⁸⁵ with 105 permanent researchers as of 2018, which hosts and administers, since 2012, the *Portail National de Signalement des Thèses (PNST)*¹⁸⁶, an online searchable directory of both complete and on-going dissertations on the national level¹⁸⁷, the Algerian Scientific Journal Platform (*ASJP*)¹⁸⁸ for all national journals and the centralised scientific journal and database access platform (*SNDL*).¹⁸⁹ An update from March 2020 of the census of national scientific journals counts almost 700 nationally-published journals in Arabic (491), French (166) and English (40) (DGRSDT, 2020). For international journals, it is customary in Algeria to publish an official categorisation, divided into categories A++, A, B, and C – now discontinued and replaced by a list of predatory journals/publishers of more than 1,000 each.

There are four so-called subsidiaries as spin-off institutes attached to national research centres in the fields of renewable energy, industrial technologies, physical-chemical analysis, and the centre for the development of advanced technologies, which deals with artificial intelligence. Summarised under “common research services”¹⁹⁰, which have a technical and technological orientation as platforms – including high-performance computing – as for applied research, there has recently been a launch of incubators, two of which are already operational, two others under a feasibility study, and a further four are planned in the mid-term. Likewise, four Technology Transfer Centres, as well as

¹⁸² <https://www.cder.dz/?lang=en>

¹⁸³ <http://www.cread.dz/index.php/en/home-2/>

¹⁸⁴ <https://www.crasc.dz/index.php/fr/>

¹⁸⁵ <http://www.cerist.dz/index.php/en/>

¹⁸⁶ <https://www.pnst.cerist.dz/>

¹⁸⁷ France has parallel structures: i.e. CNRS Institutes, the *Unité Régionale de Formation à l'Information Scientifique et Technique (URFIST)*/thesis.fr

¹⁸⁸ <https://www.asjp.cerist.dz/>

¹⁸⁹ <http://www.cerist.dz/index.php/en/portails-2/809-sndl>

¹⁹⁰ See section on the DRGSdT website, http://www.dgrsdt.dz/v1/index.php?fc=Plt_Tech

Experimental Stations, are currently being implemented; conceptualised under the plan for development of scientific research and technological development 2008-2012. Not least, there are “Research and Development Centres”¹⁹¹, which are hosted at the biggest (para-/state) industries, respectively companies, such as SONATRACH for fossil fuels exploitations, CEVITAL for food processing, the HASNAOUI Group in construction and agriculture and the National Enterprise of Electronic Industries/Electrical Goods. To complement the knowledge transfer entities, there exist so-called *clubs scientifiques*, student initiatives on campus, at university institutions, too.¹⁹²

The Algerian national university commission is also in charge of evaluation, and promotion, of *enseignant-chercheurs*, so-called lecturer-researchers in professorial capacity at universities¹⁹³. Established in 1994, it was complemented by the national commission of researcher evaluation in 2009¹⁹⁴. Besides, after its creation 2004, the functioning of the national commission of habilitation¹⁹⁵ was modified in 2015, together with an update of the national commission for doctoral-level studies (*troisième cycle*) in 2019¹⁹⁶ after establishment in 2007. Since 2013, there has been a Dean’s conference¹⁹⁷, according to discipline. Furthermore, there exists the national scientific commission for validation of scientific journals since 2014¹⁹⁸ – with the provision for ‘C category’ national journals from 2018, updated in 2019¹⁹⁹, and the commission for the implementation of a quality assurance system (*CIAQES*)²⁰⁰, dating from 2010. From 2019, a commission for the selection of candidates for leadership positions of higher education institutions has been operational.²⁰¹

With the two *DGRSDT* reports drawn upon serving as a blueprint for a national research strategy, respectively, sectorial research strategy in the years to come, both conclude pointing out the main challenges as follows: firstly, there is the issue of the absence of a special legal status for permanent researchers, and, secondly, conditions, in general, are not

¹⁹¹ See subsection of research structures on the DGRSDT website:

http://www.dgrsdt.dz/v1/index.php?fc=St_RSdT

¹⁹² See Chapter VI: *Vie étudiante et insertion professionnelle*, Section IV, *Les clubs scientifiques au sein des établissements d’enseignement supérieur* <https://www.mesrs.dz/fr/chapitre6>

¹⁹³ https://services.mesrs.dz/DEJA/fichiers_sommaire_des_textes/24%20FR.PDF

¹⁹⁴ https://services.mesrs.dz/DEJA/fichiers_sommaire_des_textes/25%20AR.PDF (Arabic)

¹⁹⁵ https://services.mesrs.dz/DEJA/fichiers_sommaire_des_textes/19%20bis%20fr.pdf

¹⁹⁶ https://services.mesrs.dz/DEJA/fichiers_sommaire_des_textes/26%20FR.pdf

¹⁹⁷ https://services.mesrs.dz/DEJA/fichiers_sommaire_des_textes/26%20B%20FR.PDF

¹⁹⁸ https://services.mesrs.dz/DEJA/fichiers_sommaire_des_textes/26%20A%202%20FR.pdf

¹⁹⁹ https://services.mesrs.dz/DEJA/fichiers_sommaire_des_textes/26%20F%20B.pdf (Arabic)

²⁰⁰ <http://www.ciaques-mesrs.dz/>

²⁰¹ https://services.mesrs.dz/DEJA/fichiers_sommaire_des_textes/26D++FR.pdf

favourable for staff at research institutes as compared to academic staff – *enseignants-chercheurs* – at universities (DGRSDT, 2019a, 2019b).

As for scientific production, in 2018, there were 7,643 publications corresponding to approximately 10% of African total and 0.25% of the worldwide output. Out of those, just under 50% were with international co-authorship. Algeria thus occupies the 4th rank in African classification – after South Africa, Nigeria and Tunisia and before Morocco – and 55th worldwide in the period 1996-2018 with 65,714 publications in total; out of which 83% between 2008 and 2018 (DGRSDT, 2019c), based on a bibliometric analysis with data from the open-access ‘Scimago Journal and Country Rank Portal’²⁰², which is up-to-date. In 2018, when aggregated per discipline, Algeria is among the top three in Africa in Physics, Chemistry, Material Sciences, Engineering and Mathematics; as opposed to economics/finance (11) and psychology (19).

On a worldwide scale, its best position is again material sciences (42), engineering (44) and mathematics (45), with a total of nine disciplines out of 27 in the top 50. Towards the lower end then, once more, there are social sciences (71), arts and humanities (80) and psychology (113) (DGRSDT, 2019c). The citation rate per document as an indicator of the national scientific production is most apparent in arts and humanities and social sciences at only one-third of the national average, which is likely due to default Arabic-language publications in these fields as well as lower standards for journal reputation compared with natural sciences, according to the authors of the study (DGRSDT, 2019c). While there seems to be no correlation with increased research funding, a correlation between the augmentation of researchers and improved scientific productivity can be observed (DGRSDT, 2019c).

3.3 Phases of National and International Orientation

It is a risky task for any educational leader to attempt to transform a system as vast as the university in such a short time without a trial or pilot study. The Algerian university system of higher education does manifest certain common trends and phenomena that are leading it to a greater resemblance to the Maghrib nations as a whole (Daghbouche, 2011, p. 469).

The national policies of a newly independent Algeria, which naturally influenced its university and emerging higher education system, were set at the Congress of Tripoli in 1962, followed by the Constitution in 1963 and the Charter of Algiers 1964. Three main lines of the following policy were the emphasis on science, the acknowledgement of the

²⁰² <https://www.scimagojr.com>

values of Arab-Islamic civilisation, and faithfulness of socialism (Mahiou, 2015, p. 9). The first indicator for reform of colonial higher education in place was the commission of higher education reform in the Ministry for National Education in 1967. In 1969, a national commission of educational reform was established.

Not least, then-President Houari Boumediene (1965-1978) stated in one of his speeches on Arabisation in the framework of the commission that “la langue arabe est la langue de la sidérurgie et de l’acier”²⁰³ (Mahiou, 2013, p. 301), thus making Arabisation another priority as a means of national development, as was the policy of the *FLN* cultural commission, which sought “indépendance linguistique” after political independence from France (Mahiou, 2015, p. 11). Then Minister and president of the commission, Ahmed Taleb, took over to define the four pillars of higher education reform: Algerianisation of academic staff, Arabisation of instruction in a “de facto” bilingual environment, the democratisation of higher education in line with other levels of national education, and scientific modernisation (Mahiou, 2015, p. 10).

After a government re-shuffle and a partition of the former Ministry for National Education into a separate Ministry of Higher Education in 1971, the first reform of higher education was designed by European, Eastern as well as American educational consultancies, which – though paradoxical as it may seem for the socialist regime of the time – had put the university on an economy-oriented, developmental, and even liberal as well as global pathway (Bellil, 1985; Mammeri, 1989; Guerid, 2007). Nevertheless, it was explicitly drawn on experience by fellow socialist countries such as the then Soviet Union in planning higher education development (Daghbouche, 1982, p. 47), although elected Deans of the University of Algiers as delegation members participated in month-long hospitation visits to the United States and the former Yugoslavia. In the following, experts from around the world such as Canadians, French, Chileans, Brazilians, then Yugoslavians, and Egyptians are reported to have taken part in the evaluation of proposals put forward by committees dedicated to each discipline (Mahiou, 2015, p. 15).

The formula employed, seen as an adequate measure, was “une formation maximale au moindre coût”²⁰⁴ and it entailed removing the rest of university autonomy (Ghalamallah, 2006, p. 35). The door was thus open for all kinds of political and ideological

²⁰³ The Arabic language is the language of steel and the steel industry.

²⁰⁴ a maximum of training at the lowest cost

instrumentalisation for anti-values of the society to prevail at the university (Ghalemallah, 2006, p. 36). Following three national seminars on “Formation et développement” in 1968, 1970 and 1971 respectively, the university was “assimilated” to a factory as students were assimilated to the workers of development and modernisation (Guerid, 2007). From this background, Institutes of Technology were founded, as well as *Écoles polytechniques*, which also determined the hierarchy of disciplines, i.e. experimental and engineering sciences at the top for technical, practice-oriented training of more vocational nature aimed at being operational right away.

Arabisation itself was implemented in several phases. Firstly, in the 1960s, it only applied to history and philosophy; secondly, in the 1970s, law, social sciences and sciences were taught bilingually, respectively, in parallel Arabic-French. Thirdly, in the 1980s, social sciences were entirely arabised, and – as is the status quo still today – fourthly, from the 1990s, the division of social sciences and humanities in Arabic and experimental sciences in French manifested itself (Guerid, 2010). Accordingly, over two decades 1970-1990, programmatic teaching was prescribed to mitigate drawbacks resulting from instructors’ weak pedagogic competences as well as subject, with no systematic evaluation which would have led to measures such as closing poorly-performing public education institutions, and, even a tendency from supervisors in dogmatising national education policy by encouraging or favouring those thesis subjects treating related pedagogical, didactical or organisational aspects (Haddab, 2014, p. 249). French-taught science and engineering academic programmes received the first cohort of Arabic-educated baccalaureate holders in 1989. In contrast, the Arabisation reform was generalised from 1990, leading to the implementation of Arabic as the language of instruction for scientific disciplines, except medicine. Training on the use of Arabic was conducted through regional conferences of university lecturers during the period of Djilali Liabes, a humanities professor and Minister from 1991 until his assassination in 1993.

In 1980, Minister Mustapha Haddab’s predecessor in office 1966-1971 and later UNESCO Director, Mourad Benachenhou, underlined the revolutionary character of the Algerian university : “Dans les sociétés révolutionnaires, lancées dans la remise en cause de l’ordre social et l’avènement d’un monde plus juste, l’université constituera une institution

privilégée dans la Révolution. Et c'est justement le cas dans notre pays"²⁰⁵ (Benachenhou, 1980). Further, he describes the institution's education mission as training technically competent civil servants, impregnated with the Algerian personality, aware of national realities and active in the process of a socialist development (Benachenhou, 1980). Daghbouche, too, affirms this view by underlining the pragmatic and applied feature of the late 1970s Algerian university: "(...) a university is itself a product of society and the above conception of autonomy is an abstraction far from the way the real world works" (Daghbouche, 1982, p. 11). She sums up its objective as follows; "(...) higher education is regarded by government as a means of furthering development, and by individuals as a means of improving their personal economic prospects" (Daghbouche, 1982, p. 15) as well as , through learning how to learn – independently and in Arabic – the "(...) base for real change in the life style of the country" (Daghbouche, 1982, p. 27).

As one of the most prominent representatives of the contemporary diaspora, Aïssa Kadri exhibits this claim by his article "From the colonial to the national university. Instrumentalisation and 'ideologisation' of the institution" (in French). He stipulates that, "Il n'est pas autrement extrêmement hardi, (...) de déceler dans les fonctions assumées par le système d'enseignement colonial et le système de l'enseignement national une *homologie quasi parfaite*"²⁰⁶ (A. Kadri, 1991, p.153). For him, the then Algerian university is characterised by "(...) une continuité de fond et des fonctions: un enseignement fortement idéologisé, instrumentalisé, s'inscrivant dans un procès de contrôle politique de l'institution et de la production des élites"²⁰⁷ (A. Kadri, 1991, p.153). Hence, the definition of the institution university is its integration in the larger political project with a national outlook (A. Kadri, 1991).

In line with this argument, but more general and thus fluid, the Algerian university is portrayed as an actor of economic and social development (Djeflat, 1990, p. 36). As opposed to earlier or parallel prevailing theoretical reflections, he argues from a quantitative empirical basis. First and foremost, the university is to produce graduates for the productive sector and among its contributions to social development, the accessibility to, and, improvement of,

²⁰⁵ In revolutionary societies, launched into the questioning of the social order and the advent of a more just world, the university will be a privileged institution in the Revolution. And this is precisely the case in our country

²⁰⁶ It is not unduly daring (...) to detect, in the functions assumed by the colonial educational system and the system of national education, an almost perfect homology

²⁰⁷ (...) a continuity of substance and functions: a strongly ideologised, instrumentalised teaching, part of a process of political control of the institution and the production of the elite

women's education is significant (Djefflat, 1990, pp. 48–49). Indeed, there is a long-term social status ascension aspect during the first decades after independence characterised as “l'efficacité sociologique du système éducatif”²⁰⁸ (Haddab, 2014, p. 241) of the Algerian higher education system.

Since 2004, however, a gradual shift in policy towards internationalisation can be observed by the adoption of the Bologna Process in selected pilot universities at first as has been detailed above, based on decrees²⁰⁹ in 2008, first for Bachelor and, secondly, for Master courses, in effect from the academic year 2007/2008, respectively, 2008/2009, with a gradual nation-wide roll-out. The official permit to operate private higher education institutions opens doors for foreign operators, too. Excellency has also been highlighted recently, as can be seen from the new Minister's initiative to establish respective centres as institutions focussing on, e.g. artificial intelligence, sustainable development as well as institutes in the field of medical sciences and economics at the beginning of 2020 (MESRS, 2020c).

Likewise, alignment to international standards of quality assurance has recently been put on the agenda with the creation of a national council on ethics and deontology with the mission of developing mandatory courses as well as anti-plagiarism measures, among others (MESRS, 2020b). In February 2020, the previous Minister reiterated these plans by the installations of ethics councils to be implemented soon at university-level, too (Bensouiah, 2020d). Also, with the new government, there have been outreach activities to the Algerian diaspora (Bensouiah, 2020c). Not least, in mid-2019, by the interim government awaiting elections after Abdelaziz Bouteflika's resignation in April 2019, plans were announced to newly promote English as well as continue Arabic as languages of instruction in Algerian higher education, and to reduce the presence of French. While the former Minister, in the first half of 2020, had not been actively working towards implementation, he had been focussing on the quality of education, regardless of the language used (Bensouiah, 2020a).

Furthermore, there has been an announcement of the prospect of a common Arab university classification spearheaded by Egypt recently (Bensouiah, 2019b). There are two bi-national cooperation agreements, namely, with the Republic of Iran, ratified by Presidential decree in 2017, and, more recently, with the United States of America, since the beginning of 2019 (MESRS, 2020a). There are multi-lateral agreements with Tunisia, Morocco, Mauritania

²⁰⁸ The sociological effectiveness of the education system

²⁰⁹ In particular, law 08-06 (pp.33-37) and decrees 06-265, 09-03, 08-130, 10-231. Cf. <https://www.mesrs.dz/habilitations-de-formations-lmd>. See also Baddari and Herzallah (2014).

since 2010, as well as the “Regional Convention on the Recognition of Studies, Certificates, Diplomas, Degrees and Other Certificates of Higher Education in African States” from 1981, coming into effect in 1988. The recognition of degrees obtained abroad has also been updated and facilitated after its first provision in 1971, complemented by decrees in 2013 and 2015, and, by ministerial decree in 2018.²¹⁰ Of these requests, 70% concern the recognition of French diplomas in Algeria (Mediterranean Network of National Information Centres on the Recognition of Qualifications [MERIC-Net], 2019).

By means of research support, Algeria is also involved in the European Commission’s ‘Horizon 2020’ as well as European Cooperation in Science and Technology (COST) programmes.²¹¹ Algeria had participated in the TEMPUS programme for more than a decade (2002-2014), with more than fifty partnership projects improving updating curricula, implementing quality assurance in academic activities, and developing relations with socio-economic partners, employers and industries. The *Renforcement de l’assurance qualité interne dans les universités de la Méditerranée (AQI-UMED)*²¹² project produced an internal quality assurance standard for Mediterranean universities involving European, Moroccan, Tunisian and Algerian universities 2010-2013. It was appropriated to become the *Référentiel National d’Assurance Qualité de l’Enseignement Supérieur (RNAQES)*. Several Algerian students were involved in 15 Erasmus Mundus mobility projects from 2007 to 2014 (Benstaali, 2019b). Algeria currently participates in the EU’s Erasmus + programme²¹³ and, in early 2020, the meanwhile third “Algerian-Spanish Pre-Call” (ALGESIP)²¹⁴ was announced, too. With regards to research, a focus is placed on developing internationalisation according to different indicators in the coming years until 2025, as outlined in the provisional strategy ‘Horizon 2025’ (DGRSDT, 2019a).

Overall, the structure of the Algerian higher education and research system, which, despite reforms entailing reorganisation and Arabisation, remains similar or even equivalent to France in its institutions, organigrams, governance, and selection processes. In this sense, there are still *legs colonial* (Bayard & Bertrand, 2006) (post) colonial elements which are to be dealt with and tackled. Although it has been sought to overcome those – first by policies strengthening Algerianisation and nationalisation, and, more recently, by adopting those that

²¹⁰ See Chapter III, Section II, *Les documents demandés pour le dossier d’obtention d’équivalence des diplômes et titres universitaires étrangers* <https://www.mesrs.dz/fr/chapitre3>

²¹¹ <http://www.h2020.dz/#programme>

²¹² http://www.agence-erasmus.fr/docs/2161_livret-aqiumed.pdf (in French)

²¹³ <http://erasmusplus.dz/index.php/fr/accueil/>

²¹⁴ http://www.dgrsdt.dz/v1/index.php?fc=Appels_A&id=61

are increasingly in favour of internationalisation – parallel structures continue to affect. Their influence results in ambivalences on various levels, which are taken up in the following part II.

4 Theoretical and Analytical Framework

Pour qu'il y ait changement, il faut que tout un système d'action se transforme, c'est-à-dire que les personnes doivent mettre en pratique des nouveaux rapports, de nouvelles formes de contrôle ce ne sont pas seulement des règles du jeu qui doivent changer mais également la nature même du jeu²¹⁵ (Laouisset, 2003, p. 63).

This chapter discusses the conceptual and theoretical framework of the study. Subsequently, the analytical framework, which assists in operationalising the key concepts of the study, is outlined. It draws on three theoretical approaches, respectively, theories, namely Castells' functions of the university, Lüscher's ambivalences, and Bourdieu's forms of capital. Those are each aligned with a research question and are treated in this sequence. They are complementary in that they draw on each other: Castells addresses the macro level, Bourdieu the expression on the micro-level as a reaction to the macro level, and Lüscher links the two by the ambivalences perceived on, and by, a micro-level, which originate on the macro-level. Also, Castells's evolving continuum of university functions overtime may be posited against Bourdieu's forms of capital in that different forms are required to succeed in phases of prioritisation of university functions. As is outlined in the hypotheses below, and taken up in the analysis later, cultural capital is decisive when research is on the individuals' agenda. This notion has been examined in an African context (Langa, 2010, 2011), confirming its usability and potential for exploration in this thesis.

Consequently, none of the approaches may explain the phenomena observed by itself, but in their combination, they serve as a framework for analysis and explanation. Moreover, as will be shown, ambivalences are not limited to the individual level, as depicted by Lüscher. Indeed, they may determine the macro-system level as a whole, which is relevant and pertinent in an African context. In line with modernity bringing about ambivalences, and demanding tolerance of those (Bauman, 2013), the constitution of modernity in African societies is not an abnormality as it is intrinsically ambivalent, and it is what it is, due to historical contingency (Macamo, 2005). From this background, the postcolonial situation characteristic of many transforming societies plays a role, too.

²¹⁵ For there to be change, a whole system of action must be transformed, that is to say that people must put new relationships into practice; new forms of control are not just rules of the game that must change, but also the very nature of the game.

Given the empirical nature of this work, with an applied element in the form of policy implications and recommendations, and its tripartite composition, the emphasis is on the framework in its particularly innovative combination of constituents rather than an exhaustive account of each of the three components, which is beyond the specific scope.²¹⁶ It nevertheless acknowledges that the concepts have been subject to criticism since – for instance, during Bourdieu’s lifetime, and nearing two decades after his death. Furthermore, all three theorists are of European origin, which poses an epistemological question: it may be linked to inherent bias, an associated worldview, and a level of normativity²¹⁷. Therefore, the concepts are not universally applicable as they are presented here, and need to be tested and questioned every time in their claim of portraying, and making sense of, the reality in a given context; in this case, in the Algerian higher education system.

4.1 University Functions

Manuel Castells already highlighted the importance of higher education in the world economy at the beginning of the 1990s:

If we take seriously the analyses pointing towards the formation of a new economy, in which the ability to generate and process information is key to productivity, it will not be possible to integrate developing countries in a dynamic world economy without creating the necessary infrastructure in higher education. Because research and education policies take time to bear fruit, such policies must be placed at the forefront of international aid (Castells in Muller et al., 2017, p. 55).

When Manuel Castells’ paper titled “The University System: Engine of development in the new world economy” was presented at a World Bank seminar in 1991, he was yet to become, by the end of the decade, a prominent sociologist internationally, via the famous “trilogy”, *The Power of Identity* (1997), *End of the Millennium* (1998) and *The Rise of the Network Society* (2006). Hence, his work on higher education, which is the focus of the framework in this dissertation, preceded the trilogy by five years and more.

Having triggered the South African editors’ interest in approaching higher education “(...) via sociology in a very different way to the other theorists”, Castells himself is reported to have had an unpursued interest in Africa due to the prevailing lack of data (Muller et al., 2017, p. 6). Although his early visits to South Africa and other countries in Africa, in the framework of which his essay “Universities as dynamic systems of contradictory functions” in the 2001 publication *Challenges of Globalisation – South African debates with Manuel*

²¹⁶ For this reason, exclusively primary sources are cited, and a more theoretically-oriented discussion is omitted in the following subchapter

²¹⁷ These characteristics are also applicable to the author being of German nationality

Castells are becoming more dated, “Castells has shaped the research agenda, the effects of bringing his big-picture thinking to bear on the university in Africa will remain indelible” (Muller et al., 2017, p. 16). With the background of thus having previously taken reference to an African context, the framework – although developed from and in a European context – will be tested on its applicability on the African continent in this study.

The focus will be on the functions of the university, which may be regarded as uniquely developed in a historical continuum. On the other hand, different aspects of the network related to economics and globalisation are not treated in more depth.²¹⁸ These are partly based on his and others’ earlier work²¹⁹ dating from the early 1990s and 2000s. They are also reflecting the situation towards the end of the ideological Cold War, an emerging international division of labour and a technological revolution with concurrent dependence of the development of a country’s technological potential and thus its transfer at the core of development policies, with the risk of “leaving islands of modernity in an ocean of backwardness” (Castells, 1993, p. 69). The outline is derived from this first paper, complemented by its later version 2001 (Castells, 2001), which was published again as a chapter in the 2017 edited collection (Castells, 2017).

Based on the requirement of an “institutional system able to link scientific research, technological applications, and training of the labour force in the context of a process of technology transfer” (Castells 1993, p. 70), and the sociological analysis that “Universities are institutions that in all societies, throughout history, perform basic functions that are implicit in the role that is assigned to them by society through political power or economic influence. These functions result from the specific history of education, science, culture, and ideology in each country”, the following analytical framework of universities as dynamic systems (Castells, 1993, p. 70) is proposed as a system analysis on the macro level.

Ideology-dispensing institution

In the European medieval tradition, when universities first emerged on the continent and in Britain, those were faith-based institutions, either of a static nature, such as in the case of the

²¹⁸ See Muller et al. 2017, Chapter 4, pp. 57-65, “The role of universities in development, the economy and society”, and Chapter 5, pp. 67-92, “Rethinking development in the global information age” for transcripts of two lectures Castells delivered during stays in South Africa in 2009 and 2014.

²¹⁹ Though now dated, see Altbach 1987 *The Knowledge Context* for a conceptualisation of the so-called ‘brain drain’ phenomenon which concentrates high skills and advanced education in a few already globally, regionally or nationally advantages places and institutions thus reinforcing existing knowledge production inequalities. Cited in Castells 1993.

Roman-Catholic Church and religious orders such as the Jesuits, or, in the Anglo-Saxon model, theological schools as the predecessors of liberal arts colleges. Historically, therefore, an ideology-diffusing institution is an enactment of the first fundamental role of universities, “despite the ideology of their ideology-free role” (Castells, 2017, p. 35).²²⁰ Since institutions necessarily operate within a society, however, all streams including radical ones, are represented and even amplified and result in apparatuses of social conservatism or social change, depending on the degree of both establishments of elites’ hegemony and socio-political rule of society by coercion rather than consensus (Castells, 2017, p. 36).

Elite-selection institution

Accordingly, a society’s dominant elites ought to be trained in assuming their role, for which the university dispenses values and know-how of its mechanisms, insofar as “beyond selection in the strict sense, are the socialisation process of these elites, the formation of the networks for their cohesion, and the establishment of codes of distinction between these elites and the rest of the society (...) as family heritage was eroded in its legitimacy as the sole source of social power” in the industrial age (Castells, 2017, p. 36). Prominent examples of this function are the Oxbridge universities as a decisive factor in classifying all other institutions in the United Kingdom still today, as well as the Ivy League association as its equivalent in the United States. Also, as shown by the French model of the dominance of *grandes écoles*, the elite-selection function is not to be confused with private, fee-paying higher education institutions (Castells, 2017, p. 37).

Research institution

The science-oriented university only came into effect in the second half of the 19th century with the Humboldt institution originating in Germany. This model operates on the principle of separation between teaching and research. Yet, there is a high degree of interaction between the two functions, in contrast to most of Europe, where research has been institutionally separated from higher education, as exemplified by the French National Scientific Research Centres (*CNRS*). The German model – while still operating on the principle of separation between teaching and research – has been somewhat more flexible in the interaction between the two functions. It was successfully exported to now leading

²²⁰ The text of Castells 2017, pp. 35-55, as chapter 3 in Muller et al. 2017, is identical to Castells 2001, pp. 206-222, both of which are essentially reproduced from the main part of Castells 1993 original essay, pp. 70-79. In order to avoid confusion in switching between the different publications, pagination for citation is taken consistently from Castells in Muller et al. 2017.

American universities such as Stanford or the Massachusetts Institute of Technology (MIT). The current situation of its popularity to imitate around the world draws back to the United States' political boost of World War II and Cold War technological needs as well as the new information age starting in the mid-1990s, referred to as the “Silicon Valley Syndrome” (Castells, 2017, pp. 38-39). The latter refers to the origins of the Silicon Valley in California as information technology and technological business hub, a model replicated globally, in recent times, to create an ecosystem for start-ups in the field of digitalisation.

Bureaucracy-training institution

The professional university preceded the science university in that “the needs of the economy made research increasingly important as a strategic tool to enhance productivity and competitiveness” (Castells, 2017, p. 40). Dating back to the middle ages by the training of Church bureaucrats, this function continued throughout Europe and also Asian countries in the early modern age. At the time of industrialisation, there was a need for training of the massive, newly emerging skilled workforce beyond manual labourers, e.g. engineers and accountants, but also health care and teaching professionals (Castells, 2017, p. 39).

Other functions

The ‘non-traditional’ functions encompass social need and the so-called ‘Third World’²²¹ university in a postcolonial context. It is here where the contradictory nature of the university functions comes into play: “The more a university system is politically or socially forced to make coexist the implicitly excluded segments with its productive functions, the less effective it is, actually disintegrating into various organisational systems that try to recreate social segregation outside the formal institutional system” (Castells, 2017, pp. 41-42).

The societal demand for higher education pressurises national systems, independent of economic needs, as there is a desire for social ascension by education enhancement. Thus, there exists surplus labour absorption in the form of higher education expansion, resulting in massification, which, for university institutions,

²²¹ This outdated terminology is rejected by the author as it is highly problematic due to its neo-colonial notion and its inherent global North-centrism, however, is retained here for referencing the original. Nevertheless, it is highly questionable – if not incomprehensible – that Castells does not change it even in 2017, 25 years after its first publication in 1992.

(...) make difficult their performance as centres of knowledge generation. The need to preserve cultural identity, and the tensions created by the extreme politicisation of universities in overcrowded conditions, make it extremely difficult to manage the coexistence of the ideological and political functions with the scientific activity of the university (...)

as well as

(...) maintain the respect for scientific activity (whose payoffs are necessarily in the long term) on the part of students and faculty who are relatively marginal to the society or from university administrators whose main concern is to keep order and maintain the system operating in formal terms, regardless of its actual output in the generation and transmission of knowledge (Castells, 2017, p. 47).

Hence, the social need function, respectively, its effect supersedes that of knowledge creation.

The specific postcolonial situation is accounted for in the following:

(...) the specificity of the university system in the Third World is that it is historically rooted in its colonial past. Such specificity maximises the role of universities as ideological apparatuses in their origins, as well as their reaction against cultural colonialism, but emphasises their ideological dimension in the first stage of their post-independence period (Castells, 2017, p. 43).

The so-called new ‘Third-World’ universities, subsumed under ‘other’ functions by Castells, feature research – which is conducted by individuals within the institution university – as an integral element: “The new Third World universities must also emphasise research, both basic and applied since this will become the necessary ground for the upgrading of the country’s productive system. Research must be connected both to the world’s scientific networks and to the specific needs and productive structure of the country” (Castells, 2017, p. 49). Likewise, the approach of rushed technocracy in privileging only science and engineering can be observed in developing and newly emerging economies (Castells, 2017, p. 48), which applies to Algeria, too, given its postcolonial situation.

Castells’ university functions constitute the macro level in describing the Algerian higher education system analysed in the empirical part III. They expose the structural characteristics necessary to understand the setting of academia in Algeria by a functional frame, including referencing to the past, yet, also, local challenges. Not least, its specifics, such as highly centralised governance and current politicisation, need to be taken into consideration.

Once those have been outlined by the grid of analysis made up of the five – four and ‘other’ – university functions detailed above, the situation of an acting person in this field of operation of the Algerian university, the micro level, needs to be correlated, which is done in the following employing the concept of ambivalences by Kurt Lüscher.

4.2 Ambivalences

The Swiss family sociologist Kurt Lüscher conceptualised ambivalences (Lüscher, 2011b) from a knowledge sociology perspective as a “sensitising construct” (Lüscher, 2011a)²²², initially in the framework of the study of intergenerational, i.e. parent-offspring, relationships, which are in a constant state of oscillation between closeness and distance, love and hate, responsibility and burden, and obligation and personal life. While the concept has been developed with this particular social constellation in mind, it offers a “(...) heuristic definition that can serve as a reference for research, theory, and policy” (Lüscher, 2011a, p. 192). Since “(...) implying the dynamic interplay of difference and communality with autonomy and dependence (...)”, it reflects the “(...) coexistence in one person of contradictory emotions or attitudes toward the same object or situation” (Lüscher, 2011a, p. 194).

Its applicability to, relevance in, and, indeed, transferability to an education context is underlined in that it allows to “(...) observe personal preferences measured against an ideal of normality (...). In this way, social structures, ideas, and ideologies become relevant” (Lüscher, 2011a, p. 195). Ambivalences are inextricably linked to the societal context an individual finds itself in, as is shown in the following:

First, there is the dynamic search for the significance or meaning of persons, relationships, or objects. Second, the notion of ambivalence draws to our attention that we can be confronted with a specific kind of conflict. This conflict is between options, which are reduced (or which we reduce) to juxtapositions that we conceive as or attribute to contradictory forces as polarisations, often expressed as fundamental differences. These forces can be of different strength and thus are not balanced. We may become aware of social conditions and social situations that provoke such experiences of individual actors (Lüscher, 2011a, p. 195).

Hence, there are interrelated, parallel processes; and those circumstances result in “(...) conflicting experiences that are relevant for personal identity or for the personality” (Lüscher, 2011a, p. 195). Further, ambivalences serve the description of “relationship between the self and agency” in that they “generate different strategies for coping” in “processes of oscillation between polarised juxtapositions. These are the oscillations, for instance, between difference and similarity, between autonomy and dependence, moral obligations and self-interest as well as their concrete manifestations in social situations” (Lüscher, 2011a, p. 196).

²²² The journal article 2011a is written in English, whereas 2011b is in German. The latter was published just months after the first-mentioned.

The definition of ambivalences – intentionally heuristic, inviting empirical backing – is subsumed as follows:

The concept of ambivalence refers to certain kinds of experiences. They occur while we search for the significance of persons, social relationships, and facts that are relevant for our identity and our agency, thereby oscillating between polar contradictions in feeling, thinking, wanting, or social structures, contradictions that appear temporarily or permanently insolvable. These oscillations can be asymmetrical, imbalanced, and reflect the impact of powers. I call this definition heuristic because it is not definitive but encourages empirical validation and transformation (Lüscher, 2011a, p. 197).

Correspondingly, the link between theory, methodology, and practice is established by the “sensitising construct” which complements theoretical elements with ambivalences as found in an empirical – more so qualitative – study (Lüscher, 2011a, p. 200). It is based on the fact that “(...) experience of ambivalence refers to the confrontation with a fundamental difference and, consequently, dealing with ambivalences requires the acknowledgement of such differences as challenges” (Lüscher, 2011a, p. 202). Hence, sufficiently open as bound by “time and context” and pays tribute to an “ongoing concern for a dynamic definition” as well as directed at a particular subject (Lüscher, 2011a, p. 202). For these reasons, it is both fit-for-purpose and universally applicable.

Based on the principle that it is not possible not to act, ambivalences have to be dealt with in one way or another, which includes different strategies, for example, ignoring or accepting, hesitating or considering alternatives, given that there is always a social element to one’s action (Lüscher, 2011b, p. 374). To illustrate the concept of ambivalences by the resulting process of oscillation as well as its causes and constituents, the following diagram – in itself ambiguous – is proposed, which makes up a dynamic, open ‘sensitising construct’:

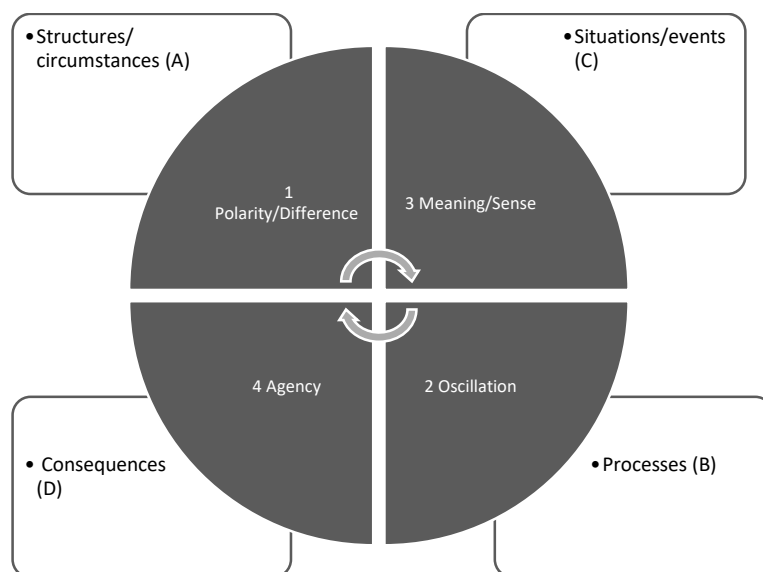


Figure 11 Ambivalence as sensitising construct (adapted and translated from Lüscher, 2011b, “Das komplementäre Diagramm der Ambivalenz”, p. 378)

In the centre is “identity as a process.” Causes, or triggers, are reflected in the categories A-D, whereas constituents are depicted in 1-4. The asymmetry – rather than balance – is reflected in the diagram with its different, arbitrary shapes. It is noteworthy that there are a variety of different appearances, depending on intra- and inter-disciplinary use and practical applicability (Lüscher, 2011b, p. 378). Also, agency, commonly defined as the ability to act in the social sciences, covers the capability to be susceptible to, and deal with, ambivalences in this framework, too (Lüscher, 2011b, pp. 381-382). The latter is of particular interest in this work, taking into account the context of both professional practices as well as the focus on research, including its methods (Lüscher, 2011b, p. 386).

For this thesis, the application is on the level of Algerian professors and researchers’ practices as an expression of their agency in engaging in the university function of research activity. Their actions in the form of coping strategies to be detailed are a means of adaptation to the ambivalences experienced, induced by the macro level. Lastly, the concept of ambivalences as a sensitising construct links the macro and micro levels, in that it can either take an individualistic, i.e. personal, or a structural approach, where social situations are highlighted (Lüscher, 2011b, p. 387). In the scope of this work, the first-mentioned is adopted. Having thus described the concept of ambivalences as the situation individual academics find themselves in at non-autonomous institutions in a politicised environment as it is the case in Algeria²²³, the manner of their agency, and their reasons for it, will be explored.

4.3 Forms of Capital

French sociologist Pierre Bourdieu (1930-2002) is one of the most famous sociologists worldwide, who has played a major role in developing the discipline in not only contributing to basic and advanced theory but also in his pioneering insistence on the link of concepts with empirical evidence, especially in the field of sociology of education, including higher education, where his early work originated from. Moreover, Bourdieu started his academic career as a then *coopérant* lecturer in sociology at the University of Algiers in the early 1960s after Algerian independence, following his deployment there as a French conscript during the war in the late 1950s. Although it is little known, his earliest publications, of an anthropological orientation, make reference to the Algerian – then colonial or immediate postcolonial – context, before he devoted himself to the study of the French educational

²²³ See chapter 2 as well as the empirical part III

system, which is much more widespread and well-known nowadays. This epistemological element makes the use of theoretical elements, building on concepts based on observations during his time in Algeria apt in so far as their origins derive from a perspective which – at its base – differs from the development and evolution of both the university functions and ambivalences as a sensitising construct concept. Notwithstanding, Bourdieu himself is known to have acknowledged his Eurocentrism and class.

His forms of capital are among the most popular social sciences theories globally. Among many, the primary source for the forms of capital has been chosen with reference to an education context specifically – as opposed to their applicability and use in other fields and topics of analysis, spanning the whole discipline of sociology and beyond – as reflected in its medium of publication, the edited collection titled “Handbook of Theory and Research for the Sociology of Education”, where it is a chapter contribution (Bourdieu, 1986).²²⁴ It is noteworthy, too, that this constitutes one of the earliest – after the German translations – English versions of any of Bourdieu’s work from the French original. It has since been included in hallmark handbooks of sociology of education.²²⁵ The publication is preceded and conceptually followed by the early theory of reproduction of academic elites (Bourdieu & Passeron, 1970) and, just prior, “Homo Academicus” (Bourdieu, 1984), one of Bourdieu’s most famous works, where he introduced the approach of power transmission by academic capital types of actors in a university context. In the latter, he also determines two central functions of the university, namely, a technical one and the cultural one. It is an institution which issues production; of qualifications, culture, and a national conscience (Bourdieu, 1984).

To begin with, Bourdieu defines capital as follows:

Capital is accumulated labour (in its materialised form or its “incorporated”, embodied form) which, when appropriated on a private, i.e., exclusive, basis by agents or groups of agents, enables them to appropriate social energy in the form of reified or living labour (...). It is what makes the games of society — not least, the economic game — something other than simple games of chance offering at every moment the possibility of a miracle (Bourdieu, 1986, p. 15).²²⁶

²²⁴ Published originally as “Ökonomisches Kapital, kulturelles Kapital, soziales Kapital,” in *Soziale Ungleichheiten* (Soziale Welt, Sonderheft 2), edited by Reinhard Kreckel. Göttingen: Otto Schartz & Co., 1983, pp. 183–98. [. . .] Translated by Richard Nice.

²²⁵ Confer, among others, various editions of *Sociology of education: a critical reader*. Edited Alan R. Sadnovik/Ryan W. Coughlan. 2011/2015/2016. London/New York: Routledge.

²²⁶ The pagination of the book chapter neither corresponds to nor matches the electronic version utilised (see link provided in the references). In order to ensure correctness, the pagination is taken from the latter: pp. 15–29.

Capital is not immediate and can take a variety of forms, material or immaterial, personified, objectified, or institutionalised, openly recognisable or concealed (Bourdieu, 1986, p. 16). It is thus the currency in, and of, society, understood as the social world, in that its existence and amount of determines social success, by actions or accepted, conducive, habits. Reproduction is conceptualised in the sense of upkeep of a social order where some – utilising various types of capital – retain privileges at the detriment of other members of a given society. This state serves to distinguish and differentiate. The practices employed to attain this objective are context and environment-specific, the phenomenon of which Bourdieu depicts with the concept of “field”, e.g. the scientific field, academia. Consequently, “The structure of the field, i.e., the unequal distribution of capital, is the source of the specific effects of capital, i.e., the appropriation of profits and the power to impose the laws of functioning of the field (...)” (Bourdieu, 1986, p. 19).

In the following, the forms and distinctions of capital are detailed in a compact form, with a focus on their application as well as implications in the context of education and academia in particular, and considering the original (albeit translated) wording in closely observing Bourdieu’s exact phrases. As a summarising overview,

(...) capital can present itself in three fundamental guises, as economic capital, which is immediately and directly convertible into money and may be institutionalised in the form of property rights; as cultural capital, which is convertible, in certain conditions, into economic capital and may be institutionalised in the form of educational qualifications; and as social capital, made up of social obligations (“connections”), which is convertible, in certain conditions, into economic capital and may be institutionalised in the form of a title of nobility (Bourdieu, 1986, p. 16).

Social capital

There exist three types of social capital: practical state, material, and symbolic exchanges;

Social capital is the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalised relationships of mutual acquaintance and recognition – or in other words, to membership in a group – which provides each of its members with the backing of the collectively owned capital, a “credential” which entitles them to credit (...) These relationships may exist only in the practical state, in material and/or symbolic exchanges which help to maintain them. They may also be socially instituted and guaranteed by the application of a common name (the name of a family, a class, or a tribe or of a school, a party, etc.) and by a whole set of instituting acts designed simultaneously to form and inform those who undergo them; in this case, they are more or less really enacted and so maintained and reinforced, in exchanges (Bourdieu, 1986, p. 22).

Not least, an individual’s relations, which make up his or her network, are the result of activities as “investment strategies” geared towards increase for personal value and gain, which may extend to claiming or safeguarding rights (Bourdieu, 1986, p. 22). Social capital

defines common identifiers as makers of group membership, as well as their exclusion (Bourdieu, 1986, p. 23).

For an academic context, there is a particular application of what is commonly labelled as favouritism – in the words of Bourdieu, “a helping hand”, “string-pulling”, the “old boy network” (1986, p. 29) – since, notwithstanding qualifications, “(...) the economic and social yield of the educational qualification depends on the social capital, again inherited, which can be used to back it up” (Bourdieu, 1986, p. 17). This means that a high amount of social capital serves as social security in the form of a safety net in retaining one’s standing or position, regardless of, for example, formal examination failure.

Cultural capital

Correspondingly, three forms of cultural capital can be distinguished, that is the embodied, objectified, and institutionalised state. The objective is, once more, accumulation of this type of capital;

The accumulation of cultural capital in the embodied state, i.e., in the form of what is called culture, cultivation, *Bildung*, presupposes a process of embodiment, incorporation, which, insofar as it implies a labour of inculcation and assimilation, costs time, time which must be invested personally by the investor (...) This embodied capital, external wealth converted into an integral part of the person, into a habitus, cannot be transmitted instantaneously (unlike money, property rights, or even titles of nobility) by gift or bequest, purchase or exchange (Bourdieu, 1986, p. 18).

Hence, this form of capital is the most elaborate and sophisticated in the sense of personalised effort needed to acquire it, which is reflected in the embodied state, inextricably linked to the individual. Therefore, it is very highly valued and thus potent in academia, where visibility through publications are the currency as expressions of this very embodied cultural capital.

The institutionalised state equally plays a role in a university context since diplomas are visible cultural capital. Institutionalised cultural capital by academic credential, therefore, detaches the possession from the individual (Bourdieu, 1986, p. 20), which, however, works in the advantage of holders, as they are given a kind of blank cheque with the effect of credit of trust by merely identifying themselves as qualification-bearer. This state of affairs constitutes an example of the “clandestine” – as opposed to open, recognisable – circulation of capital, which ensures the reproduction of a social structure (Bourdieu, 1986, p. 26) – such as higher education participation, or success – by some classes, but not others. At the

same time, this rationale is the conclusion of Bourdieu's deliberations, and, not least, of particular importance for the sociology of (higher) education.

Economic capital

At its base,

(...) economic capital is at the root of all the other types of capital and that these transformed, disguised forms of economic capital, never entirely reducible to that definition, produce their most specific effects only to the extent that they conceal (not least from their possessors) the fact that economic capital is at their root, in other words — but only in the last analysis — at the root of their effects (Bourdieu, 1986, p. 24).

While “It is, in fact, impossible to account for the structure and functioning of the social world unless one reintroduces capital in all its forms and not solely in the one form recognised by economic theory” (Bourdieu, 1986, p. 15), a transformation from economic capital into another form of capital is commonplace, requiring a certain degree of effort, depending on which currency counts to gain authority in a given, specific environment (Bourdieu, 1986, p. 24) and classified by the amount of time necessary for its appropriation when transformed into cultural capital (Bourdieu, 1986, p. 19).

Consequently, there are “conversion” rates between cultural capital and economic capital, in the academic sphere, for instance, in the form of higher pay for an academic credential, which, for an education context, means that a surge of university attendance can be observed, leading to an inflation of degrees (Bourdieu, 1986, p. 21). This development may very well be politically induced. Likewise, as for social capital, its transformation from economic capital necessitates effort, in this case, “(...) expenditure of time, attention, care, concern (...)” (Bourdieu, 1986, p. 25). Of equal relevance is the fact that social capital holders usually correspond to possessors of high, albeit underlying, economic capital (Bourdieu 1986, p. 23).

Symbolic capital

Symbolic capital, then, is overarching in that it is not tangible, and, consequently, applies to social and cultural capital exclusively, as opposed to economic capital:

Symbolic capital, that is to say, capital — in whatever form — insofar as it is represented, i.e., apprehended symbolically, in a relationship of knowledge or, more precisely, of misrecognition and recognition, presupposes the intervention of the habitus, as a socially constituted cognitive capacity (Bourdieu, 1986, p. 27).

Social capital, first of all, predominantly appears as symbolic capital in a “logic of knowledge and acknowledgement” which has the effect of hedging this very capital existence for others’ recognition, and instead relies on this authority or perceived “legitimate competence” (Bourdieu, 1986, p. 18). Social capital, too, defines itself as existence, or possession, of a combination of all forms of capital since not only one’s own forms of capital counts towards personal accumulation and hence social power and influence, but, indeed, the more connections an individual possesses, others’ capital is multiplied for this common use and can be availed of by the members of this network (Bourdieu, 1986, p. 21).

As for cultural capital, the aforementioned habitus always refers to a specific “field”, in Bourdieu’s terms, such as, e.g. academia/university as a scientific field, which means that it exists only as a currency in a social setting where, by “appropriating”, involved actors set its value within this particular environment, which applies to both the symbolic and material kind (Bourdieu, 1986, p. 20). This means that cultural capital is not universal and only valid and valuable in its specific area of intervention.

However, a competitive advantage of cultural capital in a symbolic form can arise in different areas, depending on the circumstances, which Bourdieu refers to as “symbolic logic of distinction” (Bourdieu, 1986, pp. 18-19), e.g. the fact of being a university diploma holder might be the default and thus taken for granted in some areas to the extent that only its absence attracts attention. In contrast, it carries real value in the sense of distinction elsewhere because only comparatively few of an age cohort participate in higher education at all.

Overall, accounting for the approaches presented, while the forms of capital are well-known and employed in social sciences research practised around the world – thanks to Bourdieu’s popularity and essentiality in teaching introductory sociology and his works’ translation in more than thirty languages – including sociology of education in general and more precisely higher education also in an African context (Langa, 2010, 2011), the university functions have not yet been widely utilised as a frame of analysis, and, even less so in Africa. Ambivalent personal oscillation on a micro as opposed to a macro level, then, is comparatively recent and interdisciplinary from the outset, between social sciences and psychological disciplines. In this form, it has not yet been referred to in a (higher) education setting.

4.4 Approach of Analysis and Hypotheses

To adequately address the research questions stated in part I, namely,

“Which implications does the degree of the Algerian higher education system nationalisation as well as internationalisation orientation have on institutional development as well as individual practices? “, and, specifically, the subquestions

- Which functions does the present-day Algerian university feature, including in international comparison?
- How do Algerian academics cope with system implications?
- Why do Algerian academics act in this manner? ,

the analysis presented in part III is a three-fold sequence, starting from the macro perspective of system characteristics and factors, to arrive at the micro perspective by individual academics, with practice, research activity, as a linking element.

Firstly, there is an expression of a transformation element in Algerian higher education, triggered by, and correlating with, increasing globalisation and thus pressures for system integration. Hence, the system is placed between the poles of the local versus the global in its orientation of system and the national versus the international, which is reflected in higher education policy. Secondly, the focus is on the comparatively new function of research as an emerging field, playing a key role in internationalisation adaptation processes. The undergoing transformation is made visible by its politically prescribed priority. Thirdly, the lens is brought to those carrying out research: individuals within the Algerian academia in that their academic practices are an expression of individual adaptation strategies.

This status quo requires positioning of the dominant function of the contemporary Algerian university between the historically ideological base and the modern Humboldtian research university, followed by an identification of actors' oscillation by system ambivalences combined with the labelling of ways as well as means of action in the particular situation, and, to link the two levels, an analysis of the reasons for different strategies employed.

Hypotheses

- There are system limitations related to a lack of institutional autonomy.

An Algerian higher education institution is subject to centralised governance control, which makes it prone to politicisation. Those system characteristics are untypical in the understanding of academia worldwide, where universities are generally considered special organisations and self-administered. If these conditions are not met, however, individual academic freedom is at risk.

- Research is a new social field.

Research has played a subordinate role in the Algerian higher education system's ideological outset. It has only recently been made a top-down type policy priority, implying effects on academic staff. Research activity constitutes a new means for differentiation among colleagues and leads to competition in a new social field (Bourdieu, 1975, 1980; Bourdieu & Wacquant, 2006).

- Algerian academics' agency is reflected in conducting research in an individual way by employing adaptation strategies.

Members of academic staff/researchers need to position themselves with the new or newly prioritised requirements of actively engaging in research, both in comparison with others, and individually, e.g. for promotion. They may deal with the situation differently, i.e. by embracing it, rejecting it, or withdrawing themselves from the exposition. These coping strategies are an expression of personal agency and are thus dependent on each individual.

- Personal internationalisation experiences such as stays abroad correspond to successfully engaging in research as an expression of embodied cultural capital and serve as a means of differentiation in national academia.

Embodied cultural capital is the only means of differentiation where system limitations exist, and in the absence of both social and economic capital-related factors as in the Algerian case. The accumulation of embodied cultural capital is essential in this process, which is facilitated by individual mobility experience, and, thus, partaking in internationalisation not accessible to all. The selection criteria for these highly competitive opportunities are likely based on research productivity.

The framework presented in the previous subchapter, a theoretically-guided analysis, gradually transits from the macro-perspective to the micro-level, with the resulting ambivalences linking the two by oscillation, and highlighting the peculiarity, yet the

interrelationship between the two, in a given situation juxtaposed with a personal state. The first and the third components make up the analytical frame in the following, empirical part III by their inclusion as deductive, i.e. theory-based categories in conducting a qualitative content analysis. In contrast, the second element serves to explain the focus by exposing and underlining an invisible state of mind which leads to challenges experienced by individuals since the field they operate in has incompatible characteristics with the intended practices.

This chapter four has outlined the theoretical and conceptual framework, encompassing three theories, respectively, concepts, which draw on different levels and capture another aspect, yet complement and refer to each other, and the approach of analysis including the hypotheses. The macro-level in the form of the university functions and the micro-level, represented by oscillation in an ambivalent state, which are accounted for separately in the analysis, is linked by the forms of capital as an overarching concept, presenting the reasons for and motivation of a reaction in the interrelationship with certain circumstances in a social field. The following chapter five will expose methodological considerations, consisting of the methods employed for data collection and analysis, the process itself, and the sample, as a prerequisite for the subsequent empirical part III.

5 Methodological Considerations

5.1 Document Analysis

Document analysis is a qualitative social research method conducted to assess meaning as well as different dimensions of a topic and an essential part of triangulation of the combination of methodologies to study a given phenomenon in providing a broad overview (Bowen, 2009). It is a common first step of qualitative studies, setting and complementing the material basis in preparation for the following empirical element. Public records in the form of policy documents (O’Leary, 2017) – while keeping in mind their official and sole-legitimacy nature, reflected in their voice and content – proved most useful in tracing the development and state of affairs of Algerian higher education as outlined in part I. Those were accessed throughout via the Algerian Ministry of Higher Education and Scientific Research (MESRS) website²²⁷, which has since been made available in English in addition to Arabic and French, linking to relevant bye-laws in the “Legal texts” section²²⁸, offering all editions of the *Bulletin/Journal Officiel* since independence, respectively, since the creation of the Ministry in 1971, with a separate compilation for the timeframe 2005-2018, presented in annual table index format²²⁹.

After identifying and scrutinising literature in Paris and Aix-en-Provence, France, from October 2016, Algerian physical sources could generally only be availed of once present in the country. During the first three months, January-April 2018, university as well as private libraries and the Algerian National Library were consulted in Algiers and Oran. The time factor of both limited visa duration and geographical spread of locations in different parts of the country, lead to the complex task of accomplishing data collection and the literature review at the same time. Not least, there were several logistical challenges, including security measures to be observed, e.g. not travelling between cities after darkness, limited opening hours and staff availability or restrictions on borrowing or photocopying. However, staff everywhere were eager to assist and facilitate the required inscription processes or authorisations.

²²⁷ <https://www.mesrs.dz/accueil>

²²⁸ <https://www.mesrs.dz/deja>. The French version was used.

²²⁹ <https://www.mesrs.dz/documents/21525/47949/Textes-Reglementaires-Fr-2005-2018.pdf/4f8f45fc-a436-4d2c-a209-23319c31950b>

The most up-to-date Ministry-spearheaded publications, including statistics and reports, were made available in person by an employee in an executive function in the ministerial agency Directorate-General of Scientific Research and Technological Development (*DGRSDT*) as of July 2019, after having been given some earlier versions during a first appointment in May 2018. Those are referenced as appropriate in the respective chapters in part I.

5.2 Expert Interviews, Sample, and Limitations

Expert interviews

Expert interviews are characterised by their “in-depth” nature and design (Yeo et al., 2014).

Semi-directive, i.e. guidelines-assisted expert interviews, were first conceptualised as such at the beginning of the 1990s (Meuser & Nagel, 2002).²³⁰ They may serve

(...) to shorten time-consuming data gathering processes, particularly, if the experts are seen as ‘crystallisation points’ for practical insider knowledge and are interviewed as surrogates for a wider circle of players. Expert interviews also lend themselves to those kinds of situations in which it might prove difficult or impossible to gain access to a particular social field (...) (Bogner et al., 2016, p. 2).

Persons are interviewed because of their specialist knowledge of a context or phenomenon of interest in a social setting (Gläser & Laudel, 2010). In this sense, interview partners are informants rather than respondents (Gläser & Laudel, 2016).

Considering the type of centralised and bureaucratised higher education governance in the Algerian context²³¹, the following dominant actor description characterises the setting and guides methodological approaches:

The discourse on internationalisation is often dominated by a small group of stakeholders: higher education leaders, governments, and international bodies. Other stakeholders, such as employers, and in particular the faculty and the student’s voice are heard far less often, with the result that the discourse is insufficiently influenced by those who should benefit from its implementation; (...) Internationalisation is evaluated too often in quantitative terms through numbers, or input and output, instead of a qualitative, outcomes approach based on the impact of internationalisation initiatives (...) (Wit, 2016, p. 16).

The methodological design of this empirical study addresses these issues by conducting qualitative interviews with Algerian academics, who are directly affected by the implementation. When utilising qualitative research, the required systematic approach is

²³⁰ For a detailed description of their situatedness compared to different types of interviews, see Lamnek and Krell (2016)

²³¹ See chapter 3.1

adopted, based on “(...) feedback mode (...) of testing and recycling successive adjustments” which consists of “(...) goals, a database, and predictive procedure” (Daghbouche, 2008, p. 76).

Accordingly, the thesis contributes to an empirical base as has been integrated into a recent project to tackle implementation challenges after the Bologna Process reform by a needs analysis employing qualitative methods and subsequent training of new lecturers in the procedure of comprehension, action and evaluation (Benleulmi & Hadiby-Ghoul, 2015, p. 11). Recent studies (Ridwan, 2015; Bouab, 2016, French Abstract) and the focus on Algerian professors conducted in the framework of dissertations²³² underline the critical role professors play in both the Algerian higher education system and its institutions, justifying their selection as interviewees. In the Algerian context, the expert interview type is useful as it offers access to a non-political sphere and discourse, which would otherwise be extremely difficult – if not impossible – to obtain.

Sample

The snowball technique, a qualitative, non-probability sampling method describing a process of recruitment of further research participants through interviewees themselves after a random starting point by a first identification (Lewis-Beck et al., 2004) was adopted for the sampling process after a university/institution comparative case study approach had been abandoned at an early stage due to anonymity concerns and requirements. It is deemed suitable to access hard-to-reach and “hidden” populations (Heckathorn, 1997; Goodman, 2011) as in the case of individual stakeholders in the controlled and centrally-governed environment of the Algerian higher education system.

Personal referral is accepted cultural and academic practice in the Algerian context and took place without the author’s specific intervention in the field as described in chapter 5.3 below after five contact persons were recruited in different locations and corresponding institutional settings. Nevertheless, it was requested to speak to representatives from a variety of disciplines, due to the expected differences given teaching and research language

²³² Bourenane, F. (2009). *Syndicat autonome des enseignants du supérieur algériens. Entre action localisée et préoccupations nationales*. Paris: Université de Paris VIII Saint-Denis.

Fayçal, I. (2014). *La contestation sociale en milieu universitaire en Algérie*. Paris : Université de Paris VIII Saint-Denis.

Toufik, M. M. (2013). *Les enseignants universitaires algériens entre autonomie et instrumentalisation*. Paris: Université de Paris VIII Saint-Denis.

of Arabic in social sciences and arts and humanities versus French in science and technological fields. Initially, postgraduate students were also targeted. These criteria account for an exponential, discriminative sampling approach (Heckathorn, 2011).

A total of 31 semi-directive expert interviews with one or two persons – from the same discipline, well acquainted with each other both from a personal and professional context – with researchers and professors of all disciplines, deans, vice-rectors as well as numerous graduate students (Master/PhD level), mostly in the form of focus group discussions, were subsequently conducted at a multitude of institutions in various urban or semi-urban settings in two main geographical regions of the country throughout April and May 2018.

Out of those, 15 interviews in the form of 12 (single) expert interviews and three 2-person interviews involving a total of 17 persons, out of whom 6 female and 11 male interviewees, were selected to be included in the analysis²³³, according to interviewee profile with the status criterion of being *enseignant-chercheur* – academic staff engaged in research – at a university or permanent researcher at a designated institute, and completeness, focussing on professors both with and without administrative functions, and including two persons based at national research institutes as well as one political representative.

The disciplines represented in the selected interviews include Chemistry, Physics, Mathematics, Engineering, Architecture, Arabic Language and Literature, Islamic Sciences, History, Library and Information Sciences, Archaeology, Anthropology, Sociology, French Linguistics and Music. Those were grouped into subject areas, namely, Humanities/Arts/Social Sciences (*SHS*) on the one hand, and Science, Technology, Engineering and Mathematics (STEM) on the other hand. The interviews lasted between 35 minutes and 2 hours 45 minutes, with an average duration of approximately one hour.

Limitations

Due to the difficulties accessing the field and the latent surveillance situation in data collection experienced by the author as described in chapter 5.3 below, there was little influence on the choice, and selection of, interview partners' profiles or characteristics, for example with regards to an institutional affiliation (university/research institute), and status with or without administrative function. Likewise, PhD candidates and students in focus

²³³ See Annex C: List of Interviews

groups between 5 and 27 persons were asked or even set aside to participate by their supervisors or instructors as opposed to their initiative, and the latter generally remained present or in hearing distance, thus rendering data unusable. There is a potentially high self-selection bias of persons with habitual and previous international exposure and experience. The ability to communicate in French was an implicit criterion to participate in an interview.

Due to time constraints both in a given interview situation and more broadly by the limited duration of the author's stay in one location and on the national territory, several otherwise promising interviews remained incomplete, as far as questions 10-15 are concerned, which are critical for the analysis, and therefore had to be excluded. In general, the conditions for the conduct of the interviews were not ideal as they were prone to disturbance and frequent interruption by phone calls (incoming and outgoing), open doors – at least partly for cultural reasons in the case of a male interviewee in a non-public space – and incoming or outgoing persons, as well as other conversations in between, including questions directed at the author, inviting discussions of no relevance to, or going beyond, the topic of discussion. One single expert interview – person 8 – was continued the day after as a two-person interview – person 8/9. Additionally, one interview was conducted with two persons, namely, the father (person 12), a humanities professor, and his daughter, a STEM PhD candidate (person 11), on the request of the latter.

While representatives of most subject areas are included in the sample, some are missing, such as medicine and economics, due to non-accessibility, respectively, contacts, or simply non-availability at affiliated institutions. About two-thirds of all interviews conducted and subsequently selected for analysis originate in one region, rather than being more equally spread among the territory and indirectly accounting for a variety of institutional profiles. Making up only approximately one-third of the sample, female professors/researchers are similarly underrepresented. Therefore, equal gender ratio could not be achieved.

With anonymity safeguarding and thus data protection being the highest priority, some potentially identifying data including type or level of administrative and executive function had to be removed as well as disciplines aggregated. For this concern, it was decided to refrain from including biographical data, too, so that no correlation is possible.

Lastly, the author's identity as a foreigner did likely facilitate access and willingness to participate. At the same time, free movement on the campus was somewhat restricted and

subject to a prior invitation and thus authorisation by respective members of the institutions' rectorates in most cases. It was also noticed that some efforts were made to ensure that certain persons were included in the sample. This occurrence might point towards an attempt to control information given in the form of politically desired/conform opinions.

5.3 Data Collection

Explorative pre-tests were conducted to develop, and, at a later stage, test interview guidelines. The first version was designed for both students and lecturers/researchers. It contained two transversal topics: evolution past, present, future and internationalisation, as well as three meta topics: I. Condition, (institutionalised) experience student/*expérience étudiant (institutionnalis )*, question blocks 1/7; II. Condition, (personal) lecturer-researcher experience /*condition,  p rience enseignant-chercheur (individuel/le)*, question blocks 2/3 ; III. University, state, reform(s), evolution/*Universit ,  tat, r forme(s),  volution*, question blocks 4/5/6. Those were operationalised by a total of seven thematic categories with 2-5 questions each as seen in the matrix below. Initially, it also included the following biographical data:

Profile information (professor/enseignant):

- *Age*
- *Name (OR Anonymous)*
- *Institutional affiliation*
- *Subject (discipline)/Department*
- *Profession/job title*
- *Educational background:*
 - *Bachelor/Licence, institution, year of graduation*
 - *Master/Ma trise, institution, year of graduation*
 - *Postgraduate degree, institution, year of diploma*
 - *Doctorate, institution, year of diploma*
- *Positions held within the current institution, job title, dates*
- *Position held in other Algerian higher education institution(s)*
- *Studied abroad*
- *Taught abroad*
- *Curriculum Development*

- *Language(s) of studies*
- *Language(s) of teaching*
- *Language(s) of research*
- *Place of birth*

Topic/Category	Situation	Relevance	Condition	Internationalisation
Student Affairs/ Affaires Estudiantines				
Research/Recherche				
Teaching/curriculum/ Enseignement				
Science/research management/ Gestion de la recherche				
Internal governance: Administration				
External governance: communal, regional, national level/niveau				
Role				

Figure 12 Interview matrix

In April 2017, the first version was tested as a bilingual questionnaire sent via email to five participants, out of whom the author knew two personally in the context of a previous assignment, with the remaining three having been referred by former colleagues.

- I. Algerian diaspora in France, having studied in Algeria, male, 52, language: French

- II. Recent Algerian graduate and junior lecturer in English, male, 27, language: English
- III. Recent International graduate from an institution in Algeria, male, 28, language: English
- IV. Lecturer at an Algeria higher education institution, female, 51, language: French
- V. Education professional, Algerian diaspora member in France, female, 40, language: French

One telephone interview was also conducted with a member of the Algerian diaspora in France.

Drawing on the feedback received – mainly related to non-applicability to individuals' situations and, partly, lack of clarity in the formulation of questions – by July 2017, a modified version derived from compiled answers, and including and referring to Manuell Castells' four functions of the university (Castells, 1993, 2001, 2017) was then tested with various persons, including lecturers, researchers, and postgraduate students at Master and PhD level, of different disciplinary backgrounds in multiple locations of the country over six weeks between January and March 2018. The majority was made up of informal and partly spontaneous conversations at persons' workplaces or at institutional and private (non-university) libraries, during which notes were taken. On some occasions, the guidelines were adhered to as planned, on others, this was not the case, depending on the situation, such as whether privacy could be safeguarded, and the time available.

Nevertheless, three interviews were conducted using the guidelines and recorded, out of whom one with a female PhD candidate, one with a female lecturer-researcher in an administrative function, and one with a male researcher at a national research institute.²³⁴ Contact to one person had been established while still in Germany before obtaining the visa, on the occasion of a research symposium organised by the author on the Algerian higher education system developments past, present, future, in Bonn, December 2017. The two other persons were willing to participate after having met them at a library, respectively, during an institutional visit.

²³⁴ See Annex C: List of Interviews, PT (pre-test) 1-3

To start with, as a foreign national, access to the field for qualitative data collection in the form of interviews, as well as intended prior literature search, proved extremely difficult. It took one year in total for the author to receive her first three months visa for entry to Algeria – notwithstanding several prior professional assignments over two years, and an associated network of contact persons. Until then, the process had been pending. It had been formally agreed to conduct a research stay of three months, divided into two six-week visits, before and after the summer break between academic years, at a research unit with expertise on the subject. The host was identified, and all required documentation was submitted first to the centre’s administration to then obtain the necessary approval from the Ministry of Higher Education and Scientific Research (*MESRS*) for an institutional invitation letter.

Subsequently, any information on the status of the request was not available throughout the year of 2017, despite fortnightly requests at the centre. It is noteworthy, too, that no interview intentions were mentioned in the application, officially limiting the author’s stay to one institution only, alongside with perusal of the unit, and possibly adjacent, accessible libraries. While this procedure was pending – on advice from local colleagues – no other visa letters, which would have enabled travelling to Algeria, such as private invitations from former co-workers, should be presented, either. During that time, dissertation progress was stagnant, as many documents were not accessible remotely or not digitised. It also remained unclear whether the author would be able to complete a qualitative empirical dissertation as intended. Finally, an invitation letter could be obtained through personal contact with an executive official by an Algerian diaspora professor in France. To date, there has been no notification, neither acceptance nor refusal, on the status of the first request.

During the pre-test phase for six weeks, split in two stays between January and March 2018, the politicisation of the academic environment, with the effect of decisive influence on data collection became apparent on two levels. Firstly, as a foreign national, the author was observed during her presence on the premises and discreetly, even more so, during interaction with staff at a research unit. It was later confidentially reported that – although no formal interviews were conducted, neither conversations recorded – staff were not authorised to give the author any information as the visa was issued by another authority. Moreover, it was noted that the author was not welcomed to attend scientific events involving other foreign nationals either as participants or organisers without registration several weeks in advance. Furthermore, feedback from interviewees led to the re-formulation of several questions and scrapping of certain words, which were deemed “too sensitive”, and

thus with political implications, examples of which include “(post)colonial”, “ideology”, and “massification”.

Given these circumstances, the author was only able to talk to persons selected or approved by an institutional representative in an executive position, for which appointments were set up, usually by mobile phone calls, on the author’s behalf. This included students on request; however, during three group discussions, involving a total of 45 students, the supervisor or instructor, as well as other persons such as administrative staff, remained present. With regards to students – rather than the anticipated linguistic comprehension problems – issues encountered were related to the non-familiarity with an interview setting, and the resulting short answers or shrugging altogether, which prompted frequent closed rather than open questions intended, eliciting some degree of free narration.

As a foreign national and non-student, the author had never been permitted to enter (female-only) university residences where students would normally be present if not on campus. Once it had become clear that it would not be possible to talk to local – let alone international – students in any location unobserved, without the then inherent censorship factor on both the interviewer’s and the interviewees’ side, it was decided to shift the object of study to, and limit the focus on, professors, to whom access was ensured while authorised to move freely on a variety of university premises. Other contacts were made either directly in libraries or through PhD candidates or researchers working there.

The 17 – 15 numbered and 2 optional, additional – questions in the final version of the interview guidelines²³⁵ were constructed as open-ended and designed in a deductive way, i.e. from the general to the more specific as the sequence progressed. There were thematic blocks, notably, internationalisation and reforms, though those were neither explicitly labelled nor mentioned or read out to interviewees. Although information sheets, including individual printouts of the guidelines, had been prepared for each interview, interviewees generally preferred having questions read out just before replying, rather than looking at the document first or in addition.

Interviews took place at the university workplace, in (personal) offices, in (private) libraries, in public places such as a restaurant or hotel, or at home, as requested or suggested by the interviewees. Appointments were made and arranged at short notice, for the most part by

²³⁵ See Annex A: Interview guidelines

telephone calls by the author herself or by colleagues, including the same day. Drop-in was also solicited in some cases. Interviews were introduced by the thematic complex, mentioning higher education reforms and system internationalisation for a positive connotation – as the pre-test had shown – as they had also been announced when arranging the interview. Before starting a formal interview, interviewees were informed about the number of questions in two parts and the approximate duration of one hour on average. Research questions were not explicitly mentioned.

Participants were reassured of their anonymity and personal data protection and were asked for permission to record the interview with a private dictaphone²³⁶, for quality assurance in data analysis, to which all interviewees – without exception – agreed. It was decided to abstain from both individual written recording consent and data utilisation permission forms because of their likely suspicion raised in the given cultural and political context. No documents were sent via email to participants before or after the interview.

5.4 Qualitative Content Analysis (QDA)

Interviews selected for analysis according to the criteria outlined above, as well as three focus group interviews with postgraduate students and PhD candidates, were subsequently transcribed. Thanks to the availability of dedicated budget by the author's doctoral scholarship provider, transcription was, for the most part, outsourced to two former Algerian colleagues with academic qualifications in linguistics (French/English) and education sciences and experience in academia and teaching, working outside of the interviewees' affiliated institutions. MP3 audio files were shared via a secure platform, *Seafile*²³⁷ personal server space provided by the University of Mainz, Germany. Access was granted temporarily only, and confidentiality instructions were given to persons transcribing. The author did quality assurance in double-checking and editing and correcting upon receipt of commissioned transcripts as word documents. Despite service providers, there were problems in implementation, delaying data analysis: the completion of the transcription process took as long as six months after the data was collected, until January 2019.

Transcripts as a static, compressed, presentable form of the spoken data, were created, cleansed of dialect and colloquial expressions to give focus to the interview content and for easy readability as a compromise between precision and workability. The semantic-content

²³⁶ Model: Olympus WS-852

²³⁷ <https://www.seafile.com/en/home/>

type contains what is being said rather than how exactly something is said. Rules were adopted as presented in and applied by Dresing & Pehl (2015, pp. 28–32), developed from Kuckartz et al. (2008) to streamline transcription and software-assisted analysis in the best possible way.

Employing locally installed Qualitative Content Analysis (QDA) software ‘f4’²³⁸ on a personal, fixed-term, licence, a first open thematic coding in category systems of first – hierarchical – structure (Saldaña, 2016) was done to identify relevant material. Qualitative content analysis (Schreier, 2013, 2014; Mayring, 2015) was chosen as a means of analysis, preceded by systematic coding following prescribed steps.

Accordingly, the category system is a mix between deductive, i.e. theory-based main categories, and inductive, data-derived subcategories. The main categories are made up of the four functions of the university by Castells (Castells, 1993, 2001, 2017)²³⁹ and Bourdieu’s types of capital (Bourdieu, 1986)²⁴⁰, which are complemented by subcategories created from the data. The aspect being coded is the topic/theme, and relevant material is included, observing the saturation criteria. The material is then segmented into units according to content criteria before developing a dynamic coding frame, which is amended in the process of data perusal. Coding is done in a hierarchical structure (first order). The results of the analysis are presented by a mix of typology and category system description.

²³⁸ <https://www.audiotranskription.de/english>

²³⁹ See chapter 4.1

²⁴⁰ See chapter 4.3

Part III – Empirical Study

After the preceding part II, outlining the theoretical and conceptual framework as well as the method of data collection and analysis employed, part III is devoted to the empirical study, consisting of chapter six as results description, and chapter seven as analysis and synthesis of the findings, complemented by the subsequent, hence evidence-based, policy recommendations and outlook as the conclusion of this thesis. The first part of the theoretical framework is applied by the qualitative content data analysis method in chapter six. In contrast, the second and third part will be outlined in chapter seven.

The following chapter six is based on the application of Castells' four functions of the university, namely, ideology, elite selection, training of the bureaucracy, research, plus non-captured aspects "other". It has the objective to enable positioning of the present-day Algerian university, according to its orientation towards the four functions, and the extent of their manifestation, which allows for the determination of the system characteristics and its tendency towards the national versus international, respectively, global versus local. Therefore, the results depict the macro-level context as the Algerian higher education system, in which Algerian academics operate, setting the scene for an analysis of this very micro level.

The functions correspond to the first level subchapters, which are then divided into sections based on theory. It has proven not only useful but necessary to combine the default deductive with inductive category-creation, to describe and account for the material accurately. At the beginning of each subchapter, the theoretical foundation, from which the codes are derived, is mentioned, as well as their occurrences for each of the functions and their composition. An anchor example has been integrated where applicable, too, to exemplify its scope for content. The chapter ends with a reflection on the suitability of the first theoretical concept used. By doing so, the specifics of the Algerian case, characterised by its postcolonial situation and thus the relevance of historicity, become apparent. Further, the following analysis focus on individual academic research practices is highlighted and justified.

6 Synthesis of University Functions in Algeria

6.1 Ideology Function

The university ideology function as a theoretical main category is defined as follows: “An ideology-diffusing institution is an enactment of the first fundamental role of universities, despite the ideology of their ideology-free role” (Castells, 2017, p. 35). The types of ideology present in the Algerian context are classified into four theory-based subcategories, presented in the order as found in the literature (Castells, 2017).

Initially, three out of seven cross-cutting anchor examples have been chosen, which have been coded as ‘other’, to introduce the role of the ideology function as will be detailed. The following statement exemplifies nationalism as an expression of ideology at and in the Algerian university²⁴¹:

(...) To define it exactly, we need to have a seminar for that (laughs). We can, we can have pillars, predefined and known by everyone, but there are also points of divergence, points of divergence. But, there is a big chunk of this philosophy that is, which all Algerians adhere to, all lecturers, all, the whole university community (6_m_Arts_Humanities_Social_Sciences_executive_function_central_unit, Paragraph 163).

This statement shows that there is a particular, national, ideology in the Algerian higher education system, which is accepted as given, and which applies to all members of the university community, cutting across disciplines and personal research interests. Hence, the Algerian university as a single institution but also the system more broadly deviates from what is the standard elsewhere, the orientation towards the international, as quality assurance for teaching and research.

Implications of this paradigm become clear insofar as it is equally accepted to adhere to some – religious – principles, to which reference is made, yet not explicitly mentioned: “Ah, okay, of course, of course. It’s true, you’re talking about the philosophy of; yes, we must not get out of what the country imposes, we must not go against the principles of the country” (12_m_Arts_Humanities_Social_Sciences, Paragraph 455).

²⁴¹ Translation of all citations given by the author, as close to the original as possible and wherever feasible. The paragraph numbers refer to the respective original French transcripts attached (see Annex D), with the exception of interview number 2, which was conducted in English.

Also, the de facto free provision of social services available to all Algerian students is underlined:

(...) The fact that everything is for free. There is free accommodation. University transport and catering is practically for free. You are there; you may have noticed, the meal ticket is 1 dinar 20; 1 dinar 20, it's 1 cent of, 1 euro cent. *And it has not increased since...* It has not changed since our time; it has not changed. Since independence, it has been 1 dinar 20, and it is still 1 dinar 20. Breakfast, it is 0.5 cents, so 0.5 cents, this is not even 1 euro cent. *It does not even exist (laughs)*. Not even half; it doesn't exist (...) (13_m_STEM_administrative function faculty, Paragraphs 56-60).

This statement shows that gratuity plays an important role both past and present in Algerian higher education, which is part of the country's socialist outset and which retains validity to this day.

However, as a disclaimer, the selectivity of the subcategories is not completely applicable as, e.g. Arabic as the national language has a religious origin, which then has political implications. Also, as will be shown, both the sections 6.1.2 and 6.1.3 – political conservatism and social change, respectively – are understood as broad, in that they encompass a variety of aspects, the corresponding subcategories of which are created inductively. These two poles can be taken as a central source of conflict, too, as they create the ambivalences which will be dealt with in chapter seven.

6.1.1 Faith-Based

Des fois, on dirait en Algérie que c'est Dieu qui dirige (...) ²⁴² (10_m_Arts_Humanities_Social Sciences_executive function_research unit, Paragraph 270).

Faith-based ideologies are of historical importance:

Firstly, universities have historically played a major role as ideological apparatuses, rooted in the European tradition of Church-based universities, either in the statist version of the French, Italian or Spanish universities (closely linked to the religious orders, to the Roman Catholic Church and to the national or local states) or in the more liberal tradition of theological schools of Anglo-Saxon variety, ancestors of the liberal arts colleges (Castells, 2017, p. 35).

Faith-based ideology counts 17 occurrences. It is thus present at Algerian higher education institutions – while some interviewees refer to the more neutral wording religion, some to the more politicised description of Islamism. Religion may be seen as an overall guiding framework;

²⁴² At times, one would say that, in Algeria, it is God who governs

Respect is the principle. That means that there is, how I will say? Principles, taboos. We must not touch these taboos. Taboos, it's religion, religion is sacred. Islam in Algeria, for example, it's sacred, because ninety-eight is Muslims. So, we should not touch the principles of Islam. Arabic, for example, it is, it is the national language (...) (12_m_Arts_Humanities_Social Sciences, Paragraph 459),

or indeed, religious principles are repeatedly stated as a motivation to conduct research: “We must always strive for knowledge. It is our religion. We say: ‘One must always have knowledge and we must always seek knowledge, even in China’ (...)” (12_m_Arts_Humanities_Social Sciences_Paragraph 585); and it is desired that the existence of these specific values is equally accounted for: “(...) we pass on values, we pass on academic knowledge and sciences, knowledge (*in Arabic*) ‘al maarifa’, knowledge. We pass on values at university, that will be it, the conclusion of your work. We pass on values, but also humanism. Very important (...)” (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 217). In suggesting the outcome that values are passed on, the ideology component of the university function is given higher priority and significance than any other. The specifically historical dimension is taken into consideration, which is juxtaposed with the present, such as:

(...) since the end of the 80s, and mainly from the beginning of the 90s, I was no longer a student, I was already registered in (*city in France*), and it is another culture, another paradigm that settled in the Algerian university, and downright, it was the Islamist paradigm (...) (16_m_Arts_Humanities_Social Sciences, Paragraph 8).

As can be seen, faith-based ideology in the form of Islamism has become politicised in the past, which arguably still has an impact on the present state of affairs. Whereas it is emphasised that Islamism is an ideology just like any other; “(...) For me, Islamism is only one ideology. *Like others*. Just like others, exactly (...)” (16_m_Arts_Humanities_Social Sciences, Paragraphs 8-10) and that the presence of multiple, co-existing ideologies is positive;

(...) So, the Algerian university, it's a university of the world, and it is crossed by different political currents, and it is crossed, and it was crossed by different ... Yes, whether it is the religious currents including fundamentalism, what is called fundamentalism, fundamentalism, social currents, socialism, socialists, communists and capitalists, the liberals, as well as others ... other currents. So all these currents exist here. That's it. And it's a sign of good health (...) (15_m_Arts_Humanities_Social Sciences_administrative function_faculty, Paragraph 46).

It is stated that, recently, ideology has shifted towards this very faith-based dimension:

Whether it is a little dogmatic socialism or in the face of liberalism, here is a bit dogmatic too, or whether it is the weight of religious ideas. Well, unfortunately, today, we suffer more from the weight of religious ideas. *Okay*. This, that's intolerable, I mean, it's not possible! (1_m_Arts_Humanities_Social Sciences_research, Paragraphs 257-259).

While this development is strongly rejected as it goes against the principle of individual academic freedom, it is noteworthy that the above are the only occurrences where political Islam is mentioned. Otherwise, there is a silence on this topic, which points at a taboo status of the issue. When a reference to the past is made, there are no implications for the future, so the ‘black decade’ and its consequences on the present-day situation is generally left out of the conversation.²⁴³

Accordingly, social sciences, in general, are subject to ideology to some extent: “(...) We are not into ideology, we are not much into ideology; we are a little into ideology in the humanities, in certain disciplines of the humanities; some disciplines, not all (...)” (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 231), and the difference to ideology-free(er) science disciplines is not only openly admitted but underlined; “Because them, in the humanities and social sciences, the weight of ideologies are huge. *Okay*. They are huge; they are even applicable to all methods, to all strategies that can be implemented in these universities. Us in the technical sciences, we are somewhat free, we got rid of ideology, and philosophies, no (...)” (3_f_STEM, Paragraphs 343-345).

In this context, the prevalence of socialism over Islam as an ideology at university is also mentioned: “*Well, I imagined, for example, values, Muslim values or others, but, also, well, already, the social side, because it is part of the social side. Yes, the social side. We don’t ask him to pay what he has broken (...)*” (13_m_STEM_administrative function_faculty, Paragraphs 69-70), a fact which leads to the following subcategory of type of ideologies, political conservatism.

6.1.2 Political Conservatism

(...) C’est de permettre à l’Algérie de défendre plus ou moins son indépendance²⁴⁴
(16_m_Arts_Humanities_Social Sciences, Paragraph 116).

The theory-based subcategory of political conservatism as a kind of ideology is described as follows:

(...) and therefore, they will tend to express – and even amplify – the ideological struggles present in all societies. Thus, both conservative and radical ideologies find their expression in the universities, although the more the ideological hegemony of dominant elites is established in society at large, the more conservative ideologies tend to be predominant in the university (...) (Castells, 2017, p. 36).

²⁴³ This might be due to the fact that foreigners like the author are not to express or engage in such a - perceived – sensitive conversation, and/or that the presence in the political sphere is taken for granted as a kind of unwritten law not worthy or able of discussion. See also synthesis and discussion, chapter 7.4/7.5.

²⁴⁴ It is to allow Algeria to defend, more or less, its independence

Political conservatism in the Algerian context is present and multifaceted as has been found in the data. It refers to socialism, as well as nationalism, as a reference to a political system.²⁴⁵ Those, and the subsequent, subcategories have thus been created inductively. As for occurrences, the nationalism categories counts 45 before the socialism category with 35. These numbers are an indication for its continued importance and topicality in the present-day Algerian higher education system positioning, respectively, orientation.

Socialism

Initially, it is outlined that a socialist approach governs Algerian higher education policy: “(...) the goal of our teaching is not to create the elite, it is to give a general education to all people” (10_m_Arts_Humanities_Social_Sciences_executive_function_research_unit, Paragraph 88). This state-of-affairs is closely associated with higher education massification as a consequence: “(...) there is the number of students who have their baccalaureat; the higher education system stipulates that they need to be offered jobs and study places. So from the amount point of view, from the mass, it is an enormous charge. It is not easy for Algeria!” (6_m_Arts_Humanities_Social_Sciences_executive_function_central_unit, Paragraph 87).

This very massification is portrayed as negative as it is a burden for the entire country, financially as well as economically. It is, in fact, clearly labelled as socialist in that all receive equal treatment by education in the form of university access:

So, Algeria is a country that started on socialist politics, not to say, ... *Yes*. ... Communists. *Yes*. Socio-communist, which wanted a form of egalitarianism for universal instruction. *Yes*. And for everyone, well, it showed its limits because everyone is not the same, everyone does not have the same abilities, the same competences (...) (3_f_STEM, Paragraphs 127-133).

Furthermore, there is a specific way of Algerian education policy, referred to as social-communist. Hence, socialism, as the prevailing political system, is even regarded too weak to describe the – communist – status quo, which does not differentiate at all between individuals' predispositions. Massification is also stated as such, with its implications on poor quality;

Yes. Today the level, when you say; one must weigh the term of massification policy, the mass: everyone goes to university and, in particular, everyone must succeed. *Yes*. So if everyone goes to university and if everyone will succeed, the equation is unsolvable. It means that whatever the level

²⁴⁵ The terminology is based on Castells' definitions above (see 4.1.), respectively, wording as used by interviewees as opposed to concepts from a political science perspective.

of the student, you pass him. So in the end, it's exactly that, we really must not lie to ourselves at present (...) (3_f_STEM, Paragraphs 147-149).

In this context, the negative impacts of an approach of exhaustive public funding are underlined; "(...) It's not like here, we have damage in the labs every day, damage, damage, damage, and so it's very expensive. That's among the points. And so, the student, if he does not pay, he is not responsible (...)" (13_m_STEM_administrative_function_faculty, Paragraph 68). This statement shows that there is a blatant lack of personal accountability since everything is provided free of charge, including laboratory materials. It is also emphasised that there is free education even at postgraduate level: "(...) but their studies up to Master's level, it's the Algerian state, it's the Algerian society that paid" (16_m_Arts_Humanities_Social_Sciences, Paragraph 20).

By referring to society, the socialist paradigm is reiterated in that every member of society contributes to each other's university education. Additionally, the notion of social peace is made explicit; "(...) Because, especially, especially, during the past, where, every time, we wanted to do something for social peace: leave us alone (...)" (10_m_Arts_Humanities_Social_Sciences_executive_function_research_unit, Paragraph 256). This very social peace refers to the absence of civil unrest due to the perception of equality, even if abstract. It is, however, said to hamper research and development; "To say: They were looking for what they called social peace. But social peace is not, everything is ... *Well, I think it has repercussions on everything, already, on research. On research and work itself*" (10_m_Arts_Humanities_Social_Sciences_executive_function_research_unit, Paragraphs 294-296).

Correspondingly, the training function is even subordinate to the social appeasement concept; "(...) At times, one has the impression that, for the most part, the university serves as a means of social appeasement rather than a place to actually train leaders (...)" (1_m_Arts_Humanities_Social_Sciences_research, Paragraph 48), which reiterates the importance of socialist ideology in the Algerian university in the form of social peace/appeasement. The socialist basis is also apparent in the country priority necessity paradigm, which governs the choice or establishment of new courses and research, among others;

(...) Even in European projects, we choose our priorities, what are the priorities of the country, and converge all the research, the choice of Masters, the labels, the choice of doctorates. When one starts a doctorate with a title, a label, it needs to correspond to a priority of the country; otherwise, it must

also uplift the student. When he finishes, will he find work? (...) (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 18).

This statement again emphasizes the common good of primarily the state and the society, with the consequence of superseding the individual's choice of subject.

Nationalism

Education is portrayed as a nation-building element: "(...), so the proverb says (*speaking in Arabic*): 'If this education no longer exists, the nations will disappear'. It is nations that disappear if there is no education" (...) "So that sums up a little bit the role of the university (...)" (13_m_STEM_administrative function_faculty, Paragraphs 97/99) so the nationalism type of ideology is put forward as the most important role of the Algerian university in relating education to the very existence of a nation.

It also serves as a vehicle for national interests transmission: "(...) So, it is to train people who will be capable of situating international issues, and defend national interests (...)" (16_m_Arts_Humanities_Social Sciences, Paragraph 114). The national interests to be defended indeed point towards a politicised role of the Algerian university, in that affairs of the whole country are at stake. It is, however, pointed out that;

(...) So to speak, we are among us, it's closed. We are in the national a lot more than in the international, So, that on the one hand. The other side, if you want, it's all the historical disturbances, which have repercussions on, now, if you want, which result in difficulties to be grasped and be understood, and to know the society (16_m_Arts_Humanities_Social Sciences, Paragraph 56).

This statement shows that the orientation of the Algerian university is towards the national, which is contrary to the global trend of internationalisation in higher education systems, including in the African context. More so, the system does not allow any foreign institutions, unlike others in geographical proximity in the MENA region: "(...) I wonder why Algeria does not have an American university, whereas you take Egypt, Lebanon, they have one (...)" (14_m_STEM_administrative function_central unit, Paragraph 72).

Further, the fact that there is a strong orientation towards the Algerian national higher education authority in the form of the Ministry becomes apparent as its special characteristics; "(...) First, I said, it's an Algerian university. It is a public university. It is not private. And therefore, there is a tutelage, which is the Ministry (...)" (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 231). Hence, the publicly financed Algerian university is coupled with centralisation in

governance. As a consequence, there is no institutional autonomy. This situation leads to a certain passiveness on behalf of academics: “(...) So, the Ministry, it provides its assessments. We do what the Ministry plans, its (*section*) policy” (17_m_STEM_executive function_political entity, Paragraph 50) as well as waiting for decisions rather than taking action independently: “*So now, what are the challenges and also the opportunities, the potential chances of Algerian higher education?* I would say, it depends on the decision-makers” (9_f_STEM_executive function_research unit, Paragraphs 207-208).

The ideological – as political – orientation of the Algerian university itself as well as its shift is also mentioned with regards to University functions; “I told you. In the beginning, it was instruction, after it became instruction and research; afterwards, it became serving the economy of the country. These are the present-day functions of the university; it is that, in any case, what the state wants it to be” (9_f_STEM_executive function_research unit, Paragraph 447). It thus becomes clear that the state wants to be adhered to by academics, which governs the Algerian university in its orientation. Furthermore, adoption of political discourse can be observed on one occasion, in as far as quantitative details are favourably emphasised:

(...) The state has really done a lot of effort regarding; so, say since (the *mid-2000s*) until now, from the point of view of construction, there, as you see, in (*mid-2000s*), there was nothing; it was a wasteland. And now, there are almost 25,000 study places on this campus, on this campus, not counting the other sites, for example (*campus 1*), city centre (*campus 2*). And so, all in all, I think we are at more than 40,000, and maybe more, study places. So, there is effort, actually. 40,000, not to forget the important part, so university services. I think we do something; maybe we are better off in these (laughs), it's the university residences. There may be over 20,000 beds. *20,000?* 20,000 beds, yes, that's it. With the student residences, there is more; that means that, already, there are more than 50% of our students who are residents (...) (13_m_STEM_administrative function_faculty, Paragraphs 50-54).

This statement shows how the quantitative-focused indicators for growth are put forward for showcasing, rather than quality-related outputs, which are less visible and more difficult to measure.

This situation is another indicator for a tightly closed and controlled system, which is aligned with state ideology more than research, as specific nationally-oriented research institutes exist: “(...) Research centre about the national movement and 1st November revolution” (15_m_Arts_Humanities_Social Sciences_administrative function_faculty, Paragraph 25). It is also stated that there are national references, a fact which refers to the curriculum and course accreditation process and that the national circumstances cannot be ignored: “The university, it's the Algerian university with its national references, and it's national

circumstances (...)” (15_m_Arts_Humanities_Social_Sciences_administrative_function_faculty, Paragraph 32). While this statement is generally applicable in many contexts worldwide, the existence of particularly national references is reiterated and portrayed as defining the Algerian university and thus its higher education system as a whole.

Not least, language plays a central role as a national identity marker. Arabic is found to have a political and thus ideological dimension in particular, e.g. the wish to promote Arabic as a language of science; “(...) the means for Arabic, for example, to be a language of research (...)” (12_m_Arts_Humanities_Social_Sciences, Paragraph 493), and, besides, to adequately account for its status as a national language for the countries’ leaders: “For the future, we hope that the Algerian university will train its executives in its language, Arabic, the national language (...)” (12_m_Arts_Humanities_Social_Sciences, Paragraph 572). On the other hand, the politicisation of the language subject is acknowledged; “(...) Except that Arabic is a very politically sensitive topic (...)” (14_m_STEM_administrative_function_central_unit, Paragraph 54) and concerns are expressed regarding the negative impacts academia-wise of a strictly Arabic-speaking environment:

Yes, yes! Yes, yes, yes. I will give you a striking example. Generally, the humanities and social sciences are lagging behind. All the disciplines of the humanities and social sciences are really, really lagging behind, because that is where students, lecturers, researchers are in strictly arabophone environments. *Yes*. So, nowadays, we know how science is distributed in the world; it is well known that the major poles of science are not in the Arab countries, that is a reality, nowadays, we must accept it as it is (...) (3_f_STEM, Paragraphs 179-181).

It is noteworthy that STEM representatives, too, are aware of the influence of language ideology, i.e. Arabic – while they are not directly concerned – as the two latter examples show.

6.1.3 Social Change

Social change as a type of university ideology function is described as follows:

(...) the more the sociopolitical rule of society relies on coercion rather than on consensus, the more universities become the amplifiers of the challenge to domination in society at large (...). In such cases, universities are still predominately ideological apparatuses, although they work for social change rather than for social conservatism (Castells, 2017, p. 36).

There are a total of 118 occurrences, which quantitatively remarkably supersedes the previously exposed – thematically opposing – ideological aspect as university function. This points to the fact that social change in the Algerian higher education system has indeed overtaken the formerly dominating political conservatism.

The Algerian university has a perceived and attributed role of social ascension, which is mentioned numerous times in the exact wording of social elevator, e.g. “(...) I had a friend, who, we’ll say, lived in precarious conditions, but this guy was a real genius. And the university allowed him to have a doctorate, to compete for a scholarship abroad, to go to Canada, to study. So yes, it plays the role of an elevator (...)” (14_m_STEM_administrative_function_central_unit, Paragraph 52). Through this elevator, social prestige such as study abroad is gained, and improvement of individual living conditions as well as the standing in society is assured.

Furthermore, the postcolonial situation pays tribute to the fact that university access allows for fundamental societal change:

You know that for any Algerian, enter university is to acquire a level. And until today, all mothers would like their children to have diplomas. *Yes, because they don't have it, or they have it, too?* They did not have it. My father never had a diploma. *Okay. Because at the time, access was, well, restricted, or ...?* No. Access was very difficult. During the French period, us, we could go for the simple reason that it was the war of liberation and that France loosened a little and let us enter (...) (10_m_Arts_Humanities_Social_Sciences_executive_function_research_unit, Paragraphs 144-148).

Due to the very fact that Algerians were almost completely barred from higher education for more than a century of French occupation, in post-independence Algeria to contemporary times, access to university as a right is clearly articulated: “Whoever says ‘democratisation’, the opening of the university, says ‘democratisation’; it’s giving all Algerians, all young Algerians, access to university; it’s a must (...)” (15_m_Arts_Humanities_Social_Sciences_administrative_function_faculty, Paragraph 10). Indeed, it goes as far as to say that whoever is not an academic is a failure nowadays: “(...) That too is a factor that has led to policies taking the direction of massification. If today we consider that a child, if it is not an academic, it fails (...)” (3_f_STEM, Paragraph 245), and that there is de facto no other tertiary education option:

Today, socially speaking, you have, you have a social status if you have a university degree; it means that we have degraded and completely devalued the training in trades. *Yes, there is only one status* (laughs). There is only one status, that’s it. *So that ...*, as there is this status; so it is necessary that everyone has it, this status. That’s it. Otherwise, you have nothing. So that’s why all the world has to do university. It’s totally and completely devalued (...) (3_f_STEM, Paragraphs 245-249).

Hence, socially speaking as is mentioned, lacking vocational training and its acknowledgement, there is an inflation of degrees, which makes higher education qualifications worthless. Accordingly, with regards to the entire society, progressivism is described as an occurrence of the past:

So, here too, I have to go back to the past. So, in the past, there was maybe not an ideology, but a discourse; it was the discourse of progress. Except, now, this discourse no longer exists. Then, the ideology that there was; it was the progressive ideology, on the national and international level. But now, it does not happen like this anymore. That's it (16_m_Arts_Humanities_Social_Sciences, Paragraph 112).

This statement shows that ideology is not necessarily perceived as negative as the connotation of the term suggests, but that it can be progressive, too, in the sense of social change as in this case. In this context, the Algerian university's role as integrating element for different social classes is still topical: "Firstly, the university is part of society; secondly, it is open to society, because it now receives, within the framework of democratisation, students from different social strata (...)" (15_m_Arts_Humanities_Social_Sciences_administrative_function_faculty, Paragraph 42). By democratisation, another aspect is introduced in the otherwise more negatively portrayed situation of Algerian higher education. Nevertheless, the expectation that everyone has a right to higher education extends even to the doctorate level:

(...) These days, the Ministry says, everyone to university, and then it says everyone to PhD entrance examinations. Somehow it does not work. Everyone to PhD examinations, ha! We have examinations with 2000 or 3000 candidates because the attitude is that everyone goes to university and everyone becomes a doctor, and everyone becomes ... (3_f_STEM, Paragraph 321).

Consequently, even though democratisation of higher education as a means for social change is underlined, side effects of this policy lead to an over-selectivity in PhD-level studies, which counteracts the intended general access to postgraduate education and research.

With regards to social change as a future orientation, as opposed to the dominating national central governance, internationalisation adaption is newly emerging. The development of internationalisation in higher education is not only acknowledged as influence and direction; "It's all that, the philosophy, that's it, knowledge, values, etc., that's the philosophy. But also manage to live up to a global level. Globalisation, too, is the desire of the Algerian university. Globalisation is important" (7_m_Arts_Humanities_Social_Sciences_executive_function_central_unit, Paragraph 229), but is it cited as an impact factor for necessary strategic decisions, too: "Internationalisation? Internationalisation is first and foremost by the choice of disciplines; discontinue archaic disciplines and take on disciplines that are international in scope" (7_m_Arts_Humanities_Social_Sciences_executive_function_central_unit, Paragraph 61).

It is noteworthy that – rather than outdated curricula in social science and humanity subjects – those disciplines themselves are being criticised. Yet, light is also shed on critical issues

such as the need to adapt to the local context: “(...) We have the obligation to adapt, we have the duty to adapt because the Algerian student is not a Dutch student, is not a German student. The environments and cultural contexts, social, in which they live are not the same (...)” (3_f_STEM, Paragraph 167). This statement shows that, as of now, internationalisation elements, where they are implemented in the Algerian higher education system at present, are not adequate as disconnected from the local environment and the Algerian characteristics.

Algeria finds itself in a position where it is exposed to international developments:

At university, well, right now in the world, we take part in what is called ‘globalisation’. *Globalisation*. That’s it, globalisation. For sure, globalisation is knocking on our doors, and we are forced to open the doors. We cannot keep them closed; we do not have any choice, because we live in a world that is ... *Connected*. Connected (...) (15_m_Arts_Humanities_Social Sciences_administrative function_faculty, Paragraphs 14-18).

In this situation, the country cannot isolate itself but must embrace those global trends. Thus exposed to higher education internationalisation, Algeria faces worldwide comparison, for example in terms of rankings: “(...) For sure, our universities are not very good, globally. And besides, they are not classified with the first universities; they are certainly very badly classified (...)” (15_m_Arts_Humanities_Social Sciences_administrative function_faculty, Paragraph 52).

Apart from the official, policy side; “(...) It’s always a value-add, opening up. So, it’s always been our policy (...)” (17_m_STEM_executive function_political entity, Paragraph 14), the benefits of international exposure with regards to broadening horizons and opportunities for exchange are repeatedly mentioned by both social sciences and humanities and STEM representatives, as is exemplified by the following statements:

(...) Accepting that you don’t think like me. It is a philosophy we should go for. Quite simply, now, I would have to accept that you don’t look like me, we don’t have the same life, we don’t have the same culture, but we are obliged to, not ‘obliged to’, it’s not the word, we are led to live together and work and move forward together. Why do we do cooperation? We collaborate with Africa; we collaborate with Europe. We are in the middle. We do not know if we are from Africa, from Europe, we are African, we are not African. But we have to work together (...) (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 219);

(...) So, we have something to give; we start to train people who are capable of giving. That is what is important, internationalisation. It is a very good thing, to be able to do an exchange, and the exchange, only increases the, how to say, allowing people to have an open mind. Is to increase an open mind; it is this open mind which is important. That’s what I think (8_f_STEM, Paragraph 11).

Consequently, European cooperation projects are encouraged as well as implemented: “That’s it. So I know there is a strategy in this sense, that’s why we have European projects.

Because before, Algeria wasn't, European projects, now, it makes sure to be there. So, for, whether in terms of mobility, funding, exchanges and everything, it is, I think it's a good thing. We must not stay in the retreat (...)" (9_f_STEM_executive function_research unit, Paragraph 212). The latter shows that Algerian universities want to see their place among international partners and counterparts as a primary motivation to engage in related activities. Throughout, cooperation experience is highlighted positively:

(...) Because people were lucky, in these projects, to have feedback of experience, from extremely competent people who are in these projects, not as consultants, so there was not this notion, but it was almost out of passion, okay? And we learned a lot from these people. And then, by dint of rubbing shoulders with other universities, Algerian, Tunisian, Moroccan, Lebanese, European. So you have a bit of these 'best practice' (...) (14_m_STEM_administrative function_central unit, Paragraph 92).

The best practices effect is underlined as favourable, which is linked to international exchange. Furthermore, Algeria is portrayed as an active contributor;

(...) That's how I think. When we go to France, when we go elsewhere, we have something to give, because we teach them something else, and they teach us something else. With someone you learn rigour, with someone else you learn to write, with someone else you learn to write scientifically. *The human side!* The human side! *Flexibility, yes.* Flexibility, exactly (8_f_STEM, Paragraphs 19-23).

Hence, the cooperation is not one-sided, and the more international encounters one has experienced, the more – and varying from person to person – competencies have been developed or newly acquired. As the following account shows, Algeria may feature a high degree of internationalisation already;

I think we have a lot of international. If you go and talk to the professor at the university, I would say about 80 to 90% of them have at least one trainee abroad at least one. *Okay still, yeah.* Still yeah and they still go for short visits to Europe, and there they have collaboration with European with and it works. We work within the European research program there are a lot of people who have programmes. We have programmes in our centre with the US. We have even with the Chinese. *Oh, good okay.* Yeah, we, I do not know if it is still on, but one time we had one. We have with the ... how do you call that ... Japanese. The Japanese use to offer a couple of scholarship each year for students who want to get a degree, but we have are mainly in technical fields. *Okay, yeah.* The American offer also scholarships in the program the Fulbright I do not know if you know it? *Yeah, mm-hmm.* And there are some people who went there but there you have some people who are technical and not technical. Sometimes they take a lot of people who are teaching English to ... what do you call that? To train them more, to train them more, to train for the abilities of, in English. I would say, in Algeria, it is really international (2_m_STEM_research, Paragraphs 185-193).

While the above description may be fitting for STEM subjects only, Algerian institutions play the role of national multipliers in project management with a focus on EU cooperation, too:

Yes. We do nothing but sharing. We have experts who have done dozens of universities; we appeal, we are called. *On national level?* We have (*function central unit institution*) who go nationally, yes, yes, at the national level, who depart, who stay three days, four days, they do training, and they come back. Once we offered training here for all Algerian experts for the region (*region*). We offer a lot, training, sharing, and they were shown how to write and succeed in a (*foreign*) project. Yes, yes, yes,

we share. We share, it is our, really, it is our policy. We have some skills. We are a little bit ahead, it's true, but we want everyone to benefit from it. We want to experience this with others in the same way, because if we are all alone, it's not nice, it is not good at all. It's not good. We need to; even those who give money, Europe, the European Commission, there should be credibility across the country (...) (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraphs 83-85).

Despite this fact, which is motivated by showcasing Algeria, yet, so far, it is applicable at the national level only, and limited to a few institutions of excellence and thus not representative for the country as a whole. The Anglo-Saxon tradition of graduating ceremonies has since been taken up in Algeria, e.g., “For the past three years, we’ve been organising graduation events for everyone with their outfits; it’s good; it shows appreciation because they are people who have stayed with us for at least five years” (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 100). This practice is proof of alignment to foreign traditions, induced by international exposure.

Further, while in the recent past, no other political parties were allowed, let alone non-governmental organisations, there are first signs of the development of civil society, the local development of which is mentioned explicitly as one function of the Algerian university – albeit exclusively by representatives from the arts and humanities –

(...) And the university must accompany the profile of the region; it is important. It must participate in the development of the region, and the administration of the region, the mayor, etc., must also know that it has an asset that is has never actually taken into consideration; it is the university and university competence, scientific, that they can use to develop their region (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 257).

Accordingly, civil society education and development are stated, although with varying degrees of importance, from its third function as follows: “The first goal is to guarantee training, higher education of the new Bachelor students. That is the first role. It also has the role of serving research. After all, it is the main place to do research in all fields. And, thirdly, its role is to guide society, illuminate society, guide society” (6_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 97) to first and primordial function with an emphasis on the personal development of critical thinking to become an able citizen: “The university has the role to make people aware; for me, really, it has the role of giving information to the public, so that they can think for themselves, so that they can be citizens. Yes. It has a civic role” (1_m_Arts_Humanities_Social Sciences_research, Paragraphs 348-350). To sum up, ideology is present at the Algerian university in the form of the importance attached to local and civil society interaction and development as an expression of a wider

orientation towards national development first and foremost,²⁴⁶ which has repercussions on, e.g., an applied nature of research.

University-society relations are derived from the fact that, at the base, “(...) As an academic, competencies are primarily made for the citizen (...)” (7_m_Arts_Humanities_Social_Sciences_executive function_central unit, Paragraph 174). There is consensus that the link is presently missing, once more by representatives from both discipline groups: “(...) It still seems like there is a skew between society and the Algerian university (...)” (1_m_Arts_Humanities_Social_Sciences_research, Paragraph 195); “(...) And then, the missing mission, it’s service to society (...)” (14_m_STEM_administrative function_central unit, Paragraph 236).

It is acknowledged that there is mutual responsibility by both actors to counteract the status quo:

(...) I say that the ball is between the two; each one throws the ball at the other. Society says that the university is a little far and it does not listen to us, and the university says the same thing. There is no contact; we don’t find a contact on the societal side (13_m_STEM_administrative function_faculty, Paragraph 64).

Nevertheless, it is advocated that this situation of idleness and lack of interaction cannot be maintained any longer;

Listen, the context, the relationship between the university and its surroundings, be it social or socio-economic, was a dream. Now it has become an obligation. That means we think about it seriously; we do a lot of publicity, we participate in activities, whether cultural, whether socio-cultural or socio-economic, we participate. That is, the university participates strongly (...) (6_m_Arts_Humanities_Social_Sciences_executive function_central unit, Paragraph 147).

Consequently, efforts are being made, and, as for implementation, first activities towards establishing the missing connection are taking place by the university, both with regards to civil society and industry, as is shown in the following: “(...) We must open the university to society, because we don’t make use of it now. There is an effort in this direction now; we attend visits, visits of businessmen, in universities (...)” (15_m_Arts_Humanities_Social_Sciences_administrative function_faculty, Paragraph 40).

While this is taken further, and ideas are proposed how the interaction should happen with political entities, “(...) The Directorate of Health of (*city*), the Directorate of Agriculture, yes, the Directorate of Culture, the whole beautiful world has to work with the university,

²⁴⁶ See chapter 6.1.2

and vice versa (...)” (7_m_Arts_Humanities_Social_Sciences_executive_function_central unit, Paragraph 31), urban geography and city planning, banning university campuses far away from city centers, hinders:

(...) the distance of universities from urban centres. *Yes*. And we have the expression that it is a bit of a world apart, a little bit American, but America/the United States, I think they have thought about it a lot better, whereas here, in fact, we have the impression that these are ghetto spaces. *Yes* (laughs). Universities, completely out of touch with society (...) (1_m_Arts_Humanities_Social_Sciences_research, Paragraphs 197-201).

This analysis from a social science point of view shows that there is a deliberate obstacle for interaction between university and civil society or industry actors, which is only perpetuated in designing and building new university campuses across the country.

Furthermore, personal social engagement in and for civil society has changed over time. While it seems unusual for present-day mid-career academics to be involved in civil society in the form of being a member of an association as an extra-curricular activity – be it inside or outside of the university setting; “No, no, no, no. I have never been a member of a (laughs) association, never ever” (4_5_f_Arts_Humanities_Social_Sciences_1_administrative_function_central unit, Paragraph 297), nowadays, students are more active: “Then now a lot of students, in my time it was not, but now a lot of people do some a lot of social work. My daughter and my son work in a lot of association, and they get involved with a lot of social work. *Okay*. In my time, it was less, much less” (2_m_STEM_research, Paragraphs 293-295). This statement points to the fact that the attitude of, reflected in civic engagement of academics themselves – with or without administrative function – plays a role in taking up, supporting or promoting several activities as the so-called ‘third mission’ university function.

6.2 Elite Selection Function

L’université algérienne a pour but de participer de l’effort de développement du pays, du pays; de former les cadres, les futurs cadres du pays (...) ²⁴⁷ (15_m_Arts_Humanities_Social_Sciences_administrative_function_faculty, Paragraph 38).

The university elite selection function is defined as follows by Castells:

Secondly, universities have always been mechanisms of selection of dominant elites. Included in such mechanisms beyond selection in the strict sense, are the socialisation process of these elites, the formation of the networks for their cohesion, and the establishment of codes of distinction between these elites and the rest of the society (...) (Castells, 2017, p. 36).

²⁴⁷ The Algerian university aims to participate in the effort to develop the country, the country; to train leaders, future leaders of the country.

In the Algerian context, elite, as can be seen from the statement above, means *cadres*, i.e. executives/leaders. In terms of distribution, the state-based university category features the most occurrences with 77, followed by the *Grandes écoles* at less than half, 37; and top university status with merely ten. Only five are ‘other’. However, as will be shown, the elite selection function of the Algerian state university is very specific and not by default or comprehensive from the system’s undergraduate admission policies.

6.2.1 State-Based University

The university role in state elite selection is outlined as follows:

Accordingly, a society’s dominant elites ought to be trained in assuming their role, for which the university dispenses values and know-how of its mechanisms, insofar as “beyond selection in the strict sense, are the socialisation process of these elites, the formation of the networks for their cohesion, and the establishment of codes of distinction between these elites and the rest of the society (...) as family heritage was eroded in its legitimacy as the sole source of social power” in the industrial age (...) (Castells, 2017, p. 36).

Overall, the Algerian university has the role of training the country’s elite, its future leaders: “(...) I will give you the answer given by everyone: it is to train the future executives of this country. That, that’s a ready-made answer, that everyone tells you. But when you think about the content of this sentence, it’s the reality (...)” (7_m_Arts_Humanities_Social_Sciences_executive_function_central unit, Paragraph 219). As shown by this statement, it is claimed that all interlocutors would give the same response; hence, the content is generalised as common knowledge in the specific Algerian context.

There is a mixed reception regarding the state-based – Algerian default – university. Although high social standing is still attributed to an academic; “(...) so far, Algerian society has had respect for the academic. It is important. So, he is seen as the researcher, the lecturer, the intellectual, all at the same time, we are respected (...)” (16_m_Arts_Humanities_Social_Sciences, Paragraph 94), it is acknowledged that common perception is changing towards diminishing prestige: “That means, university, in the eyes, in people’s minds; an academic is a leader, but now it is decreasing” (12_m_Arts_Humanities_Social_Sciences, Paragraph 475).

The default Algerian state-based university is still valued over the French-modelled *école* type: “(...) the university is still the privileged place next to the national institutes of administration, the Algerian ENA²⁴⁸, which operates on the French model ... ”

²⁴⁸ *École Nationale d’Administration* – Elite higher education institution in France and Algeria, aimed at training civil servants for the public sector. See also chapter 3.1.

(1_m_Arts_Humanities_Social_Sciences_research, Paragraph 229). This opinion points towards a rejection of (neo-) colonial institutions of the French type, and at the same time, appreciation of the Algerian university as a national higher education institution.

The necessity for a certain elitist approach is voiced; “I think that the university, it’s technically, it’s historically, it’s the temple of knowledge. It must remain a temple of knowledge; it must not be a tool to be used by everyone (...)” (9_f_STEM_executive_function_research_unit, Paragraph 253). Therefore, the implicit statement is that selection must take place at university, which translates – in principle – in restriction of access. Nevertheless, it is admitted that the concept of elitism is not engrained socially: “(...) And then the principle of elitism and all, it’s not, it’s not very rooted either” (9_f_STEM_executive_function_research_unit, Paragraph 44). Accordingly, it is made clear that: “(...) but now, it’s up to the decision-makers to say, hold on to this one, we can still train them to get even more. I am not against it myself, I am for the elite, without forgetting the others. But the elite should be taken care of, yes” (7_m_Arts_Humanities_Social_Sciences_executive_function_central_unit, Paragraph 237). Consequently, there is always reference to ‘the others’, i.e. the greater mass of students, which acts as a restriction to implement elite selection in the state-based university.

This fact leads to doubts of the Algerian university’s elite selection function as described in 6.1.2 above (cf. 1_m_Arts_Humanities_social_sciences_research, Paragraph 16). Hence, massification, in its function of social peace, is mentioned as a primary Algerian university function. Furthermore – although only partly – there is an outright denial of elite selection:

That is a good question. Selection of elites. That, I don’t know either, that, honestly, I don’t know. Who says elite, says selection. And is there really a selection at university-level? It depends, it depends. There are courses where there is practically no selection; everyone passes. And there are courses where it is very selective (...) (14_m_STEM_administrative_function_central_unit, Paragraph 202).

It can thus be concluded that the Algerian university as default state-based does not primarily assume the function of elite election from its outset as the political-ideological base is contrary to this concept. Nevertheless, some undergraduate courses as well as the postgraduate, respectively, PhD-level, may be highly selective also at the Algerian state university, as far as specific disciplines are concerned.

Frustration is expressed regarding the strictly centralised nature of discipline selection by Ministry allocation, based on pre-defined marks in key subjects:

For now, it does not exist, it does not exist, and we do not manage to establish this strategy, which basically can also guarantee a kind of quality. *Yes*. Because again, in a discipline, not everyone can go in the same discipline. So it is useless. Therefore, it is necessary to arrive at selections, but the selection is not by the arithmetic of the numbers and the grades. What it is currently, it is the system of the old, of the Ministry of Higher Education, the orientations, the selections are made on grades which is a total aberration. It is necessary to let the establishments, the disciplines, each discipline define access to its, to their courses, by a competence framework. This is the benchmark of expected skills which becomes the criterion for selecting a student for this or that discipline, what we, what we are not allowed to do. *Yes*. This is, once again, it is an interventionist policy of the Ministry of Higher Education. The issue of selection and orientation, it is strictly led by the Minister of Higher Education. Up to a certain point, the rules can be established, but it is also necessary to leave a certain autonomy to the disciplines and universities. They are managed by professionals to decide on the skills expected for access to a discipline. And that we are not allowed to do ... (3_f_STEM, Paragraphs 351-353).

Thus, the formal requirements by grades do not match the actual competencies necessary in the opinion of discipline representatives. This prevailing practice leads to a hierarchy of disciplines, which corresponds to social prestige as follows:

(...) So, for sure, we classify students, because, by discipline, we classify students according to their baccalaureate averages. Of course, the best, it's medicine, medicine with its subfields, dental surgery and pharmacy. And, secondly, it's the technological science streams and, of course, thirdly, it's the social sciences and humanities. *That's bad*. And that, it's bad, that's it, it's among the faults in our university (...) (15_m_Arts_Humanities_Social_Sciences_administrative_function_faculty, Paragraphs 48-50).

Consequently, "(...) for young people or for families who see only one model. *That's it*. Be a doctor, a lawyer, an architect, an engineer (...)" (3_f_STEM, Paragraphs 255-257).

The solution proposed to tackle this issue entails to reform the selection criterion system, in, notably, uplifting social sciences and humanities:

So, for example, to bring improvements and readjustments for this difference between humanities, social and technical sciences, we should already start with, at the level of the education system, that the weakest are not oriented towards humanities. *Yes*, which is an aberration. *Yes*. Because, by sending the weakest in the disciplines of humanities and social sciences, you take the bet that you will totally flatten the field. *That's it, yes, and it's not* ... The skills, they do not, it is not the level of competence of a bachelor student who must allow to orient him towards the, after all ... (3_f_STEM, Paragraphs 193-199).

Overall, the kind of discipline selection employed by central governance, best marks only, is aligned with the most societally desired professions, is both an important means and an expression of the Algerian university's specific as narrowly-defined elite selection function.

A similar procedure can be seen with the manner PhD candidates are selected: by national PhD entrance examination, *concours*. It is portrayed as a means of selection: "(...) the doctorate is not given to just anyone. The doctorate is something of value" (12_m_Arts_Humanities_Social_Sciences, Paragraph 570). Because of this exclusivity, the selection is made explicit with the result of elites-only access to PhD studies. While possible

flaws are admitted, the national examination is reinforced as a selection system as opposed to general-access bachelor and to a lesser extent master-level at universities.

(...) for the PhD, there is a much more drastic selection than that. *Okay. Even on the doctoral selection side? Yes, yes. With national examination? I think that is very good; I think that the competition must be maintained and that ... I do not know exactly how the selections are being made; I dare hope that they are fair. But I think that, at the current state, it is good that this examination will be maintained* (1_m_Arts_Humanities_Social_Sciences_research, Paragraphs 52-56).

The current university crisis due to massification, however, is also felt on the doctorate level:

(...) and you see in Algeria a number of people who are applying for doctorate number who applies is so huge I remember I was telling my daughter? *Yeah*. The number of people who tried to pass that exam the concours, so it is an exam that we have to take to pass and to be able to be eligible to, for the post-graduation medicine. *Yeah, specialist doctor. Yeah*, there were 4000, and only a thousand were taken. But there is are a lot of problems (laughs) (...) (2_m_STEM_research, Paragraphs 149-153).

Despite this pressure by the number of postgraduate students, selection by national PhD entrance examination is even seen as perhaps the only indicator of quality: “(...) I think that one of the ways to save the university is that, at least at the postgraduate level, there is a drastic selection(...)” (1_m_Arts_Humanities_Social_Sciences_research, Paragraph 50), though it must be taken into account that it is discipline-specific and likely to vary between subjects. Nevertheless, at the Algerian university, the most straightforward means of elite selection is in fact by competition for scholarships abroad; “*École supérieure*. But all the same, the selection of elites is done by itself, because the scholarship offers, for example, they are published on the site of the Ministry of Education to select the elites. The national competition for posts, for funding abroad; it is selection also (...)” (13_m_STEM_administrative_function_faculty, Paragraph 76). Thus, those selected as the elites have access to scarce and highly competitive stays abroad. The criteria are to have good grades first and foremost: “Yes! There are many projects, many calls for scholarships, so our young people, to get a scholarship, our young people can apply for scholarships. Well, it’s not automatic, you have to be well ranked naturally, you have to have good grades, etc. (...)” (8_f_STEM, Paragraph 15).

This requirement translates into the best of the batch who are then awarded available bursaries; “(...) But there’s always the elite. Currently, we are offering scholarships for the best-in-class; we offer, we are going towards the elite. The elite, it is important, to be interested in those who are, who have more capacities than the others. It exists, it exists. One needs to accept that some are stronger than others (...)” (7_m_Arts_Humanities_Social_Sciences_executive_function_central_unit, Paragraph 235). In this statement, the elite is

explicitly mentioned. The selection is justified with the focus on gifted students, and the Algerian educational socialist approach of treating everyone equal at university and by granting access to university is rejected. In particular, the école students enjoy many privileges: “(...) they will have priority because they have graduated from écoles supérieures, and, in particular, they will have priority for scholarships abroad. You see? So, for internationalisation ...” (16_m_Arts_Humanities_Social Sciences, Paragraph 78).

In this framework, quality assurance is given, e.g. by a mandatory English-language test, which has to be submitted by those students applying or selected for a stay in the USA: “(...) Some are obliged to do it, why? Because they apply for Fulbright scholarships, for example” (14_m_STEM_administrative_function_central_unit, Paragraph 24). In this case, international standards are being applied, which admit only those with the respective competences in global comparison and competition.

Elite selection through access to stays abroad goes as far as studying abroad altogether: “(...) Well, but the whole Algerian society is relatively disappointed by the standard of the Algerian university, and this same society, if it had to choose for its children, it is rather to send them to study abroad. And that is recent; it is recent, you see? So to speak, there is a loss of confidence” (16_m_Arts_Humanities_Social Sciences, Paragraph 94). Thus, those who have the opportunity prefer going abroad – even if this is described as a rather recent phenomenon – which is also referred to as a kind of self-selection: “Selection? They self-select (laughs). Actually, when they feel that they are good, or when they go abroad (...)” (8_9_f_STEM_1_executive_function_research_unit, Paragraph 287).

With regards to lecturers in research, likewise, the selection is by access to stays abroad, for which a scientific profile needs to have been developed; “(...) If people do this work, it is to pertain to work that they will do in Europe or elsewhere. Because if you don’t have scientific activities, you cannot avail of a research stay. So people do those to have them (...)” (10_m_Arts_Humanities_Social_Sciences_executive_function_research_unit, Paragraph 174). International exposure is thus only granted to the best, i.e. most active scientifically.

Notwithstanding, there exist private higher education institutions for specific sectors or disciplines as well as custom-made academies for large state companies such as SONATRACH. While there are no private higher education institutions with university status in operation as of today, those are legally permitted. There is an awareness that they will play a role in the future: “(...) We know that there are private universities already, in

Algiers, especially in other disciplines, not in the humanities, in economics, business; is not for nothing. *Yes, and the law is there.* It's not for nothing; it means that there is a state reason behind it, state logic, they tell themselves... *And demand, too.* It is needed!" (1_m_Arts_Humanities_Social Sciences_research, Paragraphs 76-80). This statement shows that this development is not only demand-driven but indeed encouraged by the state, which is an indication for a shift in policy and even governance structures.

Given this acknowledgement, concerns regarding the fee-paying nature of private universities are voiced: "(...) and there is going to be a private, paid university, for, as we say the nomenclature, for the upper classes, that means the families who can pay for higher education for their children in private universities (...)" (16_m_Arts_Humanities_Social Sciences, Paragraph 68). Similar doubts are put forward, too, aiming at the undesirable creation of a society of the privileged;

(...) I say that because I am afraid that, at some point, we will create a society of privileged people, where only those who will have the money to access universities, in particular private ones, with the best executives, the best supervisors, can avail of quality training so. This is the policy that we follow; it leads to that because sooner or later we will see the emergence of private universities for the wealthy if we do nothing; if we don't adopt important measures (1_m_Arts_Humanities_Social Sciences_research, Paragraph 72).

As can be seen, private institutions are seen as a threat to social cohesion with the risks of excluding some or the majority of the population, as opposed to the state-based, public Algerian university, which is accessible to all. Hence, private higher education institutions in Algeria are part of, and play a role in, the country's elite selection, which is however viewed critically, if not opposed.

6.2.2 Grandes Écoles

The Grandes écoles definition refers to the French type of elitist higher education institution as follows:

For instance, in France, where the service of the state was traditionally the noblest function, carrying with it the highest power and prestige, the elite university is fully institutionalised in the system of the grandes écoles, loosely connected to the university system, but largely independent from it. As is well known, the grandes écoles prepare exclusively for civil service (...) (Castells, 2017, p. 37).

The high number of occurrences show their significance for the Algerian higher education system with regards to the elite selection function. While many are simple mentions about their existence and mode of operation, there are also perception statements, for instance: "(...) *for the new creation of institutions.* It is better to create écoles rather than universities" (12_m_Arts_Humanities_Social Sciences, Paragraphs 375-376). This statement shows that

the former are privileged over the latter because of acknowledged quality assurance, connected with *écoles* rather than university-type institutions.

Indeed, they have beneficial circumstances and privileges, such as: “*They have more freedom? They are autonomous, yes, totally*” (12_m_Arts_Humanities_Social Sciences, Paragraphs 351-352). Hence, *écoles* enjoy the institutional autonomy largely lacking at universities, which gives them more options in governance as opposed to the university-type institutions under the tutelage of the Ministry of Higher Education and Scientific Research. Furthermore, they are attributed a specific elite selection element, as opposed to universities, which is largely due to their more favourable conditions in terms of numbers;

(...) So, it's based on quality, and the universities, I do not mean to say that universities do not train well, but universities face the quantitative side more than *écoles*. Because the number of *écoles*, for an *école* you can find, for example, a number that does not exceed 250 students per year. But for university, it is at least 4000, 4000-5000 (6_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 87).

In this context, they also have a better lecturer-student ratio as is exemplified in the following:

For me, in all frankness, apart from the fact that there are smaller batches, there is better supervision, a better rate. That means if, at the (*institutions*), it is a lecturer for eight students, at universities, it's one for thirty or forty. So, they are supposed to get better training results. But, basically, the diplomas are the same. *Okay, then this distinction is a little bureaucratic, or... (laughs)? Absolutely, administrative, and bureaucratic* (3_f_STEM, Paragraphs 379-381).

Though it is mentioned that the differentiation *école*-university is somewhat formal only, nevertheless, they are known to admit only the best; “(...) It's a first filter, if you want. It is the first filter to choose the best (...)”, and, as a result, to have the status of excellency: “(...) An *école* is a centre of excellence, so the best first-year students are directed towards this discipline (...)” (6_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 169).

The elitist characteristics of their students also play a role for international experience (see above, 16_m_Arts_Humanities_Social Sciences, Paragraph 78), which is otherwise hard to avail of at universities. This fact of privileging *école* over university students for scarce funding is also viewed critically, however:

(...) I am for it, it is; but I would also like to have, at the same time, a certain elite who stands out. Unfortunately, in general, the *grandes écoles* and all, they train young people who go abroad. So, in fact, Algeria doesn't benefit from it. Well, even the others, they leave. But those, for example, the *grandes écoles*, frankly, it is more than 50%. And they are trained in a generalistic manner (...) (9_f_STEM_executive function_research unit, Paragraph 55).

In this way, they are made responsible for exacerbating brain drain caused by emigration of the elite trained at these institutions. Newly established private institutions – rather than state-sponsored and state-run national *écoles* – offer an international component in attractive diplomas as accredited with partners abroad, and thus quality assurance insufficient elsewhere. It is noteworthy that these types of *écoles* have a strong link to a French-speaking environment as shown by: “(...) the Algerian higher business school. They have a lot of, how to say, a lot of partnerships with French, Canadian institutions. *Okay, but it’s mainly in the French-speaking sphere, then? Until now. Yes, most of them, yes*” (14_m_STEM_administrative function_central unit, Paragraphs 72-74).

6.2.3 Top University Status Institutions

Top university status institutions are portrayed as follows:

Prominent examples of this function are the Oxbridge universities as a decisive factor in classifying all other institutions in the United Kingdom still today, as well as the Ivy League association as its equivalent in the United States. In addition, as is shown by the French model of the dominance of *grandes écoles*, the elite-selection function is not to be confused with private, fee-paying higher education institutions (Castells, 2017, p. 36/37).

There are only ten occurrences in this subcategory, which is a testimony to the negligible relevance of top university status institutions in the Algerian higher education system. Furthermore, all statements refer to one institution only. In this case, national excellence is put forward by a specific laboratory: “And our lab (*name*), it is known nationally, it is known, it is among the best” (11_f_STEM, Paragraph 237) and thus attributed to the university at the same time: “First, yes. We were first. And it was an example for Algerians” (9_8_f_STEM_1_executive function_research unit, Paragraphs 174-175).

The emphasis on the numbers of student mobility marks the differentiation between the institution, which is internationalised, as opposed to all other Algerian universities:

We have a total of 160 students since (*end of the 2000s*) so far, who have been in mobility; at present, some are in mobility. But about a thirty incomings, those who come. *It’s good already. It’s good already, compared to other universities, they don’t have it, they don’t have a (foreign) project. Not at all? Not at all* (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraphs 77-81).

Likewise, its status is marked by benchmarking with international standards for foreign languages, i.e.: “(...) Ideally, the ideal would be that all students at (*institution*) university studying English take the TOEIC, or the TOEFL (...)” (14_m_STEM_administrative function_central unit, Paragraph 24).

On the other hand, the institution concerned understands itself as a national role model, though there are the following drawbacks associated with its status:

(...) If we are the only ones, at some point, it is like a candle extinguishing. I am afraid. *Sustainability-wise*. We need credibility; many universities should now become leaders, not only (*city*). It's true, (*city*) is a leader in many other things. Others should get started. Like this, we will be more comfortable. And we do not only work internationally but also at the national level. *Nationwide? Yes, already*. We can already work together, with many universities in the country. *Precisely* (...) (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraphs 85-90).

However, there is a risk of remaining the only or at least one of very few top university institutions, which would have repercussions on the country's national higher education landscape with regards to quality and readiness for international partnerships.

6.3 Training of the Bureaucracy Function

The training of the bureaucracy function is defined as follows by Castells: "The training of the bureaucracy, be it the Imperial service or the plethora of lawyers that populated the Italian or Spanish administrations, was (and is) a fundamental function of the university in most countries" (Castells, 2017, p. 39).

In the Algerian context, the bureaucracy is purely state-based, i.e. administration staff for the governance apparatus as well as executives in state-owned companies, bearing in mind that the largest national employer is the state. As for distribution, it features the overall lowest numbers of any main category at 79 occurrences in total, out of which education and health system expansion 33, skilled industrialisation staff 24, and professional training for business in regional development 22.

6.3.1 Skilled Staff by, for and in Industrialisation

The necessity for industrialisation staff is defined as follows:

Thus, much of the university system is rooted in a statist tradition. However, when the process of industrialisation required the training of a mass of engineers, accountants, economists, social workers and other professions, and when the expansion of the health and education systems demanded millions of teaching staff and medical personnel, universities were called upon to provide both general and specialised training for this massive, skilled labour force (Castells, 2017, p. 39).

While, at 24 occurrences, it does not have the highest number, this subcategory is relevant for the Algerian university. First of all, the immediate post-independence situation in Algeria must be taken into account, where there was a scarcity or total lack of academic professions; "There were very few, there were no people, no engineers, no doctors, there were none. So we had to train, train, train. Later, now, they want quality. So we guide, we reorient some, and we try to actually guide, to have quality. Of course, we are still far, but we want quality

(...)” (8_9_f_STEM_1_executive function_research unit, Paragraph 231). In the 1970s then, Algeria transformed itself from an agricultural-based country into an industrialised one, as is exemplified by the state-owned company SONATRACH in petroleum engineering;

(...) So there are, there are generally, whether it is the chemists, the physicists, mathematicians; they find their jobs without difficulties in education, in industries. Chemists are not unemployed, for example. There is SONATRACH; there is the whole petrochemical industry; there are the pharmaceutical industries, too (...) (13_m_STEM_administrative function_faculty, Paragraph 18).

In a wider sense, the university as a motor for the country’s economy,²⁴⁹ can be linked to the development as well as reinforcement of the petrochemical industry as is shown in the following: “(...) If I have no petroleum, why would I train people in petroleum? What would be the purpose of it for us? They will be future unemployed” (8_f_STEM, Paragraph 35). This is a reflection of a planned economy typical of socialism, which Algeria adopted in the 1970s and 1980s; “(...) I need this number of graduates, I need this number in molecular biology, I need, this number of technical employees, for example, I need this number in medical physics etc. (...)” (14_m_STEM_administrative function_central unit, Paragraph 18).

Given Algeria’s postcolonial situation in that “Yes, it continues. And it’s not just that, and it’s not just the university that works on the French model. You know, practically all of it, a large part of Algerian legislation is inspired by the French model (...)” (16_m_Arts_Humanities_Social Sciences, Paragraph 82), training bureaucrats in the narrow sense of administrative staff as state executives are mentioned repeatedly, both with regards to general governance; “(...) The state being the state, and the state needs administration executives to function (...)” (1_m_Arts_Humanities_Social Sciences_research, Paragraph 76) and specifically at and within the Algerian university; “We will mainly train civil servants” (16_m_Arts_Humanities_Social Sciences, Paragraph 98).

The university function is even marked to serve this very purpose: “(...) to train the official political elite, for bureaucracy” (16_m_Arts_Humanities_Social Sciences, Paragraph 104). Reference is thus made to already existing bureaucrat-favouring structures, including in Algerian higher education. The reason for this state of affairs is given as follows:

(...) I really have the impression that it almost suits the current system because it creates like, even an army of civil servants, loyal to the state because they are well paid, they have advantages, they will

²⁴⁹ See chapter 6.1.2

be people who will rarely be opponents (1_m_Arts_Humanities_Social Sciences_research, Paragraph 270).

Consequently, the civil servant status employees in academia come with many privileges, while it is expected that enjoying those means state loyalty to give up one's own opinion.

The derogatory effect of bureaucrats at the university is also underlined: "They are civil servants. For me, a researcher, if he becomes a civil servant, he is dead (...)" (1_m_Arts_Humanities_Social Sciences_research, Paragraph 342). This statement refers to the necessary academic freedom and non-state interference in the form of lack of politicisation of the university, which is necessary for the individual researcher as well as Algerian national science development. In addition, the risk of favouritism is pointed out in such a setting: "What is happening; there is even the risk of seeing nepotistic type cooptations, that is to say, friendly cooptations in universities (...)" (1_m_Arts_Humanities_Social Sciences_research, Paragraph 263). On the other hand, the absence of administrative hassles caused by bureaucratic processes at university is explicitly mentioned: "(...) If one has sufficient good-will, it goes ahead. I don't think we have as much bureaucracy as other sectors (...)" (14_m_STEM_administrative function_central unit, Paragraph 220), a statement which exposes the likelihood of discipline-specific differences; with a higher probability of bureaucracy-related challenges in the social sciences and humanities.

6.3.2 Health and Education System Expansion

Similarly to the demand for skilled labour in the previous section, health and education staff were equally induced by industrialisation: "At the time of industrialisation, there was a need for training of the massive, newly emerging skilled workforce (...) but also health care and teaching professionals" (Castells, 2017, p. 39).

There are 33 occurrences in this subcategory, which points towards high relevance for the Algerian university. However, like in the preceding subcategory, it has its origin in the past rather than the present context. The health system expansion still has an impact on university education in Algeria today, in that medical disciplines are being privileged over all others, and in that there is a clear hierarchy of social prestige:

(...) Because here, we are on, I must do medicine to be valued; if I miss medicine, I must at least be a pharmacist. We are on this logic here, okay, a little more in (*institution*), but I think it's the Algerian university which is like that. Then it is by order, there is surgery, dentistry, it is now called dental surgery, but you are still a doctor, you wear a white coat. Then architecture, everyone is fighting to be

an architect because an architect, it's an agency, it's a lot of money, etc. And you are sought after (...) (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 233).

Therefore, being a medical doctor or otherwise working in health professions is desirable as socially rewarded, even more so than becoming a public executive.

The education system, more particular, higher education in Algeria, had been developed in a certain way by the French until there was a backlash in a policy to 'algerianise' the university:

(...) So there were the coopérants, that is to say, the foreigners who taught. It was done, it was done. They stopped in the mid-80s, no, rather, late 80s. They wanted to algerianise, that means they thought that there were enough people trained to be able to algerianise the university. There are a lot of people who would tell you: 'Since Algerianisation has taken place, the university is not doing well'. It is an opinion. Now, it depends, because in certain disciplines, Algerians, when they stay here, and they work, they get results, they are really not stupid. So is Algerianisation a good thing or not? (...) (9_f_STEM_executive function_research unit, Paragraph 311).

Training of the bureaucracy is, therefore, a necessity, yet, it needs to happen in a decolonised way as is shown by the statement above, taking into account Algeria's postcolonial context. Though the way it has been done is debatable as the efforts might also be failing: "You, you work, for example, what bothers me a bit is that you work hard for years to train people, thinking that they will be the future. And, finally, you find that it is always, do you know the game, I give the example. You know the game of Tetris, Tetris, do you know it?" (9_f_STEM_executive function_research unit, Paragraph 397). Consequently, education system expansion has brought about increased training of the bureaucracy as a function of the Algerian university. Yet, it is not only successful in terms of outcomes, e.g. skills and competences.

Especially education-related courses are subject to the state as employer monopoly holder;

Like ... Listen, for the people who are at the level of the social sciences and humanities departments; they have no other relations than with the state. They cannot work, other than in teaching, and they cannot do anything else. Then, you will see the number of those who come out of the social sciences departments. It's enormous. And who will make them work? (...) (10_m_Arts_Humanities_Social Sciences_executive function_research unit, Paragraph 266).

Given that the number of positions in educational institutions is not only restricted but controlled by the state, there is even more unemployment. Nevertheless, the university has its part in education system expansion as is mentioned:

At the moment, the role of the university, first of all, is contributing to the effort of national development in any sector. Firstly, contributing to the fight to eradicate illiteracy and ignorance, and, at the same time, increase, well, improve the intellectual level of the citizen (...) (15_m_Arts_Humanities_Social Sciences_administrative function_faculty, Paragraph 44).

This statement shows that in the Algerian context, among others, the university has a basic and general civic education mission, which is reiterated as follows; “The challenge, for me, the essential stake, is to educate people (...)” (16_m_Arts_Humanities_Social_Sciences, Paragraph 114), and, put simply, “Tad3im etadriss wa el ta3lim (*in Arabic: strengthening teaching and learning*)” (4_5_f_Arts_Humanities_Social_Sciences_1_administrative_function_central_unit, Paragraph 352).

In this context, it is pointed out that there is still a lack of consensus regarding general rules in society; “Yes, first, a civic spirit must settle in a population. And it must be followed by rules of good conduct in society. This is not currently done (...)” (10_m_Arts_Humanities_Social_Sciences_executive_function_research_unit, Paragraph 100). Another perspective underlines the importance as well as the responsibility of the university in forming and developing a critical spirit: “(...) the university must, from my point of view, essentially educate the critical elite. That’s it, train the critical person, the person who asks questions, and who questions others. And that, it is this second aspect in particular, which, generally, does not work well, does not work well (...)” (16_m_Arts_Humanities_Social_Sciences, Paragraph 96). Hence, this function is presently not accomplished, which is an indication for the greater weight of general and basic education over critical thinking as a second, advanced step. Not least, the latter might be instrumentalised in a politicised system. The first step, basic and general education, however, remains a core function.

6.3.3 Professional Training for Business in Regional Development

The function of providing professional training for business in regional development is described as follows:

Thus, the Land Grant universities in the United States created by state governments to fulfil the development tasks of the regional economy were the exemplary experience that opened the path for future professional universities. The agricultural schools of California and Wisconsin or the engineering schools of Michigan and Illinois, generated a culture of close interaction between the university and the business world, providing the ground for the expansion of the role of these universities in the whole realm of science, technology and the humanities, but always closely linked to their original developmental tasks (Castells, 2017, p. 40).

Rather than a theory-based training, preparing for research or a career in academia, recently, the policy has led to a focus on professional skills and competences in course offers at the

Algerian university. In the context of the Bologna Process reform adoption, the *LMD*²⁵⁰, courses have a different, applied profile.

This fact is an indication for the training of the bureaucracy at the Algerian university in the form of professional training for business in regional development. While the implementation of this policy lacks behind; “In the end the Master’s are, some are good, but others are totally artificial, they are totally disconnected ... *Yes*. Compared to the real offers from the socio-economic field” (3_f_STEM, Paragraphs 99-101), at the same time, the role university training plays in Algeria, professionals for regional business, is still rather new, and municipalities do not yet take their impact and potential as a motor for economic development into account (see above, 7_m_Arts_Humanities_Social_Sciences_executive_function_central unit, Paragraph 257).

Additionally, there is a situation of insufficient showcasing as well as scientific communication, i.e. making results accessible to the public, which is derogatory to higher education of professional nature: “(...) otherwise, for the professional training issue, what is missing, what my colleague said, is recycling, like the promotion and popularisation, and of knowledge, maybe? Both, promote and popularise, both: if we value, we will make the scientific research side known, yes” (4_5_f_Arts_Humanities_Social_Sciences_1_administrative_function_central unit, Paragraph 226). As of now, students indeed have the tendency to go into business, rather than academia:

(...) We don’t do a doctorate; we do something else. We trade, we do, and so we take a job, we take a diploma, we put ourselves in a lot of trouble for people, so that in the end; the people you trained you don’t benefit from. But not just you! Even the country (9_f_STEM_executive_function_research unit, Paragraph 329).

This trend is portrayed as problematic in this way because there continues to be a lack of capacity at the university. On the other hand, graduates’ plans for entering the labour market are equally difficult:

Because now we ... in three years you can’t have an engineer particularly in Algeria that will be capable of working that is not possible. Maybe in Germany, because they have companies that offer training, but not here. *Yeah*. This is the problem, and even now people are thinking of getting out of that classical way of teaching and going to more practical courses because the problem that we have now is people can have a degree and then went for a particular job they are not able to get it because first there are too many on the market so it is more competitive. Second, the companies here are not hiring (...) (2_m_STEM_research, Paragraphs 57-59).

²⁵⁰ In the translated interview transcript excerpts, the French terminology ‘LMD’ is retained, referring to the adoption of the Bologna Process higher education reform in Algeria.

As can be derived from this statement, the issue is massification of university degrees and resulting devaluation on the one side, and the lack of employment opportunities in the industry in Algeria more generally on the other side. Therefore, training of the bureaucracy may mean professional training in regional development in Algeria, as a more recent function.

6.4 Research Function

The university research function is defined as follows by Castells:

The science-oriented university came, in fact, very late in history, in spite of the practice of science in universities in all times, including the achievement of fundamental scientific discoveries in universities that were by and large ideological apparatuses. The first universities focusing on science and research as a fundamental task were the leading German universities in the second half of the 19th century (...) (Castells, 2017, p. 37).

This main category features the highest number of occurrences in total, with 156 in new/non-default case, 3 in separate specialised institutions, and 50 in economic growth. This distribution points towards the very high relevance in the Algerian context and its novelty and originality of both the process of emergence and the function in general, as well as the characteristics of applied preferences specifically.

6.4.1 New/Non-Default Case

Research as a new university function, derived from a preceding one, is described as follows: “(...) the important fact is that it was the professional university that gave birth to the science university as the needs of the economy made research increasingly important as a strategic tool to enhance productivity and competitiveness” (Castells, 2017, p. 40).

Firstly, from a historical perspective, post-independence, research capacity was abroad:

(...) after independence, there were few researchers who were trained, not many really; people were not even highly qualified; there were too few doctors and everything. Well, there was the research that was done with France; Algeria had sent hundreds and hundreds and hundreds of Algerians to the United States, Canada, England. To 90%, we never took advantage of them, to 90%. They don't come back (9_8_f_STEM_1_executive function_research unit, Paragraphs 308/309).

This statement shows the backlash of the mentioned state policy of sending abroad for studying; namely, permanent emigration to the destination countries and lack of local capacity.

A first indication that scientific research is relatively new at the contemporary Algerian university is the experimental character of both its institutionalisation and its governance orientation, as follows: “(...) scientific research, in a way, passed through 5 or 6 ministerial

departments. So this translates into its instability (...)” (17_m_STEM_executive function_political entity, Paragraph 8). It has barely been more than ten years that a respective government agency has been established in the public structure: “(...) scientific research in Algeria is very, very young, so, compared to what exists in the world. And, so, before 2008, there was no responsible body that managed scientific research and technological development in Algeria” (17_m_STEM_executive function_political entity, Paragraph 8).

Accordingly, “(...) our universities are new universities (...)” (10_m_Arts_Humanities_Social Sciences_executive function_research unit, Paragraph 250); as is reiterated by professors, who admit that, at university, “Before, we just had to teach (...)” (9_f_STEM_executive function_research unit, Paragraph 229). This fact is relevant all the more in international comparison: “(...) If we compare it with the Sorbonne, with other universities in other countries, it is very, very young. But we have, there is, we are led by a very good will. Elhamdou’Allah (*in Arabic: Thank God*) (...)” (15_m_Arts_Humanities_Social Sciences_administrative function_faculty, Paragraph 20). The reference here is chosen as Paris’ and thus France’s premier and oldest university institution, which points towards the continuation of strong ties between the two countries, also in research.

Not least, the major motivation is international visibility and reputation afforded by research; “(...) like the development in the field of higher education and scientific research. So, you see, so firsthand, that a lot of things are done in Algeria, a lot of positive things that are done in Algeria. *Yes, even extraordinary things, that’s it.* And therefore, others should know what is actually going on in Algeria, that’s it” (17_m_STEM_executive function_political entity, Paragraphs 104-106). Additionally, it is still the case that experts are synonymous with foreigners, as is shown in the following: “(...) I think that the potential exists. We have experts, except that we need, the experts, we should label them experts. We have an expert; we should ... Me, when I say that we have, we talk, when we talk about experts, we talk about foreigners (...)” (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 210). On the other hand, it is through recent or present international collaboration – especially in research – that the Algerian university develops further:

(...) I think that the progress of collaboration, as you are, foreign to Algeria, so I think the progress of collaboration, on the side of, that is, on the quantity side, and on the quality side of this cooperation, can bring a lot to the Algerian university (...) (6_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 181).

Indeed, until the early 2000s, research was limited at the Algerian university, in terms of certain – experimental – disciplines, as the necessary qualification phase took very long, e.g.

(...) In terms of research, it has been developed. Why has it been developed? Because there is an opening towards foreign countries, something that we didn't have until 2003, 2004, when we started to have training stays. And it is from these stays that we started to finish our theses. You register in 2003, you finish in 2012, 2014, in ten years. Why? Because I was not just in the lab, I did a month in France, and the rest here, in Algeria (...) (8_f_STEM, Paragraph 3).

As is mentioned here, the change is directly connected with the opportunities to go abroad on research stays. These days, "(...) it's the opening to the outside. This external opening has helped our young people a lot. This is important. We see that young people can defend after three years, four years (...)" (8_f_STEM, Paragraph 3). At the same time, this new trend of fast PhD attainment is viewed critically; "(...) My problem is the objective, it's the result, not the objective, it's the result. The result is given; we train doctors too fast (...)" (8_f_STEM, Paragraph 11). Nevertheless, it is noteworthy that Algeria also functions as a host for other African PhD candidates as well as researchers; "(...) and we give the chance to students, on an African scale, to register for scholarships, and, to finish up, for lecturers, doctoral students and researchers. But, on an African scale (...)" (8_f_STEM, Paragraph 15).

The interplay between nationalisation and internationalisation and the role research plays becomes obvious in the following statement: "(...) that means that research, standards of research are international. But research, teaching standards are national for the humanities and social sciences; even standards of research are national" (3_f_STEM, Paragraph 181). It is in the framework of newly established institutions that international standards are now set:

So, within the Ministry of Higher Education, you have an entity which is separate, which is the Direction of Scientific Research, the DGRSDT, which is organised, which deals strictly with the research component. It's precisely this body, which depends on the Ministry of Higher Education, but which functions like a little bit on the fringes we will say, I have never understood structurally how is this possible? But it is the case, this organism which governs scientific research, it, effectively, it tries a little to put international standards, besides, it defines them, since today we function in publications, presentations, scientific productions, according to international standards (3_f_STEM, Paragraph 239).

Issues with quality assurance in, among others, publications, persist, too, having negative repercussions on research produced in Algeria; "(...) what grieves me is to see that in our scientific journals at the national level, we accept everything and anything" (1_m_Arts_Humanities_Social_Sciences_research, Paragraph 207). This shows that research as university function is still new/non-default, and, therefore, certain standards still must be developed, respectively, applied.

From a policy side, quality is demanded and encouraged, after the quantitative side has been taken care of by sufficient research infrastructure provision; “(...) Now that we have attained a critical mass in laboratory numbers, now, we must move towards excellency (...)” (17_m_STEM_executive function_political entity, Paragraph 36). Standards recommended to achieve this objective are of primary formal nature and, secondary, related to journal reputation:

(...) we have publication conditions. As you mentioned, to ensure visibility, we recommend standards, standards, such that one must take into consideration the correct email address, the correct address of the university, to ensure better visibility. And then also, we encourage publications in A-ranked journals, renowned journals, in journals that are very well known (17_m_STEM_executive function_political entity, Paragraph 94).

Those general conditions are applied more specifically by employing indexes across disciplines: “(...) the research indicators exist, Leonie. There’s SCOPUS; there’s Web of Science; there’s Thomson Reuters. So, we know how; we know if we are doing good or not so good research. There is the H Index; there are, there are lots of indicators. As far as research is concerned, it’s good (...)” (14_m_STEM_administrative function_central unit, Paragraph 44). Notably, the SCOPUS database is mentioned by STEM and social sciences and humanities representatives alike:

(...) We have launched things, research, laboratories. There are 10, for example, which will receive recognition, 10 out of (*number*), because they have made scientific productions which have been recognised by international standards, SCOPUS, etc. So we will award those, and we are showing that excellence is important in a university (...) (7_m_Arts_Humanities_Social_Sciences_executive function_central unit, Paragraph 239),

although one must take account that the persons referenced hold an administrative, respectively, executive function in a central unit at a university, and are therefore likely to be more involved in strategic planning than colleagues. It is mentioned, too, that publication quality standards have increased within the past decade and a half: “(...) for example, so to say in our sub-discipline, when you want to publish; until 2006, you know, you just had to do research and publish. Not now. In our field, if you do not justify why you are doing this research to be cited, and the journal to be cited; it will never have you published (...)” (9_f_STEM_executive function_research unit, Paragraph 225). This statement is proof of lecturer-researchers’ awareness regarding increasing publication quality standards.

However, despite these efforts and recent developments, the situation academics are confronted with is especially dire in humanities, for example:

There too, I would say in the humanities, I see that there is a slew of journals that have been created, but hardly visible, with very little visibility; if you look at the ASJP site, I don’t know if you know

this site. *Ah, yes, Algerian Journal, yes that's it.* So, if you type a keyword (*discipline*), you'll see ... Ah no, I don't remember anymore. Ah yes, in revue here, revue. *Transform 80.* So what are you going to find? 388 journals! So, all in all. *Yes.* How many are really visible? *Very few, yes.* Very few. Before, I think, I knew none, before I started working on this topic actually (laughs) (1_m_Arts_Humanities_Social_Sciences_research, Paragraphs 278-287).

This assessment of this case shows that there seem to be no quality assurance measures as all these journals are available, even if they feature national distribution only. For that reason, many would not be known by the international scientific community in the respective discipline. The lack of criteria may indeed have non-academic reasons as it is supposed:

Anyway, there was a debate on a reform that was supposed to be launched nationally, it is to remove this requirement to publish. But many have understood what is going on, what is happening behind: it is that, like this, it's made possible to integrate anyone into teaching positions. Since, I tell you: There are completely mediocre doctoral defences being held, but when you publish an absolutely mediocre article you can see it, it is there, it is visible (1_m_Arts_Humanities_Social_Sciences_research, Paragraph 268).

The solution presented to the unsatisfactory state of affairs as described above is as follows: “(...) So, we have to forge an effective university already, and I think that it is the first task that awaits us, is to get the university out of the stagnation in which it is ... And then think about these kinds of things, international standards; it is not there, we are not there. That's what I think” (1_m_Arts_Humanities_Social_Sciences_research, Paragraph 38). By doing so, the link between international standards and the quality assurance needed to counteract the lack of requirements is established, which is as of now not fully applicable.

Yet, there is an awareness that the way forward is in international norm-setting adherence, i.e. “(...) by entering standards in all, with all the other countries (...)” (10_m_Arts_Humanities_Social_Sciences_executive_function_research_unit, Paragraph 272), it will become possible to use the currency of international scientific communities as is underlined as follows: “(...) So, if we are not in journals, if we are not in conferences, we do not exist. *Yes, that's it: publish or perish. How? Publish or perish, publier ou...* Or not exist. Exactly (...)” (16_m_Arts_Humanities_Social_Sciences, Paragraphs 36-40). Hence, Algerian research will be visible only when published, and, more so, internationally rather than nationally.

Based on the acknowledgement that research has no national boundaries; “(...) now, the national pillar does not make sense, the national pole does not make sense. What is that? There is no Algerian science (...)” (16_m_Arts_Humanities_Social_Sciences, Paragraph 36); “(...) we adapt to what is going on in the world (...)” (17_m_STEM_executive_function_political_entity, Paragraph 60). This statement describes the state-of-affairs of

Algerian research, which is in the process of adaption to internationalisation in higher education. The orientation can take different ways, and there are varying opinions, as is shown in the following.

Reference is made to the governance level, which is more generic, that ‘international standards’ are being applied, without further specification regarding their origin or orientation:

It tends, when you look at instruction policy, from the Ministry of Higher Education, we tend to set international standards. For example, in the field of research, all the mechanisms of research, the visibility of research, the production of research, it is, it is currently governed at the level of the Ministry of Higher Education by international standards. That means that the Ministry of Higher Education recognises research only if it is validated by the international sphere; that is to say, it does not make its own criteria of internal evaluations. When we touch on instruction, on research, I speak of the ‘research’ component, that’s it, the recognition is done on the international level; and when it is done on the international level, it has repercussions on the lecturers’ career. That’s it (...)
(3_f_STEM, Paragraph 34).

It is admitted that the French ties continue to be very strong in higher education, and specifically in STEM disciplines; “Yes, we are, really, in science, we are linked to the French system (...)” (12_m_Arts_Humanities_Social_Sciences, Paragraph 414). Accordingly, international collaboration is privileged over local and national collaboration; “So, to say, and here too I will be frank. There are more collaborations and contacts abroad than with our colleagues, for example, national collaboration, national Algerian-Algerian (...)” (13_m_STEM_administrative_function_faculty, Paragraph 98).

This situation came about with the introduction of the Bologna Process in Algeria, too, where Algeria is said to have adopted it to its system without any modifications: “(...) The LMD, since 2004, for the LMD, we aligned with abroad. We invented nothing (...)” (8_f_STEM, Paragraph 7), which is also practised as the new international standard: “(...) some say ‘They have algerianised the LMD’. I have not algerianised, honestly. I am doing it the international way (...)” (9_f_STEM_executive_function_research_unit, Paragraph 24). The reform is the first time that international standards have been applied all-encompassing, with a possible reason being “(...)The way also people thought because we depend so much on Europe and thus we had to understand what is going on so what we have to go with what the European has/have” (2_m_STEM_research, Paragraph 53). To reiterate, there is a desire to copy what are deemed successful systems: “Already we apply what applies elsewhere. If we want to resemble the Germans, the Americans, the Japanese, we have to do it like them (...)” (9_f_STEM_executive_function_research_unit, Paragraph 30).

However, there is over-reliance on Europe, as is pointed out in the following: “(...) So I think that the LMD system, I would say that there is no denying that there is a form of mimicry; that we want to apply what exists in Europe; we maybe thought that it was the only way to standardise, to enter into an international standard (...)” (1_m_Arts_Humanities_Social Sciences_research, Paragraph 18). Consequently, a solution is proposed to retain some Algerian elements, as innovation, rather than a generic, at its base Western, system:

Oh, I am for it. I am for it. I got my degree in the US, and I worked in the US, also in Germany, I worked in Germany. I think that it is for us, it's good. *Yeah, okay*. It is really good, and I think that there is some lack of ... one point in Germany that will be good also in Germany or at least the Europeans. As I said, the best way of trying to put something together. So, I am fully for it, and the best way of doing it is to find a way of setting some basic rules the same. I am against having everything as the same. *Yeah*. Because you will take the innovation out. *Exactly I agree, yeah*. But still, if we have some basic rules the same and the remaining ... (2_m_STEM_research, Paragraphs 171-177).

Language plays an important role in the discussion of international standards application as well as adaptation, too: acknowledging that “The largest journals are journals written in English (...)”, a progressist-idealist view is put forward as follows, as possible future situation: “(...) if it depended only on me, teaching in English, learning of Mandarin compulsory. But that's; I'm dreaming. It's utopian for me because of this; you need to have a long-term vision (...)” (14_m_STEM_administrative function_central unit, Paragraph 66). Once more, there is a stark difference between STEM and social sciences and humanities disciplines, mainly because of the language of instruction:

(...) So, the doctoral student, in addition, so to speak Leonie, he is penalised by the weakness of teaching. He is penalised by not mastering the rules of writing, and, finally, he is penalised by the language. These students in social and human sciences, they write in Arabic. In the experimental sciences, they can write in English. But where is the European or American journal that will publish you in Arabic? It as good as doesn't exist, you see? (16_m_Arts_Humanities_Social Sciences, Paragraph 50).

Therefore, depending on the subject studied or researched, students and PhD candidates may either access or engage with international networks, or not. In this context, French is also attributed a declining role; “(...) I find it difficult to see that in Algeria, almost all the hard sciences are done in foreign languages; so we know that they are done in French. And we know very well that French is declining in the world. So, if we change, why not change to English directly? We will be with all the people in the world (...)” (10_m_Arts_Humanities_Social Sciences_executive function_research unit, Paragraph 60); hence, the suggestion to switch to English.

In this context, too, English as the language of publication as nowadays imposed by globalisation in higher education plays a role with regards to prevailing ideology at the Algerian university:

There are people now who are asking that courses that are taught in French should be in English. *Right, yeah*. Because the problem is not that we prefer one language to the other; it is just the international student, it is what it is. Now, if you are to advancing your career how to publish and if you are published, you have to do it in English. *Of course, yeah*. You cannot do it in French, and I am sure it is the same in Germany where you have to publish and more so the way it is. *Yeah, only English*. In English. I know that there are some German journals that are edited in English. *Yeah, that is right, yeah*. That is the way it is. *So, me too I write it in English as well (laughs)*. You write in English as well? *I was (laughs)*. And you are going to write your thesis in English, alright? *(laughs)*. *Yeah*. We have to go with the reality, I mean, that is what they tell my children you have to do it in English; there is no way. *Yeah*. It is the way it is. It is the language that dominates so far; this language, and you, and you have to learn it to go by, there is no other way (2_m_STEM_research, Paragraphs 29-45).

Hence, the solution suggested is an adaptation to the circumstances of internationalisation, i.e. embracing English, rather than sticking to both Arabic and French, depending on the discipline.

The state of affairs of research support and promotion as policy priority is underlined as follows: “(...) so this is the new law on scientific research and technological development, which allows us to carry out our activities, or, rather, to carry out our actions within a regulatory framework, through texts that we propose to the government for adoption” (17_m_STEM_executive function_political entity, Paragraph 52). Thus, this very regulatory framework was previously missing, which is an indication of the development of research on the one hand, and institutionalisation, on the other hand, in the form of specialised agencies.

Likewise, the provision of infrastructure plays an important role. With the objective of creating incentives for lecturers to also engage in research; “(...) We have built research infrastructures, we have equipped research infrastructures, we have somehow tried to attract the maximum number of lecturers to carry out research activities (...)” (17_m_STEM_executive function_political entity, Paragraph 10) the result is; “So now we have reached a stage of excellence, so we have reached the critical mass of research infrastructures” (Paragraph 18). These efforts are appreciated, and, once more, the support and promotion of applied research are emphasised in the following:

(...) the state has put ... has set up a certain number of structures to take charge of this human activity which is scientific research. It has spent a lot of money; it has facilitated the creation of laboratories, it has subsidised these laboratories; it has gathered all the means to succeed in its mission, which is to

think, to create the product (...) (15_m_Arts_Humanities_Social Sciences_administrative function_faculty, Paragraph 52).

Despite the investment, the infrastructure newly provided may just as well mean basic equipment; “Yes, they are very good because there are laboratories. In a laboratory, you have, each person has their own desk, each their own computer, connected to the internet (...)” (12_m_Arts_Humanities_Social Science, Paragraph 499) or adequate library opening times: “(...) he made sure that the library of the (*STEM discipline*) faculty in the centre was open, not all night, but at least open until 10 p.m. I believe. I must not speak nonsense; it’s international; not much (...)” (9_f_STEM_executive function_research unit, Paragraph 17). However, importantly, implementation is being done without a needs assessment; “(...) But these buildings were made when they created the campus. They said that they would build thirty labs, and when they were finished, they tried to give a little bit to all the people. *Okay, but without doing an analysis of the requirements, is it.* No, not at all (...)” (10_m_Arts_Humanities_Social Sciences_executive function_research unit, Paragraphs 202-204).

Besides, from a social sciences perspective, it is questioned whether the results are satisfactory, given the number in juxtaposing quantity and quality: “So, I will give you just, some figures. There is something like 1400 research units, but in terms of production, there are very, very few units which manage to produce new things. Very, very, very, very few” (16_m_Arts_Humanities_Social Sciences, Paragraph 108). Doubts are furthermore expressed regarding the necessity of a certain working culture;

So that’s why. So, Algeria put so many billions of dollars in equipment that people want to use it to do research, for sure, but just to get to some level, to get a rank, to have a position. And then, there is no, there is no continuation. That means, come at 8 a.m., stay in the lab until 8 p.m., or not even 8 p.m, we’ll say 5 p.m. we don’t need to go until 8 p.m., 5 p.m. We don’t have this culture, and we won’t get it. And it’s worse with the people nowadays; it’s worse (...) (9_f_STEM_executive function_research unit, Paragraph 313).

Social sciences have a role in research at the Algerian university, which is not to be underestimated; “(...) first, the university has to do its job. So, when I say that the university does its job, the university has to produce knowledge, reliable, valid, on the Algerian society. That means, we must know this society as it is (...)” (16_m_Arts_Humanities_Social Sciences, Paragraph 26). Nevertheless, those are under-appreciated by other colleagues, as is openly admitted in the following: “(...) here, certain people underestimate the social sciences and the role in knowledge of society, and the study of some, of these different aspects, phenomena (...)” (15_m_Arts_Humanities_Social Sciences_administrative

function_faculty, Paragraph 50). It is noteworthy, too, that STEM representatives did not mention the impact of social sciences in research.

Mastering academic work is essential for any advanced student, which translates into basic reading and scientific competences as follows:

(...) And then I started to ask questions, ‘Ibn Khaldoun, what do you know about him?’ Mouth sewn. Only one answered out of the five doctoral students, only one answered, ‘Sir, I used volume 7 to do my master’. And it is unfortunate. A master student should have read Ibn Khaldoun completely. *Especially as an Algerian*. Not only Algerian, but he made the history of all of North Africa and the Arab world. So, they must, if people do not read it, what are they going to read? These we call ‘sourcebooks’; so, our system itself is yet to be reviewed (...) (10_m_Arts_Humanities_Social Sciences_executive function_research unit, Paragraphs 72-74).

As this statement shows, PhD candidates were not familiar with the most important literature in their area of study and should normally not have been at this stage to research. Likewise, problems are reported when it comes to publications.

(...) I sent him to France; he did; these are extraordinary measures; I am proud of it, and I await the day when I would publish these results. It’s good. When you tell him: ‘Write something’, he doesn’t write! Finally, he is a technician. And when I had a discussion with him, yesterday, telling him: ‘You have to write this for me’, he started looking at me like that, he didn’t like it; because I changed my vision of supervision. Before, what did I do? I did everything for my students. I realised that it is useless. It’s a total mess! She is the only one who stayed at the lab. The only one! The rest, finished, recruited (9_f_STEM_executive function_research unit, Paragraph 313).

As this case shows, if findings are not published, they remain invisible, which reflects the state of research on the Algerian university as a whole – often unnoticed internationally.

Research is also repeatedly labelled as the only or main function of the university as an institution: “The objective of all education, when you see English or American universities, any university has its objectives, it is to have Nobel prizes at home” (10_m_Arts_Humanities_Social Sciences_executive function_research unit, Paragraph 90). Innovation, too, must be at the forefront of higher education policy and governance; “Processes, I am not a decision-maker, but the steps are to immerse innovation in the student but also in the lecturer because a lecturer remains a researcher (...)” (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 239). It is in this context that the issue of massification becomes problematic:

And then there are more problems, more, how do I say, more structural. We wanted to give a status of lecturer-researcher ... *Yes* ... to the university lecturer, but in reality, the massification of teaching means that, in reality, he can only accomplish his task as a lecturer and not as a researcher. *Okay*. And that too, it’s a fatal blow to research and higher education because we know very well that higher education is fuelled through research (3_f_STEM, Paragraphs 66-70).

As is shown by this statement, at the core of the university – including Algeria – is research, and teaching is given a sub-ordinated position. However, due to the circumstances given, this function can presently not be fulfilled but is indeed neglected as of now.

6.4.2 Specialised Separate Institutions

Specialised, separate institutions are defined as follows: “(...) in most of Europe, research has been institutionally separated from higher education and confined into scheduled ‘National Scientific Research Centres’ of the French, Spanish or Italian type (...)” (Castells, 2017, p. 38).

There are only three occurrences – two from a political representative, one from a university lecturer-researcher in the social sciences. Firstly, their part in state infrastructure provision is pointed out:

(...) so you have the list, so we built a lot of infrastructures. We only had a few (*institutions*), so now we have (*institutions*) which are almost everywhere in the national territory. So, these are specialised (*institutions*), and now we also have (*institutions*) which have an international reputation, such as (*institution STEM 1*), such as (*institution social sciences*), such as (*institution STEM 2*), such as (*institution STEM 3*) (...) (17_m_STEM_executive function_political entity, Paragraph 30).

Those institution references given are mainly from the STEM field. Furthermore, the contribution of national research centres to Algerian development more generally, including income source, is underlined as follows:

(...) to bear fruit by adding value to the national economy. There are (*institutions*) now which bring in money, there are (*institutions*) which solve problems in the country, technical problems; solutions which solutions which could therefore reduce the import bill, and so, we are, too, at a very satisfactory stage today. But we hope for more, for a lot more (17_m_STEM_executive function_political entity, Paragraph 30).

They are being attributed the role of a bridge to the international, too: “I believe now, we are linked, we are linked to the world via research centres; research centres like (*SHS institution 2*), like the research centre ... I don’t know if you have visited yet, in (*city 1*)?” (15_m_Arts_Humanities_Social Sciences_administrative function_faculty, Paragraph 24). Considering that several interviewees are permanent researchers at specialised institutions outside universities, it was expected that this status would play a bigger role, however, as can be seen in the following section, in the contemporary Algerian context, they are not as significant as of now due to the political circumstances and the different nature of research sought.

6.4.3 Useful and Productive for Economic Growth

Castells defines research development as need-driven for economic growth as follows:

What seems today to be the third and most obvious function of the university, that is, the generation of new knowledge is, in fact, the exception throughout the world. In many countries, it had not yet been fully recognised as a fundamental task by the political institutions and private firms until the coming of the current technological revolution when the examples of the decisive influence of American science-oriented universities in the new processes of economic growth (the ‘Silicon Valley syndrome’) won the reputation of being ‘useful and productive’ for the universities of the Information Age (Castells, 2017, p. 38).

As Castells states, “the needs of the economy made research increasingly important as a strategic tool to enhance productivity and competitiveness” (Castells, 2017, p. 40). This is reflected in the following: “(...) research, it’s the engine of the national economy (...)” (17_m_STEM_executive function_political entity, Paragraph 74), which points towards the fact that, in Algeria, research is preferred to be of applied rather than basic nature.

Accordingly, the reasons for research in Algeria are as follows: “(...) we do teaching, we do research. But why? We must be an actor in territorial development. Basically, that’s it” (14_m_STEM_administrative function_central unit, Paragraph 238). The personal motivation to contribute in, and towards, national development is, therefore, an essential factor. Indeed, academics are also of the opinion that research needs to be aligned with national needs;

(...) We need more consistency, that is to say in training, we will say, that’s it, we need useful instruction. I am not saying that (*STEM sub-discipline*) is not useful; it is very useful, okay, but there must, still, be a training map, which is consistent. Consistent with what? With the needs of the territory, with the national needs, with the foundational project. Take research that is consistent; take research that is coherent. If we have a foundational project of objectives, all researchers should go towards that goal (...) (14_m_STEM_administrative function_central unit, Paragraph 238).

As this statement shows, it is being advocated for a research agenda on the national level, into which all research conducted should fit. The notion of the need of usefulness of research is introduced, and defined; “(...) it’s research by objectives, it’s top-notch research, it is research that contributes to the development of the national economy, it is research that answers the questions of researchers, the social and the economic sector, it is useful research” (17_m_STEM_executive function_political entity, Paragraph 18). As a result, there is quality assurance in the selection of laboratories and research units: “(...) We must choose which laboratories we will be able to count on to solve problems in socio-economic sectors (...)” (17_m_STEM_executive function_political entity, Paragraph 36). This state of affairs goes along with certain – technical and natural science-based, as applied – disciplines or themes; “(...) So, if the government has prioritised these areas, it means that it gives a lot of

interest to research, and it counts a lot on research to solve socio-economic problems” (17_m_STEM_executive function_political entity, Paragraph 84). This fact is also reflected in the five thematic agencies, out of which one only oversees social sciences, arts, and humanities.

National development entails local or regional integration; “The university must insert itself; this is the great development, it must insert itself into the development of its region. If every university inserts itself into the development of its region, that will be the participation of the Algerian university in the development of the country” (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 31). Likewise, financial considerations play a role, too: “(...) What matters is profitability, profitability with being up to date” (4_5_f_Arts_Humanities_Social Sciences_1_administrative function_central unit, Paragraph 201). Therefore, there is a certain pressure to exploit research outcomes by developing a product and marketing.

Prioritising applied research is also important in terms of a government policy of the promotion of research outcomes: “(...) So, the Ministry says, ‘Yes, you must promote research outcomes, the DGRSDT, too’ (...)” (14_m_STEM_administrative function_central unit, Paragraph 158). Correspondingly, lecturers are likely to engage in research, which receives official approval of the type: “(...) the state encourages us to do this research” (12_m_Arts_Humanities_Social Sciences, Paragraph 487). Incentives are given in that in the wider sense, certain usefulness for society is indirectly attended or even required; “(...) So, scientific research is at the service of the citizen (...)” (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 241). It is also stated by lecturers, e.g., “Of course, it’s a priority, especially applied research. I prefer to orient myself towards research and even that this research is oriented towards applied research, because it can be useful in society, rather than do academic research” (13_m_STEM_administrative function_faculty, Paragraph 96).

Furthermore, research of basic nature is outright discredited: “(...) And, the second mission it’s scientific research and technological development. And we are very provocative, we write research with a minuscule ‘r’, and ‘d’ in capital letters (...) Research without technological development is good, but it is in a very narrow field (...)” (14_m_STEM_administrative function_central unit, Paragraph 236). It is assumed, too, that there must be a prior outcome focus as clearly defined objective to engage in research

activity; “(...) must be transformed into act, into action. This is important because staying only in research; it is true that we are used to saying researcher, this one is a researcher, he is a lecturer-researcher. I want, one day, to say that he is a finder. He found something” (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 241).

At the same time, it remains a challenge because the status quo is proof that it has not been achieved yet; “The challenge? Being an actor in economic development, that’s it, the major challenge – actor of economic and societal development of Algeria” (14_m_STEM_administrative function_central unit, Paragraph 184). Hence, as of now, the Algerian university and the research conducted within is somewhat disconnected from its socio-economic environment – despite the fact that policy-wise, “(...) the doctorate is recognised at industry level, and there is a law that governs all of this” (17_m_STEM_executive function_political entity, Paragraph 48) and industry linkages are thus established. Accordingly, graduates’ skills do not match the labour market; “(...) When you have a mass of young people who are graduates but who are not informed? Because they graduated, but they are not trained, or little trained or poorly trained. How do you want to start the economic wheel? (...)” (3_f_STEM, Paragraph 317).

Overall, it should be noted that the interlocutors cited in this sub-section are mainly STEM disciplines representatives, including one person in a political function. Although some social sciences representatives agree with the discourse, e.g. “(...) So, the university has a lot of potentials, and can play an important role in the development of our, of our country, and ensure significant economic and technological development” (15_m_Arts_Humanities_Social Sciences_administrative function_faculty, Paragraph 40), other colleagues are likely to have a radically differing opinion in terms of the emphasis on applied research as is shown in the following: “(...) And that is why all the research has been oriented towards technique, technology. You know that Algeria needed unmanned planes to guard the borders (...)” (10_m_Arts_Humanities_Social Sciences_executive function_research unit, Paragraph 180). Hence, the focus on applied research and technological themes derives from national defence and thus military interests, which may be hedged in economic growth and the notion of usefulness.

6.5 Other Functions

After four clearly labelled and defined functions, this last subchapter subsumes other functions – 6.5.1 with 45 occurrences, and 6.5.2 with 36 occurrences. Those functions are

united by their ‘third-mission’ characteristics, i.e. the interaction between university and society evoked in the social change subcategory as ideology²⁵¹, which has a specific format at universities in a postcolonial setting and context such as Algeria. The scope of other functions takes the third position after the research and ideology function in terms of quantity. Nevertheless, the number of occurrences is an indication of their high relevance and adequacy in the Algerian case.

6.5.1 Social Need: Massification of the University System and Surplus Labour Absorption

The social need function is defined by Castells as follows:

In many societies, and certainly in the West, the demand for higher education has reached the status of a social need, regardless of the actual functional requirements of the economy or of the institutions. This social need, as expression of the aspiration of all societies to upgrade their education, has led to the so-called ‘massification of the university system’, as the institutions respond to excess demand by downgrading some elements of the system and transforming them into reservoirs of idle labour, a particularly useful function if we consider that this idle labour is in fact formed by potentially restive youth. Thus, an implicit function of modern university systems is that of surplus labour absorption, particularly for those lower middle class sectors who think their children are entitled to social mobility through the university system (Castells, 2017, p. 41).

In the Algerian context, it is expected to go to university after completing secondary school, as all are admitted: “Everyone here, in Algeria, for example, any student who has received his baccalaureate has the right to go to university” (12_m_Arts_Humanities_Social_Sciences, Paragraph 480). Students then expect to have work lined up after graduation; “But the problem here in Algeria is that the Algerian student thinks that, when he finishes his bachelor, he must find a job, a job, that’s the problem” (Paragraph 255) and everyone can access even Master-level education, too: “The master is open for everyone” (Paragraph 119). This situation is commented as the source of associated problems: “(...) But starting from the principle that after the baccalaureate everyone does university; I believe that it is the strategic error; it is the strategic error” (3_f_STEM, Paragraph 125).

The function of the Algerian university is even named as graduating a maximum of students: “It has as the main objective to graduate the most people. For me, I see it like this; it is not at all in quality. It tries to diversify a bit, but in fact, by taking the problem by the wrong end. We do not settle things (...)” (3_f_STEM, Paragraph 321). This status quo leads to the situation of diploma inflation without any necessary or relevant competencies; “At the moment, it is giving people a diploma (laughs). What is wanted, it’s giving people skills” (14_m_STEM_administrative_function_central_unit, Paragraph 190). While indicators

²⁵¹ See chapter 6.1.3

theoretically exist, e.g. “(...) Who says that this course is good or bad? For example, if I have a course where 80% of the students are unemployed. So, it’s clear that this is a bad course. But I don’t have that figure (...)” (14_m_STEM_administrative function_central unit, Paragraph 196), the necessary data is neither collected nor exploited.

The negative consequences of massification are exposed in the following:

(...) Then, I think that many of my colleagues would agree with me to deplore the discrepancy of levels between the students of today and those of the time, we will say immediate post-independence, or indeed, even if with few Algerian students in universities, the level was higher. I think there has been a race to the bottom, which is not a strictly Algerian phenomenon, but after all, one notices it a lot, in any case, that I notice very much. That’s it (1_m_Arts_Humanities_Social Sciences_research, Paragraph 10).

Furthermore, it is put forward that expanding the system by adding several higher education institutions – in each Wilaya – is a strategy to hide otherwise obvious unemployment:

Yes, it’s this massification. And when we see the real objective of this massification, it is, in reality, it is a camouflage of the thing, of people who do not work. What is it called, people who do not have work? *The unemployed*. The unemployed students. They are paid to stay at university. You see the things? Yes. And after, they are dropped with the worthless diplomas (...) (10_m_Arts_Humanities_Social Sciences_executive function_research unit, Paragraphs 260-263).

Another reason for massification is avoiding civil unrest caused by unemployment: “(...) Because we rather overloaded universities to avoid unemployment and the social crisis (...)” (1_m_Arts_Humanities_Social Sciences_research, Paragraph 48). Also, it is mentioned that there is a political dimension to it; “(...) There is still this political aspect of the issue which aims to keep the maximum of Algerians at university to avoid an explosion. *Yes*. Occupy the youth. And that, no, it will not help us; it will not help us” (Paragraphs 82-84). As part of this analysis from a social sciences representative, not least, Algeria’s economic-political structure determines its social situation, too:

(...) anyway, being an oil-exporting country that works a lot on the oil resources; we know that unemployment has multiple causes, and especially this one, which is fundamental. We wanted to maintain this country in a resources logic and not to diversify the economy, after all. At least, wanted, or able, whatever, for the moment, the economy is not diversified enough to produce, we will say, more employment. *That’s it*. So, anyway, let’s say that there is a structural problem (...) (Paragraphs 49-51).

Another reason for prevailing unemployment is the non-applied nature of courses:

(...) Algeria, currently, the main concern of the university is employability. This is a key term in terms of reflection about the Algerian university. Because, for too long, but maybe we did well, I don’t know, for too long, or we have remained on the scientific dimension for a long time, on scientific production, on scientific research, on laboratories, on research units. It’s a little bit the profile of the university. But we haven’t thought about the future, for example, of graduates, of university graduates (...) (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 16).

Yet, there is an awareness that politicians as of now avoid reforms, given the pending risks associated with changing the system of access as well as the selection, based on socialism: “(...) I think the time of the quantitative side is over. I think that we should now think more about quality. Think qualitative, of course; it will cause, for decision-makers, lots of problems because there are masses of students (...)” (6_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 87).

Overall, it is remarkable that – while awareness of the issue is given throughout disciplines – the reasons are being outlined almost exclusively by social sciences and humanities representatives, who are more likely to reflect on their own position in society in their work, too.

6.5.2 ‘Third-World’ University: Post-Colonial Context

The particularity of the so-called ‘third-world’ university lies in its postcolonial context, as defined by Castells in the following:

(...) the specificity of the university system in the Third World is that it is historically rooted in its colonial past. Such specificity maximises the role of universities as ideological apparatuses in their origins, as well as their reaction against cultural colonialism, but emphasises their ideological dimension in the first stage of their post-independence period (Castells, 2017, p. 43).

Academics have an ambiguous relationship with the contemporary nation-state; there is an oscillation between frustration and optimism. On the one hand, there is an explicit reference to the status of underdevelopment: “(...) we are in a third-world country, underdeveloped (...)” (15_m_Arts_Humanities_Social Sciences_administrative function_faculty, Paragraph 10). On the other hand, there is outspoken national pride: “(...), so we can be proud in Algeria” (Paragraph 33). In this case, both opinions are voiced by the same person, though the concepts represent recurring motives:

I: *That’s fine. Right, is there anything you want to add, to conclude (laughs)?*

P8: To conclude, we are a great country. It is beautiful; we have a beautiful...

P9: We can do a lot of things.

P8: A beautiful, how do we say that?

P9: We can go very far.

P8: Yeah, we can go very far. A rich country. We are a rich country, and we have wealth, because we have a, how do you say? We have a culture which is behind it. We are very proud, with positive aspects, negative aspects, and it’s like that

(8_9_f_STEM_1_executive function_research unit, Paragraphs 498-503).

Also, it is mentioned that foreigners characterise Algeria as the best country in Africa;

I remember, once, there was an African commissioner who came. A commissioner, that’s the equivalent of a Minister in the African Union. He made a speech; he is someone who adores Algeria,

he was the one who came after, you know, the black lady, after all, you will tell me both (*unclear*). And he gave a speech at the university. What did he tell us? He told us: 'I give you a piece of advice. I know that you, the Algerians ...', because he was educated, and he thanks Algeria for all the scholarships it has given to African countries. So he says: 'Me, it's a country for which I have a lot of admiration, but you, Algerians, you tend to see only towards Europe. I give you an advice. Instead of being, wanting to be like them, you will never be like them. Look towards Africa; you will be the best in Africa (9_f_STEM_executive function_research unit, Paragraph 520).

In this context, competitiveness, on the same level with other African developing countries, associated with the risk of falling behind, is underlined:

And I said to myself, he is not wrong. Well, there is South Africa, there is Nigeria, there is Kenya, there are developing countries; Rwanda. They develop themselves. One shouldn't see those only, because the others are developing, because afterwards, we would even be behind them. After all, we are already behind some. And we can be behind certain that we despise now. Well, despise, so, disregard, ok. We say: 'They are underdeveloped'. So you have to think like that, even in everyday life. You must not disregard, even the poor ones (9_f_STEM_executive function_research unit, Paragraph 522).

Pride may also extend to the university. Accordingly, there are debates whether, and, if so, to which extent, there should be a particularly Algerian university. The Algerian university is yet to find its own identity as a national university:

You know, because of the Algerian educational system, because the system is part of the educational system. It's a very young system, and, after independence, we started by applying experiences. We were inspired by Canadians, we were inspired by French, we were inspired by other countries, but today, we have not yet managed to define an autonomous Algerian system, for sure (...) (15_m_Arts_Humanities_Social Sciences_administrative function_faculty, Paragraph 30).

There are advocates: "(...), but we will have to have our own system. That's what I think" (6_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 85) as well as "Presently, of course, the national side is at the supremacy" (Paragraph 109).

However, therefore, the colonial past indeed weighs heavily. The relationship with France is ambivalent as is shown in the following: "(...) and we stayed attached to France for a very long time in a very, I would say natural way. It's the umbilical cord that has remained ... even if it was cut, badly cut, or I don't know (...)" (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 184). The politicised expansion, while based on socialist approaches, has indeed another dimension, i.e. that of resistance to the former colonial power: "So, we tell you that we have opened the university, we have opened, we have democratised. But in fact, it is rather, we have massified, that's all, compared to what France did. France, which had closed the university to Algerians; therefore, after independence, one had to do the opposite, that's it" (16_m_Arts_Humanities_Social Sciences, Paragraph 62). In this context, it becomes clear why an academic still has high social prestige in the Algerian society; "(...) so far, Algerian society has had respect for the

academic. It is important. So, he is seen as the researcher, the lecturer, the intellectual, all at the same time; we are respected (...)" (Paragraph 94).

On the other hand, there are obvious issues with the quality of training of non-experimental disciplines and lack of appreciation of the teaching profession in particular:

Yes, it is very serious. It means that, instead of requiring that the educational system absorb the best graduated and the most competent, in fact, Algeria has considered that those who must teach in middle school, in primary, primary, middle and high school, it is people who were not able to have the baccalaureate, but who could have a little training of two years and then go on to teaching. And that was a terrible bet, since finally, these students are very badly trained, and in the end, it is these young people that we receive at university (3_f_STEM, Paragraph 209).

Furthermore, linked with the country's colonial past, a persisting issue is the emigration of – especially postgraduate – students, which leads to national brain drain as it is stipulated: "(...) So, the French state, them, it rather, it will find the student ready, ready-made" (16_m_Arts_Humanities_Social Sciences, Paragraph 22). Hence, Algeria does not benefit from the students trained by its higher education system, which is a particularity of the postcolonial situation the country is characterised by, too.

In general, ideology continues to play a role: "(...) You know the fault, where it comes from in some countries? It is that it was believed that the university is only science (...)" (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 216). Hence, there is resistance to part with the model of full state funding of higher education: "(...) I think it will not change, even if it has to be changed. But it will not change. I want to say one thing; it is that the state subsidises many things, so teaching will not to be paid for tomorrow" (8_9_f_STEM_1_executive function_research unit, Paragraphs 281-282). The reason is likely central governance control, preventing private higher education providers with different, e.g. curricula or subjects.

Overall, the choice of the theoretical framework, concerning its first component, Castells' functions of the university, has proven suitable to assess, and determine, the positionality of the Algerian higher education system. The present-day Algerian university is one not independent from politics, which needs to conform to the central government authority's concepts and ideologies as outlined above. It is also an institution which incorporates social change as well as social needs, and, hence, is intricately linked to societal demands of higher education for all on a national scale. Further, it has only recently institutionalised research, the implications of which are still in the process of adoption and adaptation. In parallel, external pressures have an impact, notably on language use, standardisation, and quality

assurance more generally. Lastly, it is influenced by its past and its origin as a colonial university. In contrast, the elite selection function only extends to postgraduate research education and to access to opportunities abroad. The training of the bureaucracy function is more a relic of the past, with a subordinate role in the present national system.

While Castells' theory captures these essential orientations and the extent of their presence, it remains insufficient in adequately depicting the Algerian case as the determining contextualising factors are regarded as 'other', non-essential, in his functions model. Besides, the ideology function is far from having exerted influence in the past only, with no significance in the present day. Applying the theory to the Algerian higher education system, it is also partly undifferentiated in the sub-functions, as, e.g., research as a new/non-default function is multi-faceted and concerns a variety of aspects.

Therefore, the Algerian specificity can be accounted for by acknowledging, as a first step, its past and resulting postcolonial higher education system situation referencing and able to explain and interpret from this historicity perspective, which, in the logic of Castells, is merely an addition, but neither a central element nor stands in the beginning. The question of resources is not considered, either, but plays a major role in Algerian higher education policy, which leads to the implementation, and likely continuation of massification. Again, its existence is mentioned, but reduced to an 'other' function, and not linked to the decisive social change. Not least, it has become apparent that international mobility counts as a means for elite selection individually, which needs to be analysed appropriately by Bourdieu's forms of capital in the following.

After having thus set the scene from a macro perspective, the subsequent chapter seven will treat the micro perspective of operating within this specific system, exposing the ambivalences created by the two poles of an ideological, national basis, drawing on politicisation and centralisation, and increasing higher education internationalisation, promoted by research as a newly emerging university function. In this context, it is important to take into account the postcolonial situation, as well as circumstances based on the social need, which have their manifestation in the massification of the system. These factors mean that there are limits – if not outright obstacles or contrary developments – to the individuals' practices as a part of a larger enterprise.

7 Data Analysis: Ambivalences in the Algerian Academic Field

After the preceding chapter dedicated to results, detailing the various university functions in the Algerian context, the present chapter seeks to synthesise findings, refine implications, and spell out the impact on system factors on individuals, i.e. the Algerian academic, and thus linking the macro and micro levels. After exposing the state and nature of personal oscillations, derived from the higher education context they operate in, in subchapter 7.1, Algerian academics' coping strategies in dealing with and managing those ambivalences, are identified and classified according to underlying reasons on the macro, meso and micro levels in 7.2. Further, their behavioural motivations are analysed using Bourdieu's framework of types of capital in 7.3. The outcome from those first three subchapters is synthesised concerning the research questions in 7.4 before a discussion regarding the suitability of the theoretical framework as a lens of analysis concludes the second empirical chapter in 7.5. Throughout, by cross-references, linkages are established as well as interrelationships are highlighted with regards to university functions.

7.1 Personal Oscillations

Algerian academics are confronted with system ambivalences between the national and the international, as has become apparent in contradictory university functions related to ideology and the particular postcolonial situation of the Algerian university²⁵². This situation leads to a personal oscillation²⁵³ in engaging in research, respectively, the decision to do so or refrain from it. The specific ambivalences causing the oscillation are analysed in the following; on the one hand, they are policy-induced and system-based, whereas on the other hand, they are derived from the transformation element of internationalisation exposure and associated challenges in reform as well as the absence of a strategy, serving as orientation for personal action.

7.1.1 National: Policy-Induced and System-Based

Democratisation versus Massification

Algerian academics operate in a field which is portrayed as an example of the following situation: “(...) And the third world is known by one characteristic, which is demography-galloping. That's it (...)” (15_m_Arts_Humanities_Social_Sciences_administrative

²⁵² See chapters 6.1.2/6.1.3/6.5

²⁵³ See chapter 4.2

function_faculty, Paragraph 10). This socio-economic context has led to an expansion in its higher education in both institutions and students.

To begin with, there is an ambivalence in policy, since, on the one hand – by continuing to add new institutions to the system – all universities within the country are considered equal in principle, as their mission is to grant access to higher education to the entirety of the Algerian high-school leavers. This perspective is connected with exclusively public funding, and it is accepted as common knowledge as is reiterated in the following: “(...) besides, we don’t have a university for the elites here, we don’t have it; we don’t have an elite university. Access to university is open, that’s it (...)” (15_m_Arts_Humanities_Social Sciences_administrative function_faculty, Paragraph 48). Notably, however, at the same time, mergers may be refused:

(...) it was a project to divide the university (*institution*) into three. *Okay, recent*. It’s been three years, four years. But we refused. *In the model of (city 8), (city 11), ... Model (city 8), (city 11), (city 5), (city 4), (city 12)*. Many of them are like that. We refused, because it meant that your skills would be divided. And it is contrary to, exactly this, policy of reunification of disciplines and reunification of skills, interdisciplinarity (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraphs 121-125).

However, institutions themselves may be attributed elitist status by the governing body; (...) “(...) It is the Ministry which chose its pilot universities” (...), yet, those in charge at the institutional level feel obliged to level it out by knowledge transfer; “(...) but what is good, everyone should be aware of this, it’s sharing and good practice” (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 41), which is an expression of their oscillation state.

At the same time, competitive advantages of institutions are emphasised by their executive representatives, which appear in the form of pioneering developments, e.g. evaluation, as in the following case: “So, I told you, this self-assessment process has started in Algeria since 2016. There was a national benchmark to develop this self-assessment (...)” (6_m_Arts_Humanities_Social Sciences_executive function_central_unit, Paragraph 1) or, indeed, refer to the socio-economic conditions: “(...) Imagine, the Rector, once, he said: ‘Hold on, do you know where Adrar is? It’s in the deep South. If the people of this Wilaya send their daughter here, it’s because they trust us’. You see what I mean. So, there is the environment, there is also the environment!” (9_f_STEM_executive function_research unit, Paragraph 182).

Nevertheless, the resulting issue of massification exposes the qualitative versus the quantitative conflict; “(...) you have number versus quality, that means, can we provide quality training for such a large number (...)?” (14_m_STEM_administrative_function_central unit, Paragraph 54). Hence, there is an ambivalent situation since both education for all and quality cannot be accounted for: “Lack of knowledge. They don’t have the pre-requirements. More so, massification has brought about that people who do not have capacities, but we make them ascend” (10_m_Arts_Humanities_Social_Sciences_executive_function_research unit, Paragraph 86). In this regard, individuals see the issue of unemployment, which is, however, not part of political discourse (see above, 7_m_Arts_Humanities_Social_Sciences_executive_function_central unit, Paragraph 16). Hence, Algerian academics oscillate between their attributed function and their observations as members of society.

It is acknowledged that there is an ambivalence with the quantification; “Difficult to choose (laughs), because it mixes. At times, it is massification, at times democratisation, but deciding between the two is difficult. *Humm. It goes together. That goes together. We can’t separate the two*” (6_m_Arts_Humanities_Social_Sciences_executive_function_central unit, Paragraphs 119-121). These two perspectives are due to system factors – politically-induced facilitation of access rooted in historic inequalities – versus individuals’ opinions, connected to their status and role. It is first pointed out that this development, though recent, has impacted all the more intensely:

So, first of all, Algeria went from the 80s to the 2000s through a process of massification of education. That means, us, in our time, we still had quality education because the number was limited. *Yes*. And so, we had a lecturer-student relation that was up to the norm. Algeria made a choice, which is to allow everyone to go to university. So it’s a massification of higher education; *yes ...* which means that today, we have; we have practically multiplied the number of students in all fields by three, by four, even by five sometimes (...) (3_f_STEM, Paragraphs 34-36).

Given their apparent non-political role as academics; “(Laughs) I am not to comment on the role of the Ministry, but ...” (6_m_Arts_Humanities_Social_Sciences_executive_function_central unit, Paragraph 123), policy decisions and mode of governance may not be questioned. Consequently, Algerian academics may find themselves in a position of oscillation in this system of what they perceive as massification²⁵⁴ in the context of political democratisation of the higher education system; by hinting at respective governance structures, such as; “Democratisation? I don’t know I. I would say decentralisation, much

²⁵⁴ See chapter 6.5.1

more so” (4_5_f_Arts_Humanities_Social Sciences_1_administrative function_central unit, Paragraph 289).

Indeed, the notion may also be explicitly and outspokenly rejected, as in the following: “(...) I’m not very comfortable with the term ‘democratisation’, because, really, really, really, we are not in a democratic regime, to talk about, ‘democracy’, and ‘democratisation’ (...)” (16_m_Arts_Humanities_Social Sciences, Paragraph 60). The latter opinion is voiced repeatedly:

Of course, it will not work. It is obvious that it will not work. *As a system, that’s it*, as a system. This whole system, it’s a populist system, populist, under the pretext and under the guise of democratisation of education; that’s why I reacted just before when you said ‘democratisation’. It’s not true. It’s not democratisation; it’s total populism. We give all of them higher degrees, but in fact, we do not have an overview of the professional integration of all these graduates. And when we do not have an overview of economic integration, it means we are also selling off the economic sector (3_f_STEM, Paragraphs 323-325).

Here, as another aspect to the debate, the criticism mentioned is aimed at the lack of other, and varied, tertiary education options – including vocational – which are not addressed in an ideology-loaded official discourse of access, and postgraduate and research training:

So why, on the pretext that we have to democratise then we have to allow everyone to hope to be a doctor and a professor, when they are people who have skills in other fields. *Yes*. So for me, ‘democratisation of education’, it is a term which is completely empty of meaning. *Okay, yes*. It does mean absolutely nothing for me. Because, if not, we would oppose it to the confiscation of education and teaching. But we don’t confiscate; it’s not because we don’t want massification that we confiscate knowledge and training. But we distribute it more consistently and in a much more ideal manner (3_f_STEM, Paragraphs 219-223).

While some mention negative aspects of having a university in each Wilaya – cultural and personal development hampered by not broadening horizons, as opposed to post-independence times of only one university and two centres as annexes country-wide – “(...), I cannot say the opposite. There was an advantage, it is that of giving, even just a certain level, even if it is low, but a level of education which allowed him to see how the others lived” (10_m_Arts_Humanities_Social Sciences_executive function_research unit, Paragraph 156), others emphasise the lack of distinctiveness of a single higher education institution from a nation-building point of view; “One, it would have strengthened national unity. We are a country. A young nation, it would have allowed mingling of students and staff from all regions, and it would have allowed a concentration of qualifications, too” (1_m_Arts_Humanities_Social Sciences_research , Paragraph 96).

From an academic perspective, with regards to research, a massification of institutions is also problematic, as “(...) Universities cannot flourish when they are numerous and

geographically located in the same region (...)” (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 119); so they lose, respectively, cannot retain or never develop their status as centres of excellence. Not least, executives themselves are affected by the massified system at their institutions, and are called upon for a major task, as in this case:

(...) But these little things of administrative constraints, it has always existed, and they will always exist, maybe less and less, but they will exist — the administrative slowness. Now, we are fixing everything. Students were taking a long time to have their diplomas. Now, they have them very quickly. We have a Rector who signs ten thousand diplomas in one week (...) (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 247).

Individually, there is an ambivalent situation for the Algerian academic in the lecturer status because of inflation of academic degrees, with frustration regarding the usefulness of one’s work:

(...) Because, as I told you just before, it is not the diploma that gives us the right to teach (*laughs*). And what is currently being done, it’s not... *Even less if everyone has the diploma*. Yes, yes, that’s it, that means even more. It’s heartbreaking to find people who only think about the diploma. Because with the diploma, one can access. But a diploma is not everything. *Yes, no, especially since there is inflation in general*. Yes, it can no longer continue (10_m_Arts_Humanities_Social Sciences_executive function_research unit, Paragraphs 166-170).

Further, circumstances of higher education system expansion and student number increases have a detrimental effect on teaching, which becomes obvious first in the technical disciplines; “(...) That means, at master 1 level, they are taken care of by the research laboratory, and so, you must imagine the situation. If you have the first year of master with about twenty students, and the second year of master with twenty students, forty students in a laboratory, it’s a bit annoying, for practical work especially (...)” (13_m_STEM_administrative function_faculty, Paragraph 14). More so, even the elitist-connotated, and hence restricted, medical studies, have become subject to massification:

(...) Massification, there was an explosion in the number of students. I had students; before, I give you an example, in 93, we sometimes had up to 100 (*STEM discipline*) students. 93. We are in 2018; we have up to 500 students in the same lecture theatre. That, it’s a massification, indeed, because we are victim of the number of students who register. We have no choice (...) (8_f_STEM, Paragraph 61).

This statement shows the disapproval of the professor with the current policy, yet, it also exposes their non-decision-making power.

The social sciences and humanities, too, are affected by the status quo of a context-dependent and coerced lack of quality assurance non-conducive to academia and its training: “(...) It may be shocking what I tell you, but we end up with legions of students and with little

requirements on what they have to produce. *That's it*. That is, it's not normal, it's not normal I mean, it is ... (...)" (1_m_Arts_Humanities_Social Sciences_research, Paragraphs 46-48), so, more dramatically at the postgraduate level: "(...) One cannot, it is... to seriously attend to 120 master students (...)" (Paragraph 62); which then leads to the following situation of lecturer overwhelming and students' lack of attention:

(...) let's put it this way. There are too many students now, and the infrastructure is not enough to get everybody, so you end up having a lot of students in one room and so you can't communicate with everybody. So, people ... you suffer, and the students suffer even more (2_m_STEM_research, Paragraph 165).

System-based factors

There are factors which are system-inherent and thus governance-based. To begin with, the challenge of inadequate foreign language skills, which is based on school-level policy; "(...) I have to tell you one of the problems we have, also we have the children are getting education Arabic education after the (unclear 00:46:20-0) they get to do university starting French (laughs) this is why you need one year more, one more year I am sorry" (2_m_STEM_research, Paragraphs 237-238), places academics in the situation of personal oscillation. This ambivalence extends to both teaching as part of their duties,

(...) it's neither Arabic nor French. People should apply a system. These days, our students know neither Arabic nor French. *That's a big problem*. Yes. And when you hear them, speak at the level of institutions, or at TV, people cannot string a sentence in the same language: two words in Arabic, two words in French, two words in English. It has become gibberish; it is no longer; it is no longer a real language. That's why it's a problem. But I think it will fade in a few years (10_m_Arts_Humanities_Social Sciences_executive function_research unit, Paragraph 54).

And research, taking into account required language competences: "(...) it's, for a researcher, it's doing the work halfway. We can't; we can't say that we did monolingual research. It is not possible. Because me, I think in one way, another person can think in another way, I need to know his ideas" (10_m_Arts_Humanities_Social Sciences_executive function_research unit, Paragraph 34).

Importantly, there is an issue of absence or insufficiency in university administration staffing to a great extent, which lets Algerian academics oscillate between taking on any extra-curricular projects apart from teaching, and engaging in research; it being mutually exclusive:

(...) when we take a European university the size of the university (*institution*), all these structures, (*name*), incubator, etc., it's at least 60 people full-time. It's at least, minimum, 60 people full-time. *And management, not research, not teaching*. They don't teach; they don't do research. They manage

this structure. That's the problem (14_m_STEM_administrative function_central unit, Paragraphs 130-132).

As the above statement shows, this gap becomes apparent only when compared to institutions abroad, although every member of the Algerian academia is arguably in the situation; "But it's true, it is true that each structure needs an organigramme. It is clear. If not, a lecturer-researcher will be overwhelmed. One needs administrative support" (14_m_STEM_administrative function_central unit, Paragraph 128). Administrative processes, in general, are perceived as too bureaucratic and lengthy, which then hamper research, as is openly admitted in the following: "(...) There are ..., sometimes there are administrative procedures, which may interfere. It is true that they are made to order, to organise, but it's not always the case. Sometimes, in trying to apply the regulations to the letter, we handicap a lot of the, the, the ... *Activities* ... Of research activities (...)" (6_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraphs 175-177).

Furthermore, the lack of a financial incentive to engage in research is highlighted, too, as a system-based factor derived from a largely non-existent evaluation and assessment;

(...) If one positively assesses a researcher, one will also be able to support, especially financially, etc. for research projects abroad or, or even here at home, projects that require, for example, more funding or at least more resources. But there is no evaluation, so there is no requirement of results. And that, if it were to be at the international standard, to return to the question on international standards there, yes, it is necessary, it must be applied, that is to say, that: an evaluation is a follow-up (...)(1_m_Arts_Humanities_Social Sciences_research, Paragraph 109).

This situation leads to frustration as a result of the personal oscillation between going the extra mile in engaging in research or letting go by refraining from it.

Accordingly, the absence of, respectively, restricted budget autonomy proves problematic as well: "*For this, it would be necessary... well, to have one's own budget? Which is presently not the case.* Yes, it's logical. Already, to have the budget, you have to prove that there are results. And step-by-step, as there are results, there is budget. It's a vicious circle" (8_9_f_STEM_1_executive function_research unit, Paragraphs 342-344).

In this context, the system foresees no recruitment post-doctorate either a decision which is not taken by the head of the research unit – which leads to the situation of losing talent:

The doctoral student, once he finishes, he finds a position elsewhere, he leaves. If he can't find a job, he has no rights in the lab. He can come for research, but he can't have anything, for example. That is not good either. Because otherwise, it would help keep people here, that's it. There is a law, a law

which has been passed. It must be ... because when we have a law, we have the law and the ..., the application (8_9_f_STEM_1_executive function_research unit, Paragraphs 346-348).

Hence, there is neither budget nor human resources decision-making autonomy, which greatly restricts research activities, and leaves academics to oscillate between their mission and the reality of the system they operate in.

On a meso level, institutional autonomy, too, would be needed to develop and, among others, succeed with regards to research outcomes:

(...) I think they should give more liberty or more freedom to the rectors of the universities. *Mm-hmm*. Maybe so they should some guidelines but then let them work, I think that would be the best way. Because when you ... everything is centralised the way to do it in Algeria whereas you have the Ministry and the way it is (unclear 00:44:35-7) are two different things, two different philosophy. Most of the time the people in Algeria don't feel what the local needs are and I think we should give them some freedom. So, it is I would say more like more regulatory system then somebody who gets involve into details, to me that's the way it should be (2_m_STEM_research, Paragraphs 229-231).

The criticism put forward here is that the governing body cannot take the individual situation on the ground into account, and, consequently, does not act in a needs-based way, whereas leadership of a university could very well do the appropriate for their institution if given the possibility by legal competences to do so. Once more, those in an executive function oscillate between what is centrally decided or prescribed and what they assess as an institutional plan.

Lastly, for the macro level, the absence of a wider Algerian societal development plan – where the university would play an intermediary role – is pointed out, which leaves academics without a clear plan in assuming their teaching function: “We don't have a societal plan. If you want to know, we don't have it. Even if they say that our objective is to train, to train to ensure the tomorrow. But train what? (...)” (10_m_Arts_Humanities_Social_Sciences_executive function_research unit, Paragraph 158). Hence, the personal oscillation of lecturer and society member is reflected. This situation of a lack of strategy, and hence the orientation, becomes even more apparent in the following:

(...) ‘You know well that you have taught us that a programme can only be built on a societal project. Then, you ask us to do a programme without having the project of society’. In 97, they did not answer us, in 98, they did not answer us, and that at the level of the Ministry. In 99, I said with the one who was with me, ‘I swear that we will not leave here without them telling us what the project of society is’. The answer was unacceptable: ‘We expect it from you’. That means that nothing was done, and so far, we have no societal project. How will Algeria live? (...) (10_m_Arts_Humanities_Social_Sciences_executive function_research unit, Paragraph 100).

7.1.2 International: Transformation and Challenges

Challenges in internationalisation exposure

Stakeholders in Algerian academia, including lecturer-researchers, suffer from one-sided or disadvantageous cooperation, examples of which are detailed in the following. Algerian-conferred degrees are not recognised abroad by default, resulting in graduates having to repeat at least six months: “(...) there is always a year or six months of refresher” (4_5_f_Arts_Humanities_Social_Sciences_1_administrative_function_central_unit, Paragraph 217). This state-of-affairs applies to STEM subjects all the more:

(...) We should do statistics. I know that in our scientific and technical disciplines, they make up a very, very large part. After all, do they have the means for it? How are they perceived and received elsewhere? That is yet another story. Because being weak; these days, equivalences are more and more difficult to give (3_f_STEM, Paragraph 417).

Administrative difficulties continue to persist, hampering individual progress: “Well, abroad, I ... What did I see? No, I went to France several times; I went to Turkey, too, and I visited (*public educational institution outside of higher education*). So it was not, I did not have access (...) I went to Turkey, but I did not have the opportunity to have the cooperation agreement and the authorisations to access the university; it was a little difficult (...)” (4_5_f_Arts_Humanities_Social_Sciences_1_administrative_function_central_unit, Paragraph 307). Another reason is ill-designed programmes of exchanges, where necessary language requirements cannot be met, as the following case shows:

We made an agreement with them so that we could have distance education. But it will only be in English. *Yes, because they master neither French nor Arabic*. So, we can't. *Well, a few, anyway*. No, but it is, above all; first of all, people who can be at university must, normally, it is the three languages that they must be...; but here, it is two languages, if need be, two languages, one, they know it well, the other, more difficult. But I see that people are going towards English (...) (10_m_Arts_Humanities_Social_Sciences_executive_function_research_unit, Paragraphs 44-48).

Financial difficulties of the Algerian state aggravate the situation, driving emigration for economic reasons forward:

(...) At the moment, in conjuncture of the fall in the price of barrels; the reduction of the state income, so, exhaustion of the financial state reserves, so, it's a more delicate conjuncture. Automatically, people flee from their country; one thinks of escaping the country. I apologise for the term. So, we must review this situation, and give hope to these youth who want to go to France or elsewhere. It's not only to France. There are students all over the world: United States, Japan, Germany (...) (15_m_Arts_Humanities_Social_Sciences_administrative_function_faculty, Paragraph 68).

Nevertheless, France continues to be a reference and is the preferred destination for graduates and post-graduates:

(...) well, now the internationalisation, it is done, as you said earlier, it is done in one direction only. It is especially the Algerian students, and the best, trained here, until the bachelor, up to the master, who are leaving, you see? To enter international circuits. But the opposite direction is not done; the opposite is not done. I take, for example, there are a lot of students here, with the master. They will try their luck, they will try their luck, principally in France (...) (16_m_Arts_Humanities_Social Sciences, Paragraph 20).

This status quo may be induced by a French policy of promoting and providing scholarships: “Because she was the best in class, among the best in class, so she received a scholarship, a French scholarship; not an Algerian scholarship. Her supervisor is an Algerian” (11_f_STEM, Paragraph 171). Accordingly, emigration for educational purposes – especially to France – may be commonly justified as follows: “(...) students, in particular, must continue their studies, because for them, continuing studies in France, it’s the future, it is access to their futures. So, there is no need to fight; to hold back these youth” (15_m_Arts_Humanities_Social_Sciences_administrative_function_faculty, Paragraph 64).

Further system-induced factors are a need to change the working culture; “(...) So, but more important for me, is this: one, that they get used to working all the time, all the time, all the time. It is not always obvious for the Mediterraneans” (9_f_STEM_executive_function_research_unit, Paragraph 38), since there is a discrepancy between habits at home and abroad; “I think you have to be authoritarian. I think you have to be authoritarian, no, at first, be authoritarian, get people used to it, and after a while, it will become a normal habit. When they are abroad, they are in the lab; we are sometimes in the lab from 7 a.m. until 10, 9 p.m.” (8_9_f_STEM_1_executive_function_research_unit, Paragraph 316).

Absence of internationalisation strategy

The Ministry as the responsible central governing body is in charge of Algerian higher education internationalisation, which is put forward as common knowledge by individual Algerian academics: “*Okay. Those who decide on that is it...? It is the Ministry, yes. It’s the cooperation service. So, it’s very centralised? The governance? Yes, yes, quite, rather*” (4_5_f_Arts_Humanities_Social_Sciences_1_administrative_function_central_unit, Paragraphs 278 – 281).

However, the status quo of Algerian higher education – from individuals’ perspectives – is characterised by the absence of a strategy of internationalisation as is shown by the following exemplary statements:

“And the current strategy is entering the world” (9_f_STEM_executive function_research unit, Paragraph 212);

“And there are the Arab countries, it’s normal, so there are a lot of lecturers going to Arab countries, so it’s normal” (6_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 95);

“(…) There is always, there are relations with the United States, there are relations with the countries of Eastern Europe” (….) (Paragraph 127); (….) “There are also now countries that give scholarships (….)” (Paragraph 133, 6_m_Arts_Humanities_Social Sciences_excutive function_central unit).

Therefore, various countries or regions are mentioned, without any focus on either area, language, ideology, or (geo)political considerations.

Notwithstanding, national institutional profiling may occur through its internationalisation degree. The latter serves as a distinct identity. While there is a general, apparent, discrepancy between international ranking and national status as is shown in the following:

Yes, for publications, so, each year there is the ranking, and so the university (*institution*), the ranking has been improved, from the start of these rankings until the present. We were at 4000 and something; we are at 2000 and something; we still won 2000 places. We are still far, but still, we gained 2000 places. By national ranking, this is (*institution specificity*) (….) (13_m_STEM_administrative function_faculty, Paragraph 94).

It is up to the institution’s initiative to position themselves as active in the internationalisation development, or not; “(…) The internationalisation side, cooperation side, it differs between university and others. There are universities that are really advanced, there are others that are not, which start, and there are also universities which have relations, but it is on a personal basis” (6_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 109).

However, these individual cases do not make up for the lack of a needs analysis, as is claimed did not take place before introducing the Bologna reform:

You were talking earlier about LMD, etc.; well, I have the impression that it was done without a deep reflection on: does it correspond to the local situation? *That’s it*; I do not think that this reflection was made, we have, we applied it like that, we thought that there is an international standard and that it should be applied without reflection; that’s it; I have this impression; *hm*; well we have had others, we have other concerns in cooperation (1_m_Arts_Humanities_Social Sciences_research, Paragraph 28).

Correspondingly, other national policy decisions as internationalisation adaptation measures are top-down only: “So, the Ministry saw that it was necessary to standardise, and there was standardisation, which started from the year 2017” (6_m_Arts_Humanities_Social_Sciences_executive function_central unit, Paragraph 27) and, as a consequence, reforms may be rejected by Algerian academics; “(...) From where does one bring us all these new theories? It can’t apply to us; it’s imported (...)” (7_m_Arts_Humanities_Social_Sciences_executive function_central unit, Paragraph 93) as an expression of their position of personal oscillation.

More broadly, the ambivalence of Algerian higher education internationalisation in a system characterised by central governance and the lack of institutional autonomy is pinpointed:

(...) there is an ambivalence. Theoretically, the Ministry of Higher Education is supposed to be an orchestra conductor. It is supposed to organise the function, the functions of higher education and to ensure the operation. But while everything that comes out of the nature of the courses, teaching methods, must be left to, teaching methods and even strategies, strategies, strategies, must emanate from universities; *Okay*. I believe it very sincerely because it is, because it is the university which is in contact with the field, which can say what orientation we can give to higher education; because the Ministry is disconnected from reality; it is a huge, very bureaucratic machine that manipulates figures, that manipulates ideologies. Often, it’s like that, but in reality, in terms of content, it’s the field that shows; so, of course, we can imagine an intelligent Ministry which could associate scientific advice, for example by establishments, in the promulgation of policies and strategies. So there is not, it is not vertical. So us, we are there in our universities, we notice a lot of things, and we are a force of proposals (...) (3_f_STEM, Paragraphs 225-227).

This situation of ambivalent Algerian academia between the national and international in the higher education system leads to personal oscillation as is reflected as follows:

(...) Because what is going on; yes, a heavy and universal tendency, which is called democratisation of access to university, that is very good, but that should not prevent us from thinking globally as to how to find excellency while keeping democratisation, of, access to university, yes. The two must... we must think about how to associate the two in fact (...) (1_m_Arts_Humanities_Social_Sciences_research, Paragraph 70).

Here, there is a plea not to continue to look inwards of the national system, but to assume an international outlook, where this domestic policy objective has no meaning, but actually hampers in worldwide competitiveness. Likewise, national higher education policy ought to be reformed before embarking onto the international level, by ranking and standardisation:

I would say that the main challenge has already been to re-establish a basic standard, the fight against a drop of university standards, the fight against plagiarism, the fight against corruption even, I would almost say. I believe that it exists, unfortunately, in particular the corruption of lecturers by students. *Okay, yes*. To get better grades or ... etc. It is a phenomenon which exists; with drifts sometimes rather unfortunate. The requirement of quality first, above all, before thinking of entering an international standard; no, rather, hoping to be at a good, international level (...) (1_m_Arts_Humanities_Social_Sciences_research, Paragraph 141-143).

Likewise, current developments of internationalisation adaptation are rejected, and it is advised to backtrack to first focus on the national system flaws and subsequently, gradually, extend to the immediate geographical area, i.e. the Maghreb region:

I was going to say the same thing, but I would add that there is this obsession, I was going to say maybe 'ranking' whatever ... *Yes*. ... at the international level, which I would say to say does not apply to the current state in Algeria because we should, instead of ... feeding this kind of race ... not even race, I was going to say this ... this ... how to say? This illusion of ... from international ranking integration, set goals that are much more realistic and much more ... *Yes*. Much more, we will say important, go to the current state that is to say that it is really, it is, I think, it is really far from our current concerns than to have wanted to hope to enter these international classifications so, and I think that for the moment in the Algerian case it would be necessary to be inspired by ... perhaps to be inspired by cases which are more within our range, for example to be interested much more in what is happening with our Moroccan or Tunisian neighbours (...) (1_m_Arts_Humanities_Social_Sciences_research, Paragraphs 34-38).

Not least, from an Algerian academic's perspective, national higher education policy needs to be conducive towards, and take into account, the international aspect, which is inextricably linked to research: "(...) attributing great importance to documentation. First of all, it's the purchase of documents, books, journals etc., and, at the same time, at the same time, facilitate the implementation of cooperation with research centres, libraries, and abroad (...)” (15_m_Arts_Humanities_Social_Sciences_administrative_function_faculty, Paragraph 4). For STEM, as an analogy: “Well... Really need to international setting I mean you cannot live in a close the doors or closed setting for research for technology and so we all the time we work with Europe and think it is going to last for a while” (2_m_STEM_research, Paragraph 95).

However, as of today, the opposite applies:

(...) on the other hand, in the teaching sphere. I believe that we remain in an Algerian-Algerian system. *Okay*. We did not, we did not manage to adopt or to start processes of exchanges and the application of models which are effective in other countries. No. So we remain in an instruction, I would say, a bit traditional, in which, for example, information technologies and the digital struggle to find their place, that's it. So there are these two things. Teaching is, remains traditional, and with a certain delay, which worsens with massification, the level of language, which means 'level of language', so, access to bibliographic resources (...) (3_f_STEM, Paragraphs 173-175).

It becomes apparent that especially adaptation measures of language requirements fail. Consequently, there is also frustration resulting from a juxtaposition of Algeria as developing country versus the personal position of a default internationally active researcher; "(...) we are in a third world country, underdeveloped (...)” (15_m_Arts_Humanities_Social_Sciences_administrative_function_faculty, Paragraph 10). This leads to the following conclusion as a rejection altogether: "(...) so yes, internationalisation, I would almost say

that, for the moment, it doesn't make much sense in the Algerian case (...)" (1_m_Arts_Humanities_Social Sciences_research, Paragraph 38).

7.2 Algerian Academics' Coping Strategies

Algerian academics have adopted a variety of coping strategies to deal with the ambivalences between the national and the international as outlined above, which become critical in their daily work at the Algerian university or research institute. Further, there are different reasons for each strategy, which is most obvious with lack of/minimum research engagement, to be classified into three categories, namely macro, meso and micro-level reasons. Research engagement reasons will be detailed further in the following subchapter 7.3 with regards to self-initiative and personal motivation. In contrast, either internationalisation alignment or national orientation as further reasons is exposed to a lesser extent since they are derived from, and have been treated in detail, in the preceding chapter six²⁵⁵ already. Likewise, the third strategy, alternatives in academia, is primordially contextualised.

7.2.1 Research Engagement/Prioritisation

Self-initiative and personal motivation

While there are tools to enhance quality assurance in research, namely, digitalisation of publications for improved transparency as in this case:

All publications that we did, that is to say the journals, there were only paper journals. At the moment, all journals, from this year on, all journals will be electronic journals. So, there is more foresight and transparency in the work. *Yes, okay. So, it works well?* Yes, it must work, because it is a new system, medium that they use, and it is an effective means of control: who does work, who doesn't do it (10_m_Arts_Humanities_Social Sciences_executive function_research unit, Paragraphs 252-254),

larger measures aimed at overall institutional evaluation regarding research output are still not assumed by the governing body, or insufficient, as is shown in the following:

(...) so the Ministry, I think, has a role to play in it, which requires evaluation commissions of what is done in our research centres; in our universities. So, the government must assume this role. *Yes.* To say, to send inspections, that's the role of the Ministry anyway! To inspect, to investigate what is happening, that's it (1_m_Arts_Humanities_Social Sciences_research, Paragraphs 109-111).

Hence, the individual's initiative still counts in the absence of other institutional measures: "We can assure it internally, we can assure it internally (...)" (14_m_STEM_administrative function_central unit, Paragraph 12). Personal motivation, too, is also at the root of extra-curricular activities, such as a "(...)'Nexus for (*institution*) University Network for

²⁵⁵ See chapter 6.1 Ideology function, in particular 6.1.2/6.1.3

Innovation and Entrepreneurship' (...)" (14_m_STEM_administrative_function_central unit, Paragraph 100) and it is up to the individual Algerian academic to seize opportunities: "(...) As a researcher, I can tell you that there are quite a few opportunities. Are they exploited at best? I do not think so. I think we can exploit these opportunities better than we do now. But there is a lot of potential; there are a lot of opportunities in research (...)" (6_m_Arts_Humanities_Social_Sciences_executive_function_central unit, Paragraph 173).

Despite the fact that political engagement may be rejected, "However, there is one thing that we don't do. It's politics at university. No politics. And that's for the better" (8_9_f_STEM_1_executive_function_research unit, Paragraphs 466-467), policy influence is desired, e.g. in promoting university-industry linkages in applied research in STEM: "(...), That's why I say: The only thing that, it's the subcontracting at the level of different labs, at the level of research labs and all. Outsourcing certain projects and all, with industry, would be good (...)" (8_9_f_STEM_1_executive_function_research unit, Paragraph 456). The latter situation presents a personal oscillation by Algerian academics.

Although the Ministry depends on input by those in the academic field, at the institutions, "(...) Now they are harmonising; to do things technically. But everything has to come from the base. And therefore, the Ministry only validates" (9_f_STEM_executive_function_research unit, Paragraph 117), the feedback solicited sometimes does not bear fruit: "(...) when there was the director, once she came to (*city*); she said to me: 'We want people to propose something. It's them who don't want to propose' (...)" (9_f_STEM_executive_function_research unit, Paragraph 123). This resistance might be explained by disagreement with the prevailing policy, for example in the Bologna process reform adaptation: "(...) doing two systems in parallel is a bit schizophrenic; it is not normal. If we decide to go to the future, we go to the future once and for all. We will not say; 'Yes, ok, I maintain that one' (...)" (9_f_STEM_executive_function_research unit, Paragraph 9). Accordingly, reform willingness and support depend on the individual person's mindset:

(...) it's mentality. Whether in 72, whether LMD, whether in internationalisation, whether in scientific research, whether in pedagogy, in pedagogical practices, pedagogical practices which use new methodologies, new approaches. I am in (*sub-field of discipline*), so I was working on (*topic related to discipline*) etc. And in (*humanities disciplines*). But (*sub-field of discipline*) exists in all disciplines. And then, the big changes are in mentalities. If we did, if we succeeded in changing mentalities, that means that we managed to operate and put in place changes (...) (7_m_Arts_Humanities_Social_Sciences_executive_function_central unit, Paragraph 93).

The insistence on personal initiative also extends to the execution of professional tasks, both in general associated with the role of academic, "(...) So, as we say, the seriousness is not

everywhere. And anyway, that depends on the conscience of each lecturer” (8_9_f_STEM_1_executive function_research unit, Paragraphs 190-191), and specifically with regards to interdisciplinarity and openness beyond the strict borders of one’s field as a researcher: “(...) ‘you can, you can solve problems. An economist can do health economics’. Society, social sciences could explain the problems that exist. You see? It’s something like that. Well, but people have to adapt (...)” (9_f_STEM_executive function_research unit, Paragraph 223). Not least, self-motivation is also decisive in international cooperation set-up or upkeep: “(...) But I managed to formalise the partnership of our research unit with (*university in Spain*), in (*city in Spain*), and it has become an agreement between the two universities, and other disciplines can access it, they can use the advantages of this convention (...)” (6_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 113).

International sphere privileged or practised

The opinions voiced as portrayed in the preceding chapter six²⁵⁶ reflect individual Algerian academics’ behaviour in engaging in research.

First of all, members of the Algerian diaspora worldwide are known and praised – even beyond their discipline – as is shown by the following statement:

(...) there are researchers who do, who have talent, who have been able to impose themselves globally, in the United States, in Japan. I quote in Japan Mohamed Banat who put in question a small theory, a small theory in physics, which dates from the 19th century! Fluid mechanics. And the theory, it was; we have Senhadji, concerning research from here and in France; we have Zerhouni in the United States in medical imaging, and who had become, who was appointed by the Americans as the director of the medical center, of the first medical institution in the world, researching medicine globally. So, it’s a source of pride for Algeria (...) (15_m_Arts_Humanities_Social Sciences_administrative function_faculty, Paragraph 52).

Likewise, Algerian colleagues’ achievements abroad are acknowledged; however, with the note that they do not return at all or return to leave again to then continue benefiting other countries:

(...) I hope that the Algerians of the diaspora play this role of high standards here locally. But, unfortunately, they do not return. *That’s it*. And those who returned; among them brilliant people, left because they were discouraged, I am thinking in particular of the great Algerian inventor. *Yes*. Belgacem Haba, who is from Biskra; who was in Silicon Valley as an inventor, as a scientist, and who was in the ranking of the 100 best inventors in the world; he was placed 40th, who came back for pure, really, I would say... *Willingness?* Desire to change things here, in Biskra. Of course, it was, it was a disaster, and he was taken, I would say, literally drafted, by the Japanese; who came to see him in Algeria; to offer him a job there in Japan. And he went back to Japan. So ... and this man, Belgacem Haba, has created an association, one finds the site on the internet, of Algerians, Algerian scientists

²⁵⁶ See chapter 6.5.2

from the diaspora. *Yes, yes.* You can go and see. *Very good.* And so, we see the great willingness of this man, to try to create a dynamic. *Yes.* And another who is famous, Nouredine Melikechi, who is at NASA. *Yes.* And who is one of the people in charge of the MARS 2020 programme, so the exploration of the planet Mars for 2020, him too, I see him at times here to lecture, try to get a little involved with the students, send a message. But the result is always the same. All those who can leave, leave, and don't come back (1_m_Arts_Humanities_Social_Sciences_research, Paragraphs 157-171).

Correspondingly, the emigration wave in the 1990s saw many members of the Algerian academia leave without adequate replacement in the following decade; “Listen, the potential, at one point, we had good lecturers; at one point. But with the braised years, it was the 90s, yes, a large number of lecturers left Algeria. And the next generation, it's not well done (...)” (10_m_Arts_Humanities_Social_Sciences_executive_function_research_unit, Paragraph 164). Today, emigration continues at a high level; “Algeria is one of the worst cases in Africa, especially, I believe we are the second country in Africa in terms of brain drain. So, there is a state of mind of flight, finally, of abandonment” (1_m_Arts_Humanities_Social_Sciences_research, Paragraph 175). Still, the situation is different in so far as the younger generation is seeking better research conditions: “I prefer Europe yes, yes, I prefer Europe. *Why?* Because it's a developed country, it's developed countries, it's countries that encourage doctoral students, researchers, that's it (...)” (11_f_STEM, Paragraphs 41-43).

Besides, non-domestically available infrastructure and equipment are pointed out in privileging research abroad, even if temporary: “(...) you go abroad for a month; you finish something; you come here, you have a problem, because the material is there; you can't use it (...)” (8_9_f_STEM_1_administrative_function_research_unit, Paragraph 305). Algerian academics also encourage their PhD candidates to seek opportunities abroad where there is funding: “Students, there is mobility, too, they can, of course, benefit from these stays there, doctoral candidates ... *Doctoral candidates.* Doctoral students, they have access, and they even have the possibility of; 50% of the budgets allocated to these stays are reserved for these doctoral students (...)” (6_m_Arts_Humanities_Social_Sciences_executive_function_central_unit, Paragraph 99-101), thus capitalising on their own positive experiences abroad in being able to gain knowledge to apply at home; such as “Well, we are a bit of a cliché of the French model, it must be said. But it is true that there were, how do I say, services, that I found there, that exist here. And I, personally, when I return, I, how to say, well, I try to apply what I learned there, I try to apply it here. Then I propose to my manager, I make a report and all that (...)” (4_5_f_Arts_Humanities_Social_Sciences_1_administrative_function_central_unit, Paragraph 303).

From a policy point of view, international collaboration is encouraged, and the obstacle is removed by the existence of the required English-language skills; “But now there is the English language which is beginning to evolve very, very, very significantly and now we no longer have the language problem, and we are trying to collaborate with any country for the social sciences and humanities” (17_m_STEM_executive function_political entity, Paragraph 22). Nevertheless, there is an indication that domestic collaboration does not work as intended; “(...) It’s an Algerian problem. We don’t know how to communicate (...)” (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 210).

Adhering to national principles

Algerian academics’ personal reasons to engage in research may also relate to language, authority, and values, which are detailed in the chapter on ideology as university function.²⁵⁷ Those evolve around the exemplary statements in the following: Algerian academics may orient or prioritise their research because of a certain national interest;

In principle, there must be. The Ministry must make sure that orientation must be according to our needs. We will not direct students towards a field which does not interest us, for example, an area that would interest Alaska, it does not interest us. An example. Or, an area that would interest maybe South Africa may not interest us. So, orientation, I think it is the Ministry which takes charge (...) (8_f_STEM, Paragraph 31).

They may also feel compelled to do research, or a certain type of research, for perceived function duty as an academic at university, or, indeed, to comply with economic directives: “Algerian university research has evolved a lot, simply because the state has put the means. Of course, we are not a; that is to say, we have not reached them, the desired expectations by our Ministry (...)” (13_m_STEM_administrative function_faculty, Paragraph 84).

7.2.2 Lack of/Minimum Research Engagement

Macro level: Governance reasons

Lack of budget and human resources autonomy

Algerian higher education governance is characterised by centralisation and associated administered structured, such as: “We manage research projects, we manage research projects through our research entities which are, let’s say, mandated for this kind of management, such as research agencies (...)” (17_m_STEM_executive function_political entity, Paragraph 90). Accordingly, there is little autonomy for individual researchers: “(...)

²⁵⁷ See chapter 6.1

And these research activities, automatically, they are carried out within a research laboratory” (17_m_STEM_executive function_political entity, Paragraph 32). The latter is criticised by pointing at the fact that “We must create an entity centrally, and leave the freedom to these structures to create the sub-structures they would like (...)” (14_m_STEM_administrative function_central unit, Paragraph 138).

The importance of hierarchical structures, too, is emphasised: “I can even discuss with, and I have had to talk to the director. But I cannot go beyond, because it stops, my task if you want. So that’s it, anyway, I do solicit anyway, I make an appeal to the people who are there for this task. And a little, hierarchically speaking, for my superior (...)” (4_5_f_Arts_Humanities_Social Sciences_1_administrative function_central unit, Paragraph 183). This individual scenario also applies on the institutional level: “Well, it depends ... Because sometimes, the formalisation of your contacts takes a long time. The university always requests the advice of the Ministry; it can take some time (...)” (6_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 111).

While adaptations are possible as is shown in the following: “(...) When there is a research topic or a field of promoted research, and if the regulations disturb or hinder, we always try to contact our authority to have exceptions, to do or correct the scope for this area there, and it is done (...)” (6_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 177), in general, governance type effects are viewed as an obstacle by academics: “(...) So, it’s an administration, although it’s light, but it’s still an administration, heavy enough for us, to implement things” (10_m_Arts_Humanities_Social Sciences_executive function_research unit, Paragraph 218). This status quo has repercussions on research; “(...) And now scientific research, for sure, is encountering democratic difficulties; administrative difficulties, but it’s on the right track (...)” (15_m_Arts_Humanities_Social Sciences_administrative function_faculty, Paragraph 52). Thus, it is openly admitted that the issue lies within governance structures: “(...) So on the teaching side, that is to say on the training, research side, it is done. But on the governance side, according to the people (...)” (6_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 145).

Frustration by the delays thus occurred may be due to budgeting restrictions as in this case; “(...) Everything works very well, but when it comes, because it is a job where the money is spent, it’s been more than two years that nothing has been done” (10_m_Arts_Humanities_Social Sciences_executive function_research unit, Paragraph

224). Those then point towards the lack of autonomy, encompassing budget, yet, also staff decisions; “Recruitment, it’s complicated, because civil service no longer recruits; the state has no money left” (14_m_STEM_administrative_function_central_unit, Paragraph 162), which impedes not only international initiatives: “ (...) we wanted to do an Erasmus + (*name programme*) on that. At least to draw up the programme. Afterwards, we didn’t have time. *Right, that’s the problem.* The problem, it’s human resources. Very few human resources” (14_m_STEM_administrative_function_central_unit, Paragraph 166-168) but indeed university-industry linkages which play a role in STEM applied research: “ (...) as we are not autonomous, and as companies need a speed of reaction which is high, that’s it. So if you want a university-business relationship, it really has to be something autonomous, with its own budget, etc., etc. (...)” (14_m_STEM_administrative_function_central_unit, Paragraph 222). Consequently, those are difficult to establish and maintain.

*Challenges of academic freedom in the social sciences*²⁵⁸

The prevailing governance system is perceived to have a negative impact on the social sciences especially: “To say: they were looking for what they called social peace, but social peace is not, everything is ... (...) I wanted to apply the regulation; it was bad. So, actually:’ To not have any problems, let all of them pass” (10_m_Arts_Humanities_Social_Sciences_executive_function_research_unit, Paragraphs 294-298). Here, the political ideology of socialism is said to be instrumentalised as a means of control – the regulation of social peace to be applied by lecturers, meaning that competency of students is secondary in the assessment.

Lack of appreciation of research (outcomes)

The fact that there is an issue with attributing and labelling expert status points to the missing appreciation of research outcomes: “ (...) They are experts. Except that, we need to label them experts, to appreciate them (...)” (7_m_Arts_Humanities_Social_Sciences_executive_function_central_unit, Paragraph 210). Likewise, ways to exit academia in favour of the private sector may be sought in respective applied technical fields, as in the following case: “In IT too, it works, in Telecom, too. Yes, Telecom, like in France. There are trainings that

²⁵⁸ See also chapter 6.1. on various manifestations of ideology in academia, including social sciences in particular

allow you to get out of it” (8_9_f_STEM_1_executive function_research unit, Paragraph 109-111).

Insufficiency of competent doctoral candidates or post-docs

The lack of or inadequacy of qualified human resources as a paramount component regarding junior members of a research unit is put forward. Reasons for the unsatisfactory status are portrayed as a contemporary problem:

Yes, the succession has not been assured. Me, in any case, we have young lecturers recruited, but they are recruited after having completed the trajectory we are actually criticising right now, that means with all the linguistic, structural, methodological weaknesses. And all that, so, it is not done, for ... I'm sorry, I paint you a blackboard. It is not done to hope to raise the level (3_f_STEM, Paragraph 159).

For academic staff, the need for capacity-building and training has either not been identified or remains uncatered for: “Even if, personally, I said that, at times, I provide some training for the staff, tasks. Still, it must be remembered that there is a real lack of training, significant recycling, that’s it. Before, we spoke about globalisation. How can staff improve without having training, too?” (4_5_f_Arts_Humanities_Social Sciences_1_administrative function_central unit, Paragraphs 195-196), as well as:

(...) So the recycling of information can be included in this framework of conventions. OK. So it can be included, it would be very beneficial, I would say, for this staff, for this staff, who is thirsty to perform, who is all alert. If one trains its staff, we have a service that is really... *Up to date (laughs)* (4_5_f_Arts_Humanities_Social Sciences_1_administrative function_central unit, Paragraphs 199-200).

The missing capacities of doctoral candidates, in particular, leads to frustration: “(...) there is no transfer of knowledge. No, they are not used to learning how to reflect, they are like that, and they learn the exercises, and so, that translates into this somewhat discouraging level at university (...)” (13_m_STEM_administrative function_faculty, Paragraph 43). The consequence of this situation is favouring junior foreign researchers altogether: “(...) I don’t want to run after Algerians. That, it’s my personal opinion. It’s useless” (9_f_STEM_executive function_research unit, Paragraph 334).

Meso level: Institutional challenges

Lack or insufficiency of infrastructure and equipment

At the institutional level, Algerian academics face obstacles in research due to infrastructural challenges. Those might be in the form of library opening hours: “(...) I give you an example.

At one point, we said: ‘The library, we do not work at the library because it is not open’. OK, we are not Harvard; we are not... (...)’ (9_f_STEM_executive function_research unit, Paragraph 30). Notably, the situation has deteriorated since the introduction of the Bologna system; “This is among the advantages of Bologna (*laughs*) because before, with the old system, (*institutional unit*) working hours were from 8:30 a.m. until 8 p.m. Now, with the new system, it’s 8:30 a.m. until 6 p.m.” (4_5_f_Arts_Humanities_Social Sciences_1_administrative function_central unit, Paragraph 329). Further, especially in STEM, there is a lack of equipment in laboratories, leading to idleness:

No, I think there have been means that have been deployed, well, it must be said that, when we deploy certain means, we wait too long. The proof is, at the level of the research lab, we had some material which we cannot use yet because something is missing or lack of something else, or we were moved etc. So, that blocks a researcher (...) (8_9_f_STEM_1_executive function_research unit, Paragraph 305).

Once more, working conditions abroad are perceived and portrayed as more favourable.

Heavy teaching load

A heavy teaching load prevents a professor from engaging in research, too. One reason is the generational change, with too little numbers of new academics following a retirement wave.

(...) And others who have left, gone for retirement in quite large numbers. And so, the number of staff has decreased, and that of the students has increased. It is like talking about the offer and the demand. So, there was a slight difference in the balance. At times, we can’t, I would say, for example, provide a service, since the workforce is missing, you see? The workforce is missing. It’s a bit that, it’s ... We had some obstacles in this, with regards to this situation (4_5_f_Arts_Humanities_Social Sciences_1_administrative function_central unit, Paragraph 189).

Further, the status quo is problematic for young researchers, who are not allowed to develop their research portfolio and profile:

I have the impression from what I hear, that there may be an overload of lessons; at master and doctorate levels, which in my opinion, but it may be the opinion of someone who is old-school, which in my opinion, is not necessarily the best thing to do, because that, arriving at this stage of training, requires great autonomy of the researcher: do not overload with lectures or work, but rather let one focus on research and the, I would say, even maybe the development of one’s own methodological tools (...) (1_m_Arts_Humanities_Social Sciences_research, Paragraph 26).

Micro-level: Personal reasons

Lack of interest in reform implementation or adaptation

On a personal level, there exists resistance to implement or adapt to the Bologna process, as is shown in the following:

(...) And so, among the failures and the reasons for failure, not 100% failure, but there were some flaws in this system: it is, the students did not follow, and until now, they do not follow, and also the lecturers, some lecturers did not want to get involved; did not make any efforts, especially the older generation. Ah, the old ones, they don't like it, because this system is based on learning, and also on new technologies, ICT, it's very important. We cannot do a course without, for example, using a beamer with the LMD. Though I noticed, at the level of the faculty, for example, I would say the young people are better adapted to this system than the lecturers. Until now, some oppose this LMD system (...) (13_m_STEM_administrative function_faculty, Paragraph 4).

Another example is the reluctance to leave one's comfort zone, as in this case:

(...) And sometimes I did meetings with the lecturers and things went wrong. There are people who always refused the... *Yes, yes*. Yes, they thought it was complicated, especially those who taught engineering and everything. At one point, I do not remember, there is someone I do not know what, I would have explained the principle, and on the side, I said a sentence that people didn't like very much. I told them: 'Excuse me, you have to re-format your brains'. *Yes! That's clear (laughs), I can imagine, yes*. That's it: 'Re-format your brains. The world will change, you have to apply it' (...) (9_f_STEM_executive function_research unit, Paragraphs 8-12).

Others personally reject the notion of the reform because of its missing suitability or applicability locally:

(...) So, on the other hand, the big objectives, so, that the LMD had to achieve, have already been achieved with the reform of 71. Thirdly, the LMD could not stick to the Algerian university, because the main principles of the LMD, they were made for Europe, they weren't made for Arab countries or for African countries. You see? (...) (16_m_Arts_Humanities_Social Sciences, Paragraph 12).

This view is also shared by a STEM representative, although there is confidence in timely improvement;

When it comes to weaknesses, we are all the time behind schedule. We have massification which is not good. The programmes don't really solve local problems, and these are the weaknesses that we have to look at. Also, maybe the system will have the LMD issue (unclear 00:52:03-6) *Okay, yeah*. That is one of the things I would say at least give one more year so you will have a better setting. *Result* (2_m_STEM_research, Paragraphs 271-274).

Due to missing strategy and orientation, the two systems still co-exist, which lets academics struggle and strive for individual solutions out of necessity: "(...) 'I gave you'. But: 'Don't give me, give me my rights, and leave me alone'. So, that is, there are a lot of things that we should still review in these systems. I haven't been out since (*beginning of the 2010s*) with their system. I was out until last year. But, by my own system, if I am going to ... " (10_m_Arts_Humanities_Social Sciences_executive function_research unit, Paragraph 174). Consequently, confusion persists: "(...) we do it, but we remained very classic. For a few years, we stayed in the old system, with labels, with a discourse of the new system, but people were struggling to change, to adapt (...)" (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 57).

Lack of or over-reliance on institutional knowledge

In the context of difficult access to information and mal-functioning communication in Algerian higher education – “The university could better communicate internally and externally. So, this is a, the first problem I see, it’s a communication problem” (14_m_STEM_administrative function_central unit, Paragraph 186) – there might be a lack of information, impeding international collaboration during research stays, such as:

It stopped, or it’s a bit hidden. That, I don’t know, we don’t have any information, at all, not at all. We don’t have it. Even if we ask, even if, I said, personally, I went to France, it’s been 2 years, and I was asked if we came as part of a convention? And all that. I came back, I asked, I asked; I didn’t have one; after all, I was told there was none, it wasn’t there, that was it (4_5_f_Arts_Humanities_Social Sciences_1_administrative function_central unit, Paragraph 277).

On the other hand, the governing body, represented by the institution, whose authority as such may not be questioned: “I believe that there is, the role of the authority, it is important. We need a roof; we need a papa, we need... (...) When we are in the public sector, there is massification, there is free education, there is all that. But when one has the authority, it is important. It is important, an authority which is aware” (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 149).

Non-incentive by (additional) salary²⁵⁹

The fact that research activity is not normally remunerated beyond the salary corresponding to one’s staff rank in the Algerian higher education context is a factor which may deter – especially younger – academics from engaging in research, even though the conditions and facilities might be favourable;

So you ask them: go, now that you don’t have the stress of the PhD, that’s it, there is a device here, it costs a million dollars, and I’m not exaggerating. We even have a device that costs 1.5 million dollars. Go to work, take the doc, read it, explain to me what you have understood, and we will start it. Good luck! Good luck. It’s an example (9_f_STEM_executive function_research unit, Paragraph 331).

Hence, concerning STEM, more economically attractive options in the industry are sought.

On the other hand, the occasional existence of additional remuneration draws high interest, which is however motivated by the financial incentive only, as is reported as follows:

An example, an example. A month ago, the Ministry launched research projects. These research projects are to allow for doctoral training, but at the same time, the researcher is paid on the project. It’s not huge. But he is paid. As if by chance, people disappear, when they hear projects, they come back, they are interested in doing projects. They do not propose the project; they don’t come up with the idea, they don’t offer to work on it; just to be a member of the project (9_f_STEM_executive function_research unit, Paragraph 324).

²⁵⁹ See also the following subchapter 7.3.1 on behavioural motivations: economic capital

*Lack of personal connections in an informal system*²⁶⁰

The situation of dependency of personal connections to be able to publish, and be published, is put forward as is shown by the following statement:

(...) it's in terms of analysis, you see, in terms; for example, I give you a very simple example. You write an article, in which you will defend, for example, you will defend the Salafism, Islamism. You know, if you don't know, for example, the person in charge of the issue of the journal, or if you don't know the editor, or if you don't know, or if you do not don't have an entry point, chances are high that your paper won't pass (16_m_Arts_Humanities_Social Sciences, Paragraph 44).

Therefore, especially in the social sciences – where ideology has shown to play a major role – those informal criteria may override scientific quality, with the consequence of no publishing activity.

*Lack of competencies including language issues*²⁶¹

As for personal skills of individual Algerian academics – although communication issues are also mentioned as obstacles; “For the simple reason that people don't take communication seriously. I stayed for fifteen years, trying to find solutions. We did; I was in a centre for lecturer training. That's where I learned how to communicate. So, normally all lecturers should have that background (...)” (10_m_Arts_Humanities_Social Sciences_executive function_research unit, Paragraph 80), the lack or inadequacy of necessary English-language skills is most prominent, which is increasingly seen as a handicap in the default international sphere of academia: “It remains a language problem. It's still a language problem; it's a language problem” (14_m_STEM_administrative function_central unit, Paragraph 84). This view is shared by humanities representatives, too: “Yes, English. We have a language handicap; we don't master English well, that's why we prefer to go ...” (11_f_STEM, Paragraph 103).

In this context, the on-going, and continued orientation towards French – more so for the older generation – is at the base:

You know, the French model existed because France had set up the Algerian university. Algiers, it was a big city, but above all, Algiers, it was centralised in Algiers. Later, there was the establishment of several universities in the big cities, first. Then in the provinces, etc. But we stayed on the French model because the competence had attended their training during the French time. It was a little bit natural; it was natural. It is, either instructors, lecturers who were trained in France, or who were trained in Algeria during the French era, either... That means that the competence was in French. This is why hard sciences have continued to be taught in French because we have this reference that exists,

²⁶⁰ See also the following subchapter 7.3.3 on behavioural motivations: social capital

²⁶¹ See also the the following subchapter 7.3.2 on behavioural motivations: cultural capital

and the reference, either in terms of lecturers or in terms of documentation, was French (...) (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 184).

This state of affairs is reiterated by a social sciences colleague: “(...) in our generation. We were all only francisants (laughs), only francisants” (10_m_Arts_Humanities_Social Sciences_executive function_research unit, Paragraph 48).

Given these circumstances, academics are struggling to produce scientific work, and, hence, publish, in particular in STEM disciplines, e.g., “I write in English, yes. Before, no, before, it was in French. My dissertation, it was in French. Everything in French. Now, it’s completely different. I translate. That’s the solution. I download articles; I translate them into French after I can, I do what I want. If not in English, no” (11_f_STEM, Paragraph 513). However, likewise, Arabic is impeding a researchers’ inclusion and access; “(...) in history, in archaeology, in philosophy, in Arabic. Because everything is written in Arabic, in law, everything is done in Arabic. So there may be some extraordinary topics that may interest the Americans, the Germans, but they are not visible (...)” (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 63).

7.2.3 Alternatives in Academia

There is also the third coping strategy of not choosing either of the strategies above but not positioning oneself altogether by striving for alternatives in academia in the form of administrative or supervisory roles. Outreach may also be a priority or a preference. Three main types of alternatives can be distinguished: devoting oneself to lecturing, to supervising, or to taking on an executive position. University self-administration in general – even with limited institutional autonomy in the Algerian context – is positively underlined as in this case; “(...) What is good, what is nice at university, around the world, is that those responsible are lecturers. That is, those who ensure administration (...)” (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 247).

A teaching focus is emphasised as follows: “(...) I let the student come, I offer him a panoply of things, and you will see that they can ... that the students can offer us extraordinary things. We must not impose things too much (...)” (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 23). Teaching also encompasses the transmission of broader, general knowledge; “(...) train them artistically; train them philosophically; teach them to think (...)” (16_m_Arts_Humanities_Social Sciences, Paragraph 96). It may even go as far as to hold the lecturer mainly responsible for study and even research outcomes: “(...) The success of the training, I will go further, the success of

scientific production begins with the genius of the lecturer, it is him who stimulates, it is him who encourages, it is him who motivates, it is him who promotes these thinking heads (...)" (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 109).

The supervisory role has expressions such as: "(...), but still, we see the difference. In the 90s, for example, there were thesis defences once every three months, four months, there is a one. Whereas now, there are defences practically every week (...)" (13_m_STEM_administrative function_faculty, Paragraph 84). In addition, there is a need for training which must be assumed which is currently not yet the case: "(...) For the university the solution exists, it is 'hire the best'. We must have, we must be more selective, and also, do internal training. *For that, time is needed.* A lot of time is needed; it takes time; it takes dedicated staff. That's the problem" (14_m_STEM_administrative function_central unit, Paragraphs 176-178). Postgraduate students have also been integrated in research units lately: "(...) Because now, the master and doctorate are part of the activities of research laboratories (...)" (17_m_STEM_executive function_political entity, Paragraph 12) and, in parallel, funding has been provided: "And, also, these days, we have enough research labs, we have had extraordinary funding, actually, for a few years now. And this funding has enabled us to acquire equipment. And this equipment has enabled us to have certain doctorates defend (...)" (8_f_STEM, Paragraph 3). Hence, academics are all the more called upon to exercise their supervisory role.

The executive position may be adopted for example in a Dean's role: "(...) so these lecturers must be managed, they must be managed, by whom? By the Dean each time; so there are problems (...)" (13_m_STEM_administrative function_faculty, Paragraph 98). More broadly, managerial tasks may be seen as integral to any academic on its various levels.

7.3 Behavioural Motivations

Social resources determine one's social position with regards to, and in competition with, others in the same field.²⁶² Behaviour is shaped by the availability or non-availability of individuals' resources, defining the extent, and the scope of their – theoretically possible – action in a given context; the professor or permanent researcher at the Algerian university or dedicated research institutes. The attainment of achievements in the sense of practising research is thus contingent on resources at their disposal, i.e. types and prioritising of capital.

²⁶² See chapter 4.3

7.3.1 Economic Capital

Bourdieu's economic capital refers to an individual's income and ownership. The coding rule for this category is applied as follows: All units containing implicit or explicit reference to financial aspects; both in the affirmative and in negating content; with reference to Bourdieu's definition: "(...) immediately and directly convertible into money and may be institutionalised in the form of property rights" (1986, p.242).

In the absence of further differentiation of theory-based subcategories, two categories, namely, sufficiency/affluence and insufficiency/lack of, were created inductively. There is a total of 48 occurrences, out of which 33 in the former, and 15 in the latter. As the distribution shows, in two-thirds of cases, there is either sufficiency or even affluence, which means that those mentioning scarcity – only four interviewees, thus less than one-fourth of the total – are rather the exception.

Sufficiency/Affluence

In setting the scene, there are several mentions of attractive terms of the Algerian higher education system as follows: "My vision for the future; I think that the future is in our hands, and in the hands of our predecessors, and successors, especially, to improve the role of the university a bit, because we have the means. The state has invested a lot and therefore, the minimum is that this investment be; that we see the fruits of this investment" (13_m_STEM_administrative function_faculty, Paragraph 102). Accordingly, the personal responsibility to engage in this process is stressed, given that the financial aspect is taken care of; "(...) Me, I think that we have all the chances to succeed the mission of the university because we have the means. It is sufficient that there be a little bit of goodwill on the part of all partners, so, lecturers, students in particular, and technical staff to support (...)" (13_m_STEM_administrative function_faculty, Paragraph 50).

In concrete terms, thus, this means that Algerian academics may take up external projects as additional income generation activity for their institution of affiliation: "Now, we have research units, which are a little aware that they can bring money to the university (...)" (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 251). However, the opposite may apply, too, as is accounted for by the following:

(...) So, they weren't interested, the day they said it was going to be paid, everyone wanted to come, do you remember? And then we withdrew (*laughs*). No, but it is an example. Ah, but it is an example among many others, and it's a pity! One has to be motivated. First, one should be motivated, first.

And, then, if the pennies come, no one spits on them. You have to be motivated first (...) (8_f_STEM_1_executive function_research unit, Paragraphs 325-327).

As this statement shows, monetary compensation as the primary motivating factor is rejected, though it is admitted that it is welcome after one has engaged in or agreed to do an activity.

Individually, the relatively comfortable position of Algerian academics as civil servants is repeatedly stated, e.g.: “(...) People don’t want to, they like the ease, they’re in their cocoon, they are happy, they have, they know that the salary arrives on the 12th of the month (...)” (9_f_STEM_executive function_research unit, Paragraph 411). Volunteering, too, is mentioned as an extra-curricular activity by a permanent researcher: “I have been in associations called (*name*) what else? I work a lot with the university sometimes I don’t get paid for it, but it is fine. *Yeah*. I go there and I ... well, I have to admit I have a lot of friends at university I made lots of friends, so it sometimes fun for me just to go there give a helping hand (...)” (2_m_STEM_research, Paragraphs 257-259). Furthermore, there are ways for graduates, including university employees, to earn better than in the public sector, which the university is part of by default.

(...) A doctor who does not work in the hospital, he works in the private sector, he earns crazy money. I mean he earns better than in Europe sometimes. So I don’t think it’s for humanitarian motivations, that’s it. All these specialities, it’s because of, it’s the best wages. Or else, working in the private sector. IT; it makes a good living, too (9_f_STEM_executive function_research unit, Paragraph 82).

More so, better financial conditions abroad – in France, a priori – lead to many academics leaving Algeria, as is shown here; “(...) Because for him, France, it’s emancipation ... it’s money; it’s comfort, you see. So, you can’t stop him, that’s it (...)” (15_m_Arts_Humanities_Social Sciences_administrative function_faculty, Paragraph 64). Likewise, it is claimed that generous living allowances in proposed mobilities primarily attract academics, and choose accordingly: “(...) On the website, he sees South Africa, mobility, or doctoral students, 900 Euro per month (...)” (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 212).

Insufficiency/lack

While Algerian state funding of higher education, in general, is assured, the state of affairs is different for the research budget specifically; “(...) so far, even the money given for research is scraps (...)” (10_m_Arts_Humanities_Social Sciences_executive

function_research unit, Paragraph 182) and equipment – even basic office infrastructure – might continue to be lacking as can be seen in the following; (12

A derisory percentage that is given to research. And I give you a small example. We are there in the research unit of (*name*), and I am the director. Do you see computers? How are we going to work? *Not in this one, yes.* We have tables, desks. But how to work, how to be in contact with people? I am working at home rather than coming here, though I had asked for this material 3 years ago. Up until now, it has not come (10_m_Arts_Humanities_Social_Sciences_executive_function_research_unit, Paragraphs 184-186).

However, this situation might have arisen due to administrative difficulties based on centralised bureaucracy, rather than the non-allocation of funds.

It is also mentioned that, recently, there have been funding issues in Algerian higher education, searching for alternative financial means compulsory: “(...) But on the Erasmus, we have European partners who are very present. And these days, even in terms of funding, the financial problems that our country is experiencing, we have to go to other funding, other types of funding and other partners (...)” (7_m_Arts_Humanities_Social_Sciences_executive_function_central_unit, Paragraph 67). As this statement shows, while the base operations might still be covered publicly, all extra activities such as cooperation projects and exchange programmes have to be financed elsewhere. In this situation, the trend is to turn to European partners.

On the individual level, academics, including those in executive positions in research, are subject to non-action due to non-existing budget autonomy, as is pointed out: “And his lab works. Yes, he has up to 4 million dollars in contracts with three people. I can have 50 people with zero, so, that’s it. If we manage to have post-docs, that’s my personal opinion, some lab engineers, research projects. And that’s it” (8_9_f_STEM_1_executive_function_research_unit, Paragraphs 340-341). Notably, a comparison with an Algerian colleague working abroad is made, which contrasts with the conditions in the country, where options are limited due to the systemic lack of decision-making power.

Although it is equally acknowledged that European salary levels cannot be demanded due to the significantly lower cost of living in Algeria, dissatisfaction with the current remuneration of Algerian academics is expressed notwithstanding:

(...) We cannot claim to be paid like lecturers in Germany or France are paid, and so on, since the standard of living is different. What we spend, what a Professor spends in France is diametrically (*laughs*) ...*Yes, taxes, social security (laughs)*... So, it’s not; we don’t ask for their pay, but we ask that there be an equivalent so that one can go get; what he needs, so that he can easily find it (...) (10_m_Arts_Humanities_Social_Sciences_executive_function_research_unit, Paragraphs 94-96).

It is spoken here in the collective term ‘we’, thus making this claim universal for all colleagues. Also, underlying socialist principles in this state practice are criticised:

(...) You see, now that they are building, even for lecturers. But don’t build for a lecturer! Pay him well and let him fend for himself! Why make him a building? Pay him well! You exit the university; you find 120 accommodation units which are for lecturers. Are there only 120 lecturers? No, that is not possible. So, to whom we have given them? So, pay people, and it is up to him to find ... *Yes, that’s it, like normal.* Like in all other countries of the world (10_m_Arts_Humanities_Social Sciences_executive function_research unit, Paragraphs 280-282).

The in-kind contributions by the state are rejected in favour of better payment, and individual choice. Again, reference is made to foreign countries, where the latter is standard.

In this context, it is highlighted that there is no monetary incentive for engaging in research: “(...) In the salary, one is supposed to be a lecturer-researcher, to do research. But the problem, we all have the same salary, whether we do research or not. This, that’s not fair. That, it’s not fair! Whether you work, or you don’t, it’s exactly the same thing” (8_9_f_STEM_1_executive function_research unit, Paragraph 319-321). As a result, these very incentives are put forward as a motivating factor; “One can also have financial mediation. Yes.” (8_9_f_STEM_1_executive function_research unit, Paragraphs 78-79).

Besides, administrative functions and positions are also characterised as voluntary work; “(...) because it’s a passion, it’s a vocation, okay? Why? Because it takes a lot of effort. For example, I’ve been at (*entity*) for about seven years. And it’s not paid, it’s volunteering. *All activities (entity)?* All this, it’s volunteering. It’s volunteering. We’re not remunerated for it (...)” (14_m_STEM_administrative function_central unit, Paragraphs 142-144). Hence, again, the lack of financial compensation for extra work beyond one’s status strictly speaking is underlined as noteworthy.

From these findings, it can be derived that Algerian professors – overall – possess sufficient economic capital, more so with regards to the salary levels of other occupations in the country. Furthermore, there is little to no differentiation between individuals, making economic capital unlikely to be subject to competition between the members of Algerian academia. Thus, the availability and the amount of economic capital possession does not determine one’s behaviour in conducting, or not, research, especially since there is no financial incentive for it.

7.3.2 Cultural Capital

Cultural capital, according to Bourdieu, exists in three forms: informal education – *embodied state* –, cultural objects – *objectified state* – and educational credentials; the *institutionalised state*. Bourdieu’s definition is as follows: “(...) convertible, in certain conditions, into economic capital and may be institutionalised in the form of educational qualifications” (1986, p. 242).

There is a total of 105 occurrences for the theory-based main category of cultural capital, out of which in 51 in embodied state and 54 in institutionalised state deductive subcategories, with some of these being double-coded. There are neither objectified state references in the sense of “(...) cultural goods (pictures, books, dictionaries, instruments, machines, etc.), which are the trace or realization of theories or critiques of these theories, problematics, etc. (...)” (Bourdieu 1986, p. 244), nor miscellaneous. This distribution points to the high relevance of both types of cultural capital for Algerian academics, respectively, the Algerian university.

Embodied state

The embodied state is defined as follows by Bourdieu: “(...) in the form of long-lasting dispositions of the mind and body” (Bourdieu 1986, p. 244), meaning it is inextricably linked to the individual.

Firstly, embodied cultural capital is reflected in competences which are not universal. A skill which is decisive in the Algerian context is multilingualism; “No, not at all. I was comfortable, was it Arabisation? No, I knew both languages, I expressed myself easily in languages, and besides, I sometimes translated directly. The Professor spoke in French, and I wrote in Arabic. Or, if he spoke in Arabic, I wrote in French, without any problem” (10_m_Arts_Humanities_Social_Sciences_executive_function_research_unit, Paragraph 30). This embodied cultural capital is not available to everyone, so those who possess it have an advantage: “There is equipment, and know-how, too. Because we don’t all have the know-how (...)” (9_f_STEM_executive_function_research_unit, Paragraph 368) This know-how can refer to technical skills or discipline competences, but just as well to methodological prowess; as is highlighted in the following:

(...) Also, I have to admit that people want to get the doctorate degree we have a problem in Algeria. I think it is the same in Germany before you can get a degree you have to publish. *Yeah mm-hmm*. Same right? *Yeah*. And so ... and here sometimes some people have problem more particular people

who are on (unclear 00:22:10-6), it's really difficult for them. I don't know why but (laughs), you know people and technical curriculum have less problem with that because I think people ... I do not know it is ... with us as soon as he gets into the university and they tell, what do they tell then okay you want to advance you have to publish, and this gets into his head or her head and they ... and he ends up with that. So, a lot of people learning and these other people try to get the sense on how to write on how to communicate and how to do things. A lot of people in the technical fields conferences where in social sciences not nice so by going to conferences they can have feeling on how things are done (...) (2_m_STEM_research, Paragraphs 137-141).

Hence, there is a disparity in disciplines to the detriment of the social sciences and humanities in that the latter more often lack essential and required competencies to publish and thus be visible as a researcher – scientific writing.

However, embodied cultural capital is not only limited to hard facts, but also to implicit and explicit methods, the *savoir-faire*, for example, teaching:

(...) Dynamics, dynamics of a group; class, it is, it is, it is also an art; it is an art that should be mastered, that must be learned. It is a profession. You must like it and you must have a good teacher. The good teacher is the one who knows, who loves to share. You have to have a sense of sharing, simple as that (7_m_Arts_Humanities_Social_Sciences_executive_function_central_unit, Paragraph 206).

Indeed, it also entails the knowledge of navigating in the academic sphere: "(...) that, at least they learn to be independent, not depend solely on the Prof. *This is important for after (laughs), actually.* It's not obvious, it's not obvious (...)" (9_f_STEM_executive_function_research_unit, Paragraphs 26-28). Not least, the transmission of embodied cultural capital includes personal values; "(...) We don't just transmit knowledge. I repeat so that it is well recorded. We don't just transmit know-how, know-how to be, know-how to become, but we transmit many values. The lecturer must convey, must transpose, must argue values (...)" (7_m_Arts_Humanities_Social_Sciences_executive_function_central_unit, Paragraph 109). Here, the abstract values, which may make up embodied cultural capital, are even attributed higher importance than factual knowledge. One example is the ability to engage in discussion, and negotiate; "(...) There are people who will say: 'Yes, but well, we don't have the spirit of discussion and everything'. The 90s showed that, well!" (9_f_STEM_executive_function_research_unit, Paragraph 472). Here, it is referred to the so-called 'black decade' of terrorism in Algeria in the 1990s. The violence erupted may eventually have been prevented by this very culture of discussion, the individual experience of which is embodied cultural capital.

Further, there is an awareness that embodied cultural capital can, and does, extend and accumulate as is accounted for in the following; "(...) personally, I have noticed that and, still speaking personally. I have really passed through, if we can say, a transition from a

certain, from a certain stage to another, more efficient and personal” (4_5_f_Arts_Humanities_Social_Sciences_1_administrative_function_central_unit, Paragraph 27). Moreover, there is a desire to increase one’s embodied cultural capital in the academic community by more activities, e.g. “So for us. It’s something that will be on the CV, that’s for sure. It’s one experience more; it’s on the CV (...)” (4_5_f_Arts_Humanities_Social_Sciences_1_administrative_function_central_unit, Paragraph 206). Accordingly, their differentiating potential may be overtly exposed; “(...) I would say that me, as in having been educated in a foreign university ...” (1_m_Arts_Humanities_Social_Sciences_research, Paragraph 155). Yet, it is underlined that there are Algerian experts:

(...) he’s an expert. He can go do expert assessments in several European universities; he can do his expertise; one can call upon him to assess things in European universities. People should; just know that there are experts who are able to assess things; they are capable of being in a doctorate jury, so assess scientific productions of doctoral students. So they are there, well we call upon them; someone just picked up a plane ticket here, saying ‘ I am on a jury in Nice, or in Spain, or in Italy’ It also exists, so we are in scientific expertise (...) (7_m_Arts_Humanities_Social_Sciences_executive_function_central_unit, Paragraph 210).

This statement shows that there is an appropriation by embodied cultural capital in its institutionalised state, which in this case serves to highlight the elite institution status of the university.

Cultural capital may also be reflected in the ability to access international contacts, which is strictly personal, so only one’s students benefit from it; “(...) I’m trying to get these students into international circuits. Then, it is not that they remain in Algeria, perhaps, but above all, that they enter international circuits (...)” (16_m_Arts_Humanities_Social_Sciences, Paragraph 34). This is based on the prerogative that “(...) So, if you want to succeed, go abroad, now there are also opportunities in the Gulf countries, abroad” (9_f_STEM_executive_function_research_unit, Paragraph 86). Hence, if serious personal efforts are being made, there are opportunities to be seized; “I find nothing but opportunities when there is an exchange, and in the exchange one always wins, whether it is an Algerian abroad, or a foreigner towards Algeria, an Algerian to Africa. Well, we are part of Africa, another country; that is to say, when we change when you move from your circle, automatically, there is a plus, there is always a plus” (8_f_STEM, Paragraph 17). It is noteworthy that international mobility is portrayed as exclusively positive here. Nevertheless, it requires especially embodied cultural capital; knowledge of these opportunities and how to use them.

In this context, mistrust among fellow Algerian colleagues is stated, and the competitive edge by high embodied cultural capital is played upon; “(...) We have more collaborations abroad than with Algerian universities, and so, the fault is the researcher. Well, we are still; we would not like my neighbour to know what I’m doing (...)” (13_m_STEM_administrative_function_faculty, Paragraph 98). This fact is reiterated by exposing the personal choice to collaborate, or not: “(...) even lecturers can collaborate. It is not only the part of the persons in charge, the leaders. Even us lecturers-researchers can collaborate to change this state a bit. *That’s it*. To bring on more, bring on more” (4_5_f_Arts_Humanities_Social_Sciences_1_administrative_function_central_unit, Paragraphs 233-235).

Indeed, cooperation is contingent on the personal initiative – rather than authorities’ decisions; “It doesn’t prevent you from doing collaboration yourself, initiative. That’s it. *Initiative, yes*. There is no spirit of initiative; that’s it: oneself (laughs)” (10_m_Arts_Humanities_Social_Sciences_executive_function_research_unit, Paragraph 177-179). Thus, so far, it has not been attained yet, and a certain passiveness on behalf of academic actors remains an issue. However, extra-curricular work might not be appreciated in the field of academia, as is shown in the following:

(...) that’s how I made the transition from one to the other and, like me, I like change... *To advance*. It didn’t bother me. And I had read and everything. So the fact of adapting it, yes, I think that we could have done it in a better way because personal work is not valued at all at here. So if you do it as a lecturer like I do; I really do personal work, I make it compulsory, I give them homework, I tell them: ‘Like at school’ (...) (9_f_STEM_executive_function_research_unit, Paragraphs 12-14).

This situation gives way to frustration on the one hand, but distinguishes those who have, and take, initiative on the other.

Accordingly – largely in the absence of institutionalised quality assurance – it is up to the individual academic as a researcher to adapt appropriate measures him- or herself; “Because at the moment, we do it with other colleagues like me, individually we barrage, we make dams. I know ... there is a student, I’m sorry to say it, but last year I ... I refused that she defend. I read her thesis, I said no, she can’t. So, we try to steer, but it is a drop in the sea (...)” (1_m_Arts_Humanities_Social_Sciences_research, Paragraph 149). Notably, the overwhelming mediocrity caused by the massification of the system cannot be compensated by individual Algerian academics – despite their high embodied cultural capital. It is because

of this reason, too, that the coping strategy of rejection²⁶³ of, for example, Algerian journals is adopted:

But, the quality of the publications; I'm sorry to say it, I've gotten to the point where I don't want to publish in a national journal. *Okay. And that's serious. This is very serious.* I do not want; I don't want to because..., yeah, that's it. *Not at the same level, yes.* And besides, I want... I want to be judged, I want to be evaluated (...) (1_m_Arts_Humanities_Social Sciences_research, Paragraphs 213 -219),

since there is too high a risk of losing one's accumulated embodied cultural capital. Further, this statement shows that there seems to be simply no Algerian colleague with a comparable embodied cultural capital in this specific case. While it might apply more or even exclusively to the social sciences and humanities, the fact that there is no evaluation even in national research centres likely is valid for all disciplines;

(Sighs) Me, where I am already disillusioned as a researcher is that I find that there is not enough evaluation, there is not enough evaluation... It is not normal that it has been 4 years that I have been in (*institution*), and I have never had to fill out a single annual evaluation form; without any follow-up of my activity (...) (1_m_Arts_Humanities_Social Sciences_research, Paragraph 109).

Institutionalised state

The institutionalised state is defined as follows: “(...) a form of objectification which must be set apart because, as will be seen in the case of educational qualifications, it confers entirely original properties on the cultural capital which it is presumed to guarantee” (Bourdieu, 1986, p. 244). Thus, the possession of the embodied state of cultural capital can be the acquisition of its institutionalised state.

The intellectual institutionalisation of being an academic is highly valued in Algerian society, to begin with (see above, 16_m_Arts_Humanities_Social Sciences, Paragraph 94). Algerian academics also enjoy privileges of funded training, which is connected to their status: “(...) Our Ministry provided us with stay abroad allowances. So, all Algerian lecturers can have state funding to go and do a short stay, or training, to go and see what is being done all over the world (...)” (6_m_Arts_Humanities_Social Sciences_executive function central unit, Paragraph 93).

Ranks serve as differentiation between members of academia; “(...) there are rules for accessing class A positions. For example, class B, you must submit a file for which there is all the work. Supervision, for example, publications” (12_m_Arts_Humanities_Social Sciences, Paragraph 522) and marks distinctions also on a personal level; “(...) I have

²⁶³ See the previous subchapter 7.2.2

colleagues of mine who have become professors during those seven years. And I haven't (...)" (14_m_STEM_administrative function_central unit, Paragraph 146). Their status, as a result of high cultural capital, is uncontested and generally accepted also within the field of academia: " (...) it's not up to me; it's not up to me, as you said, a professor is not to wait until the students come to get him. It's, you make an appointment once per month, it's international standards, it's once a month" (9_f_STEM_executive function_research unit, Paragraph 394). Thus, the institutionalisation, as a professor, in the capacity of supervisor, triggers certain expectations regarding doctoral candidates' behaviour, as possessing less institutionalised as well as embodied cultural capital.

Notably, social sciences and humanities representatives lay the focus of action not on themselves as the embodied state in the above, but demand that the university as an institution play a role in civic education, and thus the transmission and, accessibility of, institutionalised cultural capital to grow gradually in the embodied state, too:

I think that the sector which is the most sensitive, I think, is that of education. I think because, from this sector, one moves on, one produces the researchers, the brains who go to other socio-economic sectors and all that, that's it, that's it. And so that's why there is a connection with that openness to another world, to other countries, what globalisation is, it's a bit the two inseparable (4_5_f_Arts_Humanities_Social Sciences_1_administrative function_central unit, Paragraph 161).

Although they possess embodied cultural capital as individuals, it is preferred that their institutionalised cultural capital be put to good use for society, as this statement shows:

(...) and there is also the role of guiding, orienting and assisting with the culture of society, assisting to find solutions when there are problems. It is, it is the university that is supposed, in the first place, to seek solutions to any problem that society faces. That's the primary role (6_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 179).

The focus is not on research but on teaching and the so-called 'third mission'. As those without the available institutionalised cultural capital in the form of a university diploma face a dire situation, this is needed;

(...) society, on this level, is progressing very, very, very slowly. Maybe because there is not enough success for some people who have chosen the professional path that can become a model for others, then, because it is a country that does not have an industry, that does not have; I mean that, that Algeria is not, one cannot say that it is a country of small, medium or large companies. The private initiative to form companies is not specific to the country. So, in the end, private and individual initiatives on skills, on training of a profession exist only to a very small extent. So they cannot if they do not exist, cannot become a model (...) (3_f_STEM, Paragraph 255).

The role of the Algerian university for the society as members of the general public in acquiring the cultural – including social – capital by studying and, after all, degree conferring in its institutionalised form, is described as follows:

(...) I think I believe in a fundamental mission, which is a social and cultural mission. If the external environment does not offer the student a level of sociability or a level of culture, for many reasons, because outside; when not at university, the student is in his family, where he is in a family environment, and in general, many family environments are outside of all aspects, well, cultural aspects. So the university must also play this role because it will allow a greater openness of mind to these students, outside the disciplines and professions for which they are studying. To teach them, even if one is in a university which trains (*STEM discipline*), it is necessary that the university, in addition, teaches them to look at the world, to observe, to observe their society, to learn and to cultivate themselves – everything what the family sphere cannot offer. I believe I believe in this role, this mission of control of the university, or of any educational institution, in countries like ours. It is necessary that we train and that we put at the disposal of our students what they cannot find in their family circles, that is to say, an opening towards society, the world of associations, an opening towards culture, access to co-education male and female, a discovery of their country. All these things, which, for me, are very, very important, and I would say that if I had to put percentages, I would say: training in the profession 50 and all of this 50 because I believe that the person that this student will be tomorrow, he must have these two components. If he does not accept, and he does not have that, it will be bad. In any case, so, all of this cultural environment, social, which is to be observed, to be regulated, must be taken care of completely by the university. I strongly believe in it (3_f_STEM, Paragraph 413).

Indeed, cultural capital, in its embodied form first, is viewed as essential, and specific training comes second. As is pointed out, this very cultural capital as an academic, at the university, does not exist in the average Algerian student family and more broadly social environment.

This institutionalisation, once achieved, allows for common acknowledgement for successes, especially in international projects, such as:

(...) The project proposal is 100% the university (*institution*). We did not bring in experts, as some do. 100%, and it's the same team that is managing the project: we coordinate, we have money from Europe, and we coordinate it. That means that in terms of visibility and credibility of Europe, we have built something (...) (7_m_Arts_Humanities_Social_Sciences_executive_function_central_unit, Paragraph 71),

and this meso-level elite institution status may be replaced by the institutionalisation of the university in its governance, i.e. the Ministry on the macro level, which is praised for its international outlook and support of research: “In terms of governance, very often, I say it: fortunately that we have an authority, an authority which is so open to the international, which which is on top of scientific production, which is really behind meetings, scientific productions (...)” (7_m_Arts_Humanities_Social_Sciences_executive_function_central_unit, Paragraph 149). Policy priorities relevant to research reiterate this;

(...) this issue of visibility; it is the issue of visibility, for example, in research topics: visibility of universities and everything. It is very important for the Ministry and the government. So, I think they

want to be in an international environment, and, so, to be in this environment, one has to be in everything that is happening. You must not live outside of what exists (9_f_STEM_executive function_research unit, Paragraph 210).

However, both on the individual – embodied – and on the institutionalised level, cultural capital is usually not to be shared in the Algerian academic context: “(...) It must be said that we don’t have this culture, to be honest with you, we don’t have this culture, we don’t have this culture of exchange. We don’t have it; we’re building it. Because, universities, generally, see themselves as competitors (...)” (14_m_STEM_administrative function_central unit, Paragraph 98).

Therefore, the cultural capital in its double institutionalised state is capitalised on by the effort to be apar with global standards and trends – though not engaging in setting national standards. The latter is also claimed, in critical analysis as follows: “(...) if we had an American university like Beirut or Cairo, I’m all for it. *Okay*. I am in favour, because, frankly, given the current situation, anything that can improve higher education is welcome. Well, I think we have to build the system on new foundations (...)” (1_m_Arts_Humanities_Social Sciences_research, Paragraphs 183-185). In this line, appreciation is decreasing with massification rendering the institutionalised cultural capital of a diploma more and more worthless:

(...) to show that I can give you eight or seven out of twenty and we can have a coffee after. And that’s what it means to become at the Algerian university, it’s this credibility that will have to settle, this; one must calm those students who need to be reassured. Because there is a negative discourse in parallel: ‘You can’t do anything with this degree, there is nothing happening; those are depreciating diplomas’ That’s the discourse from their environment. Even at home, their parents, unfortunately, ‘Do university, but what are you going to do after?’, or: ‘What is the content of your studies? It is not important, it is ...’ But with my behaviour, with what I bring them, what I bring back to them; but with my behaviour, they break this negative vision. It is important (7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 216).

The solution proposed is to limit the number of institutions conferring a degree throughout the country; “(...) that there are university poles, a concentration. I would say, maybe 5 poles maximum, nationwide” (1_m_Arts_Humanities_Social Sciences_research, Paragraph 23). Nevertheless, Algerian students have institutionalised cultural capital which they apply abroad; “(...) There are, really, a lot of Algerians who are competent, who studied at the Algerian university, and who have passed, for example in France and in Spain, who succeeded their studies. That means that there are students who are competent (...)” (12_m_Arts_Humanities_Social Sciences, Paragraph 433).

Despite the high cultural capital in its institutionalised state – for both students and staff as academics – there are signs of decline of its importance in the Algerian higher education

system as there is a certain massification even of the doctorate degree, as shown in the following: “(...) someone who will have a doctorate, universities will be saturated with numbers of lecturers” (17_m_STEM_executive function_political entity, Paragraph 48), which may lead to frustration when the transfer of cultural capital from the supervisor to the student is dysfunctional, or perceived as such: “(...) Sometimes, we are upset, we say to ourselves: ‘So, we are useless, after all’. It’s a bit annoying, it’s a discourse which is like that, but okay (...)” (9_f_STEM_executive function_research unit, Paragraph 251). Furthermore, quality assurance challenges in degree-awarding – especially PhD – is mentioned, too;

(...) that means, with requirements, first of all, that of quality. It is intolerable for us to validate poor defences, and this is what is happening. Every day, we validate defences and mediocre theses so ... *Who become mediocre lecturers* ... I believe that, for me, it is the main challenge of the Algerian university, it is to say stop to that; but, that means to act immediately before it is too late because actually, they are now ... they will be those profs later, after all, these mediocre ex-students who will become profs, and who will perpetuate mediocrity. So ... we must act now and maybe, yeah, but then ... it’s a real problem. How? How to do it? (1_m_Arts_Humanities_Social Sciences_research, Paragraphs 143-145).

With the responsibility thus shared between the individual and the institution, both types of cultural capital are portrayed as interconnected and building on each other.

7.3.3 Social Capital

Bourdieu’s social capital concept refers to an individual’s social connections as convertible meta-capital. The coding rule is applied as follows as defined by Bourdieu: “(...) social capital, made up of social obligations (“connections”), which is convertible, in certain conditions, into economic capital, and may be institutionalized in the form of a title of nobility (...)” (Bourdieu, 1986, p.249). This type of capital features 42 occurrences in total in two deductive subcategories, out of which 35 in symbolic exchanges and as little as 7 in the practical state. Those make up less than one-third of the numbers of cultural capital above and the lowest overall. Occurrences have neither been identified in the third deductive subcategory, material exchanges – for which a description is equally lacking in the main and further sources – nor the different subcategory.

Symbolic exchanges

The symbolism refers to power in advocating one’s interests: “Exchange transforms the things exchanged into signs of recognition, and, through the mutual recognition and the recognition of group membership which it implies, re-produces the group” (Bourdieu 1986, p. 249).

It is noteworthy, first of all, that the distribution of double-coding is the highest between the subcategories of institutional state of cultural capital – the preceding section – and symbolic exchanges of social capital. Although the former subcategory features close to double more occurrences in terms of numbers, there are conceptual overlaps – in so far as the university as an institutionalised form of cultural capital is a network with symbolic exchanges at the same time – so many of those apply to both and are interchangeable. This holds true also partly for the embodied state, since the social capital, like the other types, refer to a personal possession from the perspective of the individual. This accounts for the comparatively lower number of citations included in the following.

Notably, in the Algerian context, the issue is around inclusion versus exclusion from networks as an expression of social capital in the form of symbolic exchanges. On the one hand, the reform by the adoption of the Bologna Process opens up new possibilities, as can be seen in the following;

Yes, for example, now that Algeria has also adopted the LMD, we could say that it is ... It is international. Yes, I think it is a good thing, especially, especially for the; like that, we avoid the problem of equivalences on the one hand and then for mobility, student mobility. And I think that with this LMD system, even, we were able to, even, obtain co-supervision in the doctorate; there are our students who did studies in Algeria, from graduation, and even up to the master, registered in Algeria, they may have a registration in France (...) (13_m_STEM_administrative_function_faculty, Paragraphs 7/8).

However, on the contrary, the bias against academia from the so-called global South in general and thus its academics continue to persist in the so-called global North; “(...) Because, when the paper comes from the South, it’s the South: ‘What are they going to teach us, these guys from the South, it’s us who have taught them everything.’ You see? (...)” (16_m_Arts_Humanities_Social_Sciences, Paragraph 48).

Though being a respected member of society with a particular, valued, status; “Yes, because now we have what we call the status of ‘lecturer-researcher’ (...)” (17_m_STEM_executive_function_political_entity, Paragraph 32), Algerian academics’ social capital is questioned when there are different levels of symbolic exchanges, such as the attempt of the introduction of international standards, for example:

(...) there are other universities, three or four or five, which are like that, pilot. And we try, so we try, we try to see if you agree with us being evaluated. For example, the lecturer was not at all; we offered it to him; we put the evaluation sheets. The lecturer, we tell him: ‘If you’re interested, it’s anonymous, it’s anonymous, so you take your sheets, give them to your students; they rate you, they evaluate you. After, if they want to give them back, they don’t want to give back, etc. It is to get you used to it and get the students used to it’. Of course, even in developed countries, there are people who you; evaluation by the students, I don’t even hear about it (9_f_STEM_executive_function_research_unit, Paragraph 136).

The resistance encountered, in this case, is a reflection of the desire to retain one's social capital, in the light of colleagues, but also considering the preferential national social status: "(...) What I'm seeing is a corporation of people who are well paid. *Yes* ... compared to Algerians in general; and who display selfish behaviour. *Yes*. Who are very satisfied with the situation, who are not controlled" (1_m_Arts_Humanities_Social Sciences_research, Paragraphs 334-340). Those privileges thus critically exposed are based on membership in academia as a scientific network attributing the community high social capital.

Nevertheless, from an Algerian professor's or permanent researcher's perspective, the individual holding social capital can transfer it by symbolic exchanges, e.g. by:

(...) at my small level, I would like to have classes of, I know, ten students, 15 master students who I know I will take care of, and who I know we're going to take care of. And we're going to make them ... executives and we are going to make them quality researchers. They will be visible everywhere abroad; they will be ... That's it (1_m_Arts_Humanities_Social Sciences_research, Paragraph 310).

Besides – even if induced institutionally – an obligation is felt to share this very social capital with members of the general public, not least to enhance their status: "Well, me at my level, I would say that there is a duty of proximity. *Yes*. To the public, with the people, go to popularise knowledge, to go, I think it's one of the roles, yeah, of the university (...)" (1_m_Arts_Humanities_Social Sciences_research, Paragraphs 334-336).

Practical state

Lacking further elaboration by Bourdieu (1986) in the primary as well as secondary literature,²⁶⁴ it is defined for this purpose as the absence of symbolic exchanges, though still as an expression of power for one's advantage, i.e. personal agenda. While it can be argued that there is always a symbolic dimension of a particular practical state, this remains somewhat vague. Seven occurrences as an expression of the advantages or the need of one's relations, or memberships, have been identified. Out of those, five refer to the positive as well as negative implications for an academic in conducting research.

Not only respect towards, but indeed high social capital comes with the acquaintance of those in executive positions, such as: "No, but me, no, but you, as you are, what is it called? You are laboratory director, laboratory director, you know what are these, what you ordered as equipment, and you know your human resources which exist in your lab, and what has been done in, say, a period of 2, 3 or 4 years" (8_9_f_STEM_1_executive function_research

²⁶⁴ See chapter 4.3

unit, Paragraph 307). Further, being connected on social media with one's lecturer facilitates learning from a student perspective as is shown in the following: "(...) I am in the group with my students on Facebook, they ask me questions, I answer directly (...)" (8_9_f_STEM_1_executive function_research unit, Paragraph 150).

There are only two instances where personal acquaintances – in this case, from the alma mater – are mentioned as playing the primary role in research and other joint project collaboration:

(...) I know directors, I know university centre directors, I know Vice-Presidents. So, most of the leadership of the university region (*region*) are from here, from this university (*institution*). They always keep in touch with their mother university; they always keep; that means, when he thinks of doing a research project, the first names that come to his mind are his friends from the university (*city*). So it's normal that there is this contact, there is always this look towards the mother university. That's it (...) (6_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 141).

In this context, the partnership with France occupies a special position, once more:

(...) Of course, France still stays at 60 to 70%, and there are the other countries. Yes, two-thirds is France. *Because there is funding?* Simply because there is more, already, there is proximity, because the majority of lecturers who are at the university studied in France. And so, they kept these relations, and therefore, it goes step to step. So our students, we get them used to; I still have contacts, up until now, in (*city 1 in France*), in (*city 2 in France*), et cetera (13_m_STEM_administrative function_faculty, Paragraphs 80-82).

Highlighting the role played by French institutions and individuals and their continued influence on Algerian academics' behaviour in aspiring to be part of France-initiated or based networks or retaining their position within shows that Algerian higher education is still subject to a postcolonial context, which is relevant considering the associated accumulation of social capital thus facilitated, albeit limiting.

In reverse, individual researchers may struggle to enter international circles other than those mentioned: "(...) one doesn't publish you, if you're not already part of a network. One is stuck; one is really stuck (...)" (16_m_Arts_Humanities_Social Sciences, Paragraph 46). As a consequence, the need for social capital as symbolic exchanges – networks – is acknowledged, which may work to the disadvantage of the Algerian academic accessing those very circles because of structural bias;

(...) So to speak, we are always in inequality. Hence the importance of networks, hence the importance that one needs to know people. So, if you want, it's not, it's not the force of science, it is not objectivity, it is not the force of the argument. It is the force of personal knowledge. Well, I'm not saying that it works 100% in all cases. But, generally, it's a bit that (16_m_Arts_Humanities_Social Sciences, Paragraph 48).

Accordingly, the lack of contact between colleagues at other institutions is portrayed as dismal, too:

(...) I don't know what's going on at the university (*city 10*), it's too bad; I don't know what's going on at the university (*city 11*), it's a pity, I don't know what's going on at the university of (*city 9*), it's a pity. In (*institution*) two juxtaposed laboratories, we don't know what is being done in the laboratory next door; it's a pity. We don't know how to communicate to students, we don't know how to communicate to students and tell them, 'You have value that you can produce'. We don't know how to communicate, it's just a communication problem that we have, and, I think, it's an Algerian problem (...)(7_m_Arts_Humanities_Social Sciences_executive function_central unit, Paragraph 210).

Notably, as this statement shows, the communication issue currently hampering one's research is attributed not primarily to the individual but the academic community as a whole, or, indeed, as an 'Algerian problem', to society.

7.4 Synthesis

Research question I: Which functions does the present-day Algerian university incorporate, including in international comparison?

Since the system is centrally governed and publicly financed, there is little room for experiments. Reforms, too, most recently the adoption and implementation of the Bologna Process, are prescribed from the competent authority with few considerations of individual situations and cases, neither at the meso nor the micro-level.

At the same time, there is a lack of consistency in policy, as becomes apparent in the absence of an internationalisation strategy, respectively, implementation plan, and more ad-hoc national research programmes. Overall, the macro level is dominating, and individuals in the system – Algerian academics at the micro-level – are subordinate in serving the purpose of national operation of higher education, i.e. predominantly access, social integration and undergraduate teaching.

It is noteworthy that academic self-administration and governance, which are characteristics of universities as special organisations from the outset, is largely non-existent, according to the corpus analysed. Therefore, system factors penetrate to everyday life and work of an Algerian lecturer-researcher at a university institution, which becomes apparent in the activity of research as an essential task of both the individual academic and the field as a whole.

Due to system expansion and resulting massification, there is a high teaching load, the university function of which takes priority. Ideology in its various forms persists, which is

relevant especially in non-STEM fields, and, consequently, politicisation – it is understood and used in an exclusively negative way – is rife, which has implications on individuals' academic freedom. Not least, the language policy does not take into account personal competences and needs. The objective to widening education and access is at the detriment of research. The Algerian higher education system – at university status institutions, outside of national research centres – neither rewards research activity nor sanctions the lack of research engagement, which is therefore left to the individual. Overall, the main university function, in Castells' terms, is a social need, with the effect of massification of the university system and surplus labour absorption in the postcolonial situation of the country's higher education system.

Research question II: How do Algerian academics cope with the system implications – ambivalences?

There are three coping strategies which Algerian academics employ in their situation of personal oscillation. Firstly, they engage in research against all the odds, either by individual quality assurance to set up internal standards, by seeking foreign partnerships, by publishing abroad only, by emigrating, or by adhering to national principles – out of conviction or out of necessity – the latter of which is especially prevalent in social sciences.

Secondly, they do not engage in or conduct minimum research. This coping strategy is based on a variety of reasons: governance-related, institutional, or personal. Although the system factors, among others, in their expression as lack of budget and human resources autonomy – including insufficiency of qualified or competent junior researchers – deter academics from engaging in research, the decisive criterion is personal reasons, which range from resistance to reforms, encompass the lack of financial incentives, and, not least, issues with foreign language skills, which are perceived as a major obstacle in conducting research. Due to the missing institutional autonomy, institutional reasons play a minor role.

Thirdly, they seek alternatives in academia, either by taking up administrative and executive positions or by dedicating themselves to teaching and supervision or other extra-curricular initiatives. By doing so, they usually cannot engage in research in parallel due to limited time resources, but do not make a conscious decision against it.

As can be seen from this classification – while all three options are practised – the reasons for not engaging in research are most elaborate and most differentiated as they span, and go

across, several levels. Indeed, unlike the other strategies, macro and micro are interrelated. Hence, unless there is a significant personal effort, it can be concluded that the default strategy of an Algerian academic is to do no or minimum research, which applies to different disciplines to varying extents. Arguably, the arts, humanities and social sciences representatives are most affected due to prevailing ideology exposure and political language policies focused on the national, impeding engagement in the international sphere. Consequently, while they might support and promote research at the Algerian university, advocacy does not necessarily mean personal engagement. In this case, the path of least resistance is chosen, in not dealing with ambivalences occurred by the status of being research-active.

Research question III: Why do Algerian academics act in this manner?

It has become apparent that, in the Algerian context, material incentives of any kind are subordinate as the individual academic's motivation to engage in research. Proof of this claim is provided by the absence of the subcategories depicting financial means, material exchanges in social capital, respectively, the objectified state subcategories in cultural capital.

Further, economic capital is overwhelmingly mentioned as sufficient and thus possessed by Algerian academics – more so with regards to the salary levels of other occupations in the country. There are only a few instances where insufficiency, or lack of material provision altogether, is stated. Given that the number of occurrences accounts for the least overall and less than half of the cultural capital, salary is rarely subject to competition between colleagues as members of the Algerian academia, which excludes this factor as a means of distinction and differentiating in deciding whether, and if, to what extent, to do research. Thus, the availability and the amount of economic capital possession does not determine one's behaviour in engaging, or not, in research.

In general, social capital in either its symbolic exchange or the – as far as the data is concerned – negligible practical state form has shown to be not decisive in academics engaging in research or refraining from it – or engaging in other activities. Therefore, with a few exceptions, social status has no significant influence on Algerian professors' behaviour in conducting research, a fact which is likely connected with their similar and comparable position as academics – whether engaged in research or not – in a postcolonial context, marked by former French elitist and excluding approach to higher education specifically.

Further, in the French tradition and corresponding system, research at universities is secondary and new, and elite selection – for state functions in public administration – is done via the *grandes écoles* type of institution; not by specialised separate research institutions, which do, and continue to, co-exist. This context shows that the contemporary Algerian higher education landscape as well as the policy is still influenced by the colonially inherited system, although the transformation triggered by internationalisation has begun.²⁶⁵

Overall, in the Algerian context, cultural capital in its various types only has proven to determine individuals' behaviour and actions in as far as Algerian academics are concerned. In its embodied state, it enables professors and permanent researchers to engage in research on the one hand, by holding a necessary rank or position obtained, and behave in such a way as to acquire the necessary competencies on the other, either to start initially or in increasing competition with others, colleagues in the national sphere, i.e. the immediate environment and the wider Algerian scientific community, and on the international level, i.e. worldwide discipline representatives.

While the institutionalised state equally plays a role, their cultural capital-enriching measures – i.e. higher education and science and technology policy, even if recent – are of less importance when juxtaposed with the individual motivation. Although both forms are connected by the formal, institutionalised qualification required, the individual researcher defines him or herself through personalised, i.e. embodied, cultural capital, rather than that brought by the affiliated, or any institution through respective credentials. Given that internationally practised kinds of research assessments are based on exactly this individual performance – including, though not limited to, publications – the way to compete is to adhere to these global rules and ways as common knowledge of the scientific enterprise.

Nevertheless, political circumstances and the institutional environment are decisive in this very approach. When academic freedom is limited or ideological concerns determine the language of publication – as may apply to researchers in the social sciences and humanities in Algeria – researching in a per definition international sphere becomes challenging, despite the existence of significant cultural capital in a national context. As a result, extra effort has to be put in by the individual to engage in research, and the motivation for additional work

²⁶⁵ See chapter 6.2.2

as well as inconveniences in a centrally governed system, where this activity is not foreseen or even desired, draws exclusively on the necessary increase of embodied cultural capital.

Furthermore, individuals might even have to compromise on their social capital, at the detriment of good relationships with colleagues, who chose to adopt a different approach; either no engagement or administrative positions. Hence, it is a question of prioritisation. It is precisely in this institutionalised state, too, that the various functions of the Algerian university, and their weight and prioritisation,²⁶⁶ come into play. Holding a diploma as institutionalised cultural capital is thus a reflection of the system the institutions belong to.

As a summary based on the findings stipulated in the third part, hypotheses outlined in the second part²⁶⁷ were confirmed as follows: There are system limitations related to a lack of institutional autonomy; research is a new social field; Algerian academics' agency is reflected in researching an individual way by employing adaptation strategies, and personal internationalisation experiences such as stays abroad correspond to successfully engaging in research as an expression of embodied cultural capital, and serve as a means of differentiation in national academia.

7.5 Discussion

The most prevalent Algerian university function has been identified as the social need in surplus-labour absorption. Ideology in the form of higher education politicisation retains a strong influence, too. It draws on the national unity, while the university as a state organ likely taboos or preferably suppresses the divide caused by political Islam and its implications on society as a whole. It, therefore, does not currently feature the function of national reconciliation after the conflict of the 'black decade' – including on a political level. Rather, it serves as a means for social peace. Given the status quo, the particular setting of a postcolonial situation plays a role, although it is usually not outspoken. Accordingly, the silence surrounding this issue – which, by contrast, is very much present among the country's diaspora – points towards related political structures, which are given, and accepted. The elite selection and the training of bureaucracy function exist to some extent in the Algerian context, yet, are not decisive, as those reflect the inherited French model, which is slowly but continuously revoked in its structures, partly by internationalisation exposure, partly by reinforced national interests.

²⁶⁶ See chapter 6, in particular, chapter 6.1/6.5

²⁶⁷ See chapter 4.4

Castells' framework has served the desired function of a setting the scene in identifying those system factors, among others, which affect academics. It must nevertheless be acknowledged that in the Algerian case, "other functions" are those who have the highest impact and influence as of today, leaving the relevance of the traditional functions 1-4 behind. However, it is this fifth function, least elaborated both theoretically and empirically, which leads to the conclusion of its limited suitability for an African – or indeed general postcolonial or transformation society – context. Not least, as has been shown, it is human resources quality issues of both junior and more senior researchers, insufficient technical and soft skills and competences, and the lack of budget autonomy coupled with partially restricted academic freedom, which deters or hinders Algerian academics in engaging in research, rather than the absence of this respective, or another, university function altogether. The situation of personal oscillation reflected in coping strategies stems from the dilemma between national and international orientation.

The approach of Bourdieu's capital types as a lens for analysis executed via theory-driven QDA²⁶⁸ has proven to be useful overall, though there are significant shortcomings. Applying Bourdieu's definitions as – subcategory – coding rules was only partly successful, as those were either non-existent or too broad. The coding of economic capital subtypes was thus only possible by inductive additions, in the simple existence/lack of dichotomy, and the results are to be treated as more indicative.

Similarly, social capital coding was reduced to a few illustrative expressions of the practical state, and a more vague attribution of symbolic exchanges. With less than 50 occurrences in both main categories each, the analysis remains somewhat limited, and, as a consequence, correlations are difficult to establish. This unsatisfactory state of affairs may also be since the types of capital were treated in isolation rather than in their full theoretical framework, which would include an analysis of habitus as well as the field. However, this approach of the only partial application was chosen because the theoretical underpinnings of this work are three-fold,²⁶⁹ with the third element, Bourdieu's forms of capital, building on the findings of the second and the first component, as is reflected in the research questions.

The fact that "Bourdieu's theory focuses more on the socioeconomic status and cultural capital of an individual in attaining educational achievements than on his/ her social capital;

²⁶⁸ See chapter 5.4

²⁶⁹ See chapter 4.3

the latter is therefore much less elaborated in Bourdieu's work (...)" (Rogosic et al., 2016, p. 91) reiterates this observation. Further, professors and permanent researchers have a similar socio-economic status, which is relevant considering the following: "The theory itself is more suitable for explaining differences in the educational achievements of individuals (...) or in cases where there are discernible differences in the socio-economic and socio-cultural status of the participants in the sample" (Rogosic et al., 2016, p. 94).

While the suitability of both specific components of Bourdieu's theoretical approach and the combined method was flawed in this manner, the adequacy of Bourdieu's concept, nevertheless, unfolds in the cultural capital subcategories, and more specifically in the embodied state, which could be identified as the primary motivating factor in Algerian academics' behaviour when dealing with ambivalences, or deciding whether to engage in research. In this case, operationalisation did not fail or remained incomplete.

Overall, the institutionalised state is connected with both ideology, as is reflected by multiple double-codings, and research methodological questions – namely, academic work.

8 Conclusion and Recommendations

8.1 Reflection

The range of experience gained in the framework of this PhD research – through interaction with embassies, ministerial bodies, universities, research centres, professors, administrative staff – illustrates that it is a challenge to enter Algeria as an individual foreigner, yet, that trust-building allows not only access but a wealth of opportunities, beyond one's project, and much faster and deeper than it is possible elsewhere in higher education research. My case illustrates that international researchers face a highly politicised environment in Algeria, which might prompt some to consider or prefer free-to-enter neighbouring countries initially instead, for example.

However, it must be highlighted that, once a visa is obtained, the main obstacle has been overcome. Once present in the country, I was also able to collect data much faster and more efficient than it would have been the case in Germany or France, for instance. On the other hand, it must be duly noted that the visa procedure state-of-affairs equally applies to Algerian colleagues wanting to go abroad. Restrictive practices – discriminatory, in the sense that applicants are assessed solely based on their nationality, not individual cases, as witnessed by the author – are in place by most European and other countries. In this context, structural violence is exercised. Therefore, Algeria operates a strictly reciprocal visa policy.

Nevertheless, qualitative social research, as an integral part of social science disciplines, but also, e.g. archival works, as is commonplace in the arts and humanities, may be rendered impossible or at best severely impeded by non-scientific external influence or even (self-) censorship in a controlled academic environment. Consequently, there is a dearth of data, which then continues to enable and encourage emotional, short-term and individual-interest as opposed to evidence-based policy-making as the objective of the “advocacy-by-design” approach outlined in the introduction of this work. The control exercised allows for less accountability as decision-making criteria are often not transparent, which makes it difficult to be traced back to individuals rather than a/the system.

Rather than discontinuing or outright dismissal of any joint academic activity and mobility from abroad, as is done by many – including, but not limited to – central European countries as of today, the way forward is to become aware of, and acknowledge the characteristics of specific countries' higher education systems, and the challenges associated with the given

framework conditions. Above said applies to both the macro- and micro-level, where the individual academic is concerned, personally as well as functionally, regarding one's activities. If the issues arising from the ambivalences identified are being dealt with, quality assurance will be possible in the sense of peer review in the academic community, and institutional development will be advanced towards self-governance in the interest of research and science. Hence, there should be a focus on the potentials rather than problems. At present, too often still, only challenges are pointed out, and criticism is voiced in the MENA region, including politics more broadly, and centralist governance in particular. Instead of recognising that actors such as individual academics are accomplice, which may then lead of a vicious cycle, focussing on individuals' possibilities and competence to navigate nonetheless allows working towards a solution, and a compromise to retain agency in a given context.

To conclude, the Algerian academia needs to be fostered as an attractive career path and a choice motivated by personal, intrinsic motivation, where striving for enhancing one's cultural capital in the form of innovation is rewarded in different ways, socially as well as economically. At the same time, academic staff development is crucial, as graduates with insufficient skills in scientific work will continue to become lecturers and then lack this essential proficiency in their teaching and supervision, with the consequence of stagnating quality of training and research. Instead, there need to be role models for postgraduate students and young researchers.

Furthermore, universities cannot remain the default and de facto only option of tertiary education available after secondary school. The present-day trend of inflation of diplomas leads to devaluation and frustration, both for graduates and employers, who are dissatisfied with the skill-set possessed. It makes looking for greener pastures, i.e. emigration plans, more likely. If the status quo continues, it will mean a loss detrimental to Algeria. Therefore, the measures proposed below will only be effective when complemented by a competence-based curriculum update – starting on the school level – as well as creating or strengthening existing facilities, remuneration and, not least, social prestige by the promotion of TVET tertiary education, combined with the possibility of undertaking professional degrees at university-level, too, to counteract graduate unemployment as well as the prevailing 'brain-drain' many countries in the region, and on the continent, are confronted with.

Given its plurilingual character, with the presence of modern standard Arabic, spoken Algerian dialectal Arabic, Tamazight, French, and, recently emerging, English – pushed by the academic integration of the South, where French does not play a major role, as well as globally – Algeria should capitalise on the opportunities offered by this encouraging environment. The high politicisation of the language question reflects a contemporary identity conflict of society; Arab rather than African, Tamazight versus Arab, and the tendency towards, as well as orientation to, France and Europe. Hence, Algeria is an illustration of African ambivalences (Macamo, 2005). This state of affairs is conflictual, contradictory, and emotional, not allowing for pragmatic and rational policy-making for higher education development, among others.

In this context, it can be observed that Algerian politics is geared towards disassociating from its former colonial power France, however, it has not yet fully succeeded in this endeavour as of today in the realm of (higher) education. The problematic relationship with France, where political discourse and individual practice highly differ, exposes the need for France to change its approach of neo-colonial policies, which continue to reflect structural violence unless corrected on a balanced and equal footing as real partners. A solution for this paradox is to start at benefits of socialisation elements, for which a positioning needs to be identified first. The resulting diversity can thus be perceived as an opportunity rather than a threat.

Not least, neither a comprehensive reform nor associated policies are likely to take place or be implemented without an empirical as well as conceptual reflection on the roles and functions of the Algerian university and its interactions with the members of the academic community, the general public, and the legislative – including, but by no means limited to research. Besides, there ought to be partners from the private sector, which partake in a strategic planning agenda with a clear-cut vision and mission. The diaspora needs to be involved, too, in the form of a long-term strategy. Providing evidence by the data generated in this thesis, it is advocated that this activity will only be effective when carried out by social sciences, arts and humanities representatives, who should be acknowledged, encouraged, and supported in their on-going and future tasks at the service of society and thus the national common good.

Overall, Algeria has the potential to become a best-practice example for French and Arabic-speaking African as well as Arab countries, among others, undergoing similar transition

processes of increasing higher education internationalisation and the social pressure by massified higher education access, youth and graduate unemployment and migration movements. Measures outlined in the following – as reform elements – will facilitate Algeria’s higher education system transition towards and in its striving for a knowledge society. Furthermore, the changes will ensure that it can claim, and take up, the place it deserves in the international academic landscape, not least by boosting its visibility, incorporating scholars from Africa and the Middle East, and showcasing European and North American countries that its perspective, different from the prevailing Western-biased and centred discourse counts, and will not only need to be accounted for but indeed can be learnt from for these countries’ topical reforms. In this context, European and other countries are also called upon to inform themselves and learn more about a country’s socioeconomic and political setting and their interrelationship with education and science to enter a cooperation project on eye-level, to arrive at actual ‘sharity’, rather than continue with the presently prevailing ‘charity’.

8.2 Recommendations

The scope of these recommendations encompasses a personal contribution to Algeria, which has been solicited in interviews with stakeholders as well as political representatives. In English, they offer not only new international accessibility, but an alternative, outsider, and thus potentially more neutral and credible perspective, to be consulted stand-alone. The focus on chances rather than problems is characteristic of a new mentality oriented towards good practices, quality assurance, research cooperation, and the acknowledgement of non-African academics’ training in Africa rather than the traditional way vice versa, which implies a certain disadvantageous power dynamic as an expression of neo-colonial structural violence. The latter suggestion offers currently insufficient continuity. Objectives of policy recommendations in the higher education field can be more broadly subsumed under quality assurance since a causal link can be established between quality development and higher education institution development and management (U. Schmidt, 2007).

Consequently, policy recommendations regarding the Algerian higher education system are derived from the research in this dissertation in that the micro-level observations from the data analysis in the previous chapters are employed to link to the macro level. They are thematically structured into five categories, addressing the macro as well as micro perspective, and introducing an autonomous decision-making meso – as the institutional – level, which does not exist yet. In a nutshell, higher education institutions are special

organisations, and the academic sphere is, globally, characterised by self-governance as a prerequisite for its functioning, even though it is not the default case worldwide as of today. Therefore, conditions need to be put in place to allow for a university's research function as its core, which is inextricably linked to increasing internationalisation and regionalisation of higher education. Centralised governance and more ideological considerations informing higher education policy choices are halting progress in the sense of participation and visibility as they are nationally-oriented to the extent of negative impact on the desired continuing transition into a knowledge society, which translates into a restriction of academic freedom as has been posited above.

In Algeria, this process can draw on a high priority of an education-related budget, equality in access and quasi full participation, human resources, strong and publicly funded institutions, to result in well-qualified staff and competency-based training of the young population as next-generation professionals and executives. In this context, Algeria, which already hosts numerous international students, mostly from sub-Saharan countries, may share its experience as so-called 'best-practices' dealing with globalisation impacts in higher education with other African as well as Arab countries, and beyond – with the Asia-Pacific, Europe, and the Americas. Soon-to-be-expected private universities will likely increase competition and offer the perspective of quality assurance, among others, by benchmarking with international higher education institutions and frameworks (Sebihi & Schoelen, 2019).

8.2.1 Knowledge Management and Research Practices

Before research practices and processes, knowledge management is a necessity. A culture of exchange is a prerequisite, which needs to be established, e.g. by academic societies and conferences. Algerian understanding as of today revolves around physical laboratories, experiments, and number and type of publications. It mostly concerns applied research and is thus heavily biased towards STEM fields when compared with the social sciences, arts and humanities disciplines. This thesis has shown that there is a variety of obstacles preventing university academic staff from the default, or engaging more actively, in research as of now. Also, it is noteworthy that innovations have not been mentioned in interviews, which has been the expectation, talking to researchers about research. Therefore, there need to be reform elements for a transformation into a research and knowledge culture. While teaching currently prevails in practice, assuming the acknowledgement that research activity is first and foremost intrinsically motivated and thus individual since Algeria is in a position to reallocate its generous education-related funding, it may:

- Define national research programmes and priorities in a participatory manner, including non-state and industry representatives, and review as appropriate
- Establish a framework, i.e. in the form of standing and ad hoc committees, where relevant stakeholders are involved in commissioning, using and evaluating research, as well as in the development of strategies and systems for knowledge management and sharing
- Prioritise a knowledge base of state-of-the-art research and sustained investment in interdisciplinary research to develop new methodologies and theories from critical inquiry and innovative spirit as the foundational understanding of research
- Disseminate research funding nationally as well as internationally by electronic means rather than default official decree publishing only

With regards to promoting and incentivising individual research activity, measures include:

- Create the legal basis for the status of the researcher
- Reduce (undergraduate) teaching load by introducing more specialised courses, and employing teaching assistants needs-based
- Facilitate, and streamline the roll-out of, a sabbatical year or semester
- Honour publications on the principle of quality over quantity to be taken into consideration for staff rank also
- Involve all national research centres in doctoral education in collaboration with universities; create pathways for staff exchanges and visiting lecturers
- Implement individual, non-state research funding possibilities
- Implement English-language support and funding for translations, with a focus on the social sciences, arts and humanities
- Honour personal science communication activities as ‘third-mission’ public events

Post-graduate-level research training and standardisation

In this context, another central issue identified by this thesis is the need for the development of researchers’, or the insufficiency or lack of research students’ competences, especially with regards to a scientific working approach, yet, also, in foreign languages – English in particular. To avoid unsystematic, individual training of allocated doctoral candidates as has been reported as being common practice, it is proposed to:

- Discontinue centralised PhD entrance national exams (*concours*) and quotas for the number of PhD candidates in scientific disciplines, instead, freedom of choice given to researchers to take on PhD candidates according to the potential for research ability and innovation
- Introduce institution-wide and interdisciplinary or discipline-specific mandatory skills courses in foreign languages, research methodology, academic writing, presentation and communication competences, research ethics, e.g. by a doctoral school, and create peer coaching encounters
- Encourage empirical research designs for data collection critical for quality assurance
- Procure specialist research equipment as a competitive advantage nationally
- Provide or enhance research support structures, such as availability of literature including online access, extend library opening hours and facilitate equipment import

National and international collaboration and partnership

Due to the fact of negligible staff internationalisation rates and comparatively scarce mobility opportunities as of today, there is a need for more international awareness and welcoming in the domestic sphere, as well as more Algerian presence abroad, to increase the present overall low scientific visibility:

- Start/promote national disciplines or subject associations with annual conferences
- Distribute national and international academic events equally throughout the national territory to include and promote the South
- Strengthen regional exchange in the Maghreb by networks, such as the Bologna Process; facilitate student and staff mobility and agree on accreditation standards
- Wherever feasible, encourage co-tutelle/co-supervision arrangements, co-publish, and invite international colleagues to take part in doctoral defence juries, as well as actively seek these opportunities from the Algerian side
- Showcase, and promote, regional specialist areas of studies of international interest in the humanities, such as Tamazight, Arabic language and literature, Islamic Theology, Archaeology, medieval and ancient history
- Reorientate, and increase awareness of, partnership strategies towards the African continent, the Middle East, and Asian countries rather than Europe and North America

- Offer intensive or accompanying Arabic/dialectal/Tamazight as foreign language courses as well as cultural summer school experiences
- Conceptualise a participatory higher education internationalisation strategy as well as implementation plan in analogy to the existing five-year plans and prepare for its application and implementation in institutions
- Include the diaspora as facilitator and mediator between higher education institutions and countries
- Associate entities of the United Nations system, regional bodies, and international institutions

8.2.2 University Administration and Leadership

The issue of university staffing and leadership has rarely come up in the interviews overall, even though several representatives were holding administrative, including executive, positions. In contrast, teaching has been mentioned throughout. This finding leads to the observation that roles in administration and leadership are not sufficiently fulfilled or are not given priority. Hence, there is a need for capacity-building for incumbents – by training, onboarding and backstopping. On an autonomous meso-level, positions, roles and responsibilities have to be defined, and, on a macro-level, governing structure adaptations and constitutional provisions have to be made.

Institutional Autonomy

Research, excellency and international competitiveness necessitate an adequate environment, which has been reiterated by the findings in this thesis. Hence, institutional autonomy is an essential condition, i.e. to transfer governance from the centralised body to universities. Concrete measures may take the form of:

- Facilitate transitions between institutions, including flexible admission procedures and guidance, credit accumulation and transfer, accredited equivalency schemes
- Reform administrative processes, such as staff recruitment and procurement
- Allow, and encourage, national profiling of institutions, e.g. research-intensive, professional-oriented, international foreign-language instruction
- Start operations and allow fee-charging of private, including international, higher education providers

- Create and adequately remunerate administrative-only positions, both on an executive/rectorate level, as well as in faculties or departments
- Create dedicated international offices within institutions as well as research centres
- Facilitate academic visits from foreigners by giving institutions the necessary administrative competencies and authorisations
- Allow income-generation activities, e.g. by university-integrated or affiliated foreign language institutes, research laboratories and spin-offs
- Establish institutionally transversal services, i.e. quality assurance and monitoring and evaluation units

Strategic Planning culture

- Conceptualise a mission and a vision for national higher education
- Engage in e.g. 5-year development plans for higher education
- Align higher education with other national strategic plans, such as economic and social policy
- Develop policies consistent with technical and vocational education and employment policy fields, among others
- Introduce a regulatory framework to define roles, responsibilities, duties and accountabilities and rights of stakeholders in higher education
- Issue guidelines rather than decrees only

8.2.3 Infrastructure and Resources

The findings of this thesis highlight that institutional and individual infrastructure is generally sufficient or comfortable, and that resources are available. However, there is a misfit in what is required, and mismanagement and lack of communication in what is delivered. Academics are confronted with centrally-commissioned, standardised physical laboratory provisions rather than an allocation based on individual request and need assessment. Due to the lack of equipment warranty, insurance, but also administrative support, as well as technicians and maintenance personnel especially in STEM fields, experimental teaching and research are de facto discouraged because it is challenging to conduct and kept up. In line with institutional autonomy, budget decision-making powers need to be on the meso-level, and adapted, e.g. to student numbers. Investments may then be channelled towards human resources and development.

Digitalisation implementation

Higher education institutions worldwide have moved online by necessity, being confronted with the Covid-19 pandemic at the beginning of 2020. For Algeria, there is a great potential in embracing, adopting, and sustainably implementing digitalisation for its system as follows:

- Technological education tools, such as Student Management System (SMS) and Learning Management System (LMS) applications, considerably reduce time spent on administrative tasks, presently routinely carried out by academic staff
- Critical transversal skills such as project management, foreign languages, as well as specialist software requirements, and, as applicable, entrepreneurship may be deployed, learned and taught online
- Conceptualise a virtual Community of Practice (CoP) as an inclusive platform to share best practices and encourage interdisciplinary exchange for academic staff nationally, and, potentially, internationally
- Overcome literature access challenges by decentralisation of traditional subscription to, and the provision of, digital journals, eBooks, and other scientific sources, instead, allocate needs-based budget to university libraries and national research centres
- Use blended learning approaches to ensure geographical-location independent and gender-balanced equity of access
- Implement remote lecturing possibilities to involve, and outreach to, the diaspora
- Use online conferencing technology to facilitate co-supervision arrangements, thesis defences, and research collaboration, including conference presentations
- Offer Massive Open Online Courses (MOOCs) on established international platforms; prepare an Arab education space, offering courses in both Arabic and English
- Promote improved worldwide visibility for Algerian academic staff by an open access policy, i.e., make theses as well as *OPU* academic publications available online freely

8.2.4 Benchmarking and Quality Assurance

The overarching outcome of the data analysis highlights the need for more and better quality and systematic quality assurance in higher education, to be set on the agenda on the macro-level.

Benchmarking Arab and African countries

Algeria is culturally influenced by both the Arab League as well as African Union member states. This dual position presents a chance to refer to both contexts. To account for, and eventually achieve, systemic change, a holistic approach has to be adopted. In an African context, national higher education revitalisation can be observed recently based on four case studies in Western and Southern Africa (United Nations University, 2009) – albeit from a practitioners’ rather than theoretical, foundation perspective. At its base are good or so-called best practices; however, there is no systematic quality assurance and strategic planning, respectively, operational planning and implementation and monitoring as of today.

This trend, however, is in contrast to Algeria’s higher education policy status quo, largely drawing on reform ideas and influences from Europe – especially France – and North America. To streamline its endeavours in higher education advancement, Algeria should peruse, and align its policies with existing Continental or regional strategies, namely, the African Union’s *Agenda 2063*²⁷⁰, the *Continental Education Strategy for Africa (CESA) 2016-2025*²⁷¹, the *Science, Technology, and Innovation Strategy for Africa (STISA) 2024*,²⁷² the *Arab Strategy for Science, Technology and Innovation (ASSTI)*²⁷³ and the associated *Executive Plan*²⁷⁴. Furthermore, Algeria needs to consider the progress of implementation measures of the SDGs, No. 4, Education²⁷⁵, which currently does not play a major role, as can be seen by its absence from political discourse and strategy papers.

Benchmarking should also be practised with third countries, however, less with the so-called global North. In the Arab world, Jordan has invested immensely in its national higher education system. It has strategically internationalised and put quality assurance rather than quantification on the policy agenda. Therefore, Jordan could serve as a case to be replicated – more precisely, its strategies and roadmap for higher education reform (Khader, 2009).

At the beginning of this thesis, the idea was to compare the Algerian with the South African transition situation to assess positioning and strategies to deal with challenges in the respective higher education systems and showcase continental best practices to allow for

²⁷⁰ <https://au.int/en/agenda2063/overview>

²⁷¹ https://au.int/sites/default/files/documents/29958-doc-cesa_-_english-v9.pdf

²⁷² https://au.int/sites/default/files/newsevents/workingdocuments/33178-wd-stisa-english_-_final.pdf

²⁷³ <http://www.fasrc.org/uploads/Arab%20Strategy.pdf> (available in Arabic only)

²⁷⁴ <http://www.fasrc.org/uploads/Arab%20Strategy%20Plan.pdf> (available in Arabic only)

²⁷⁵ <https://sustainabledevelopment.un.org/sdg4> (see source in the introduction)

more likely acceptance. South Africa, being a widely accepted African continental reference, less risk of politicisation was to be expected. The Southern African experience of decolonisation and transition from the racist apartheid system towards social inclusion and democratisation of higher education has improved. Through assessment and strategic planning, as reflected in several related strategies, among others, its *Ten-Year Innovation Plan*²⁷⁶, updated by a recent *White Paper on Science, Technology, and Innovation*²⁷⁷ from 2018, and, most topical, the national strategy for the fourth Industrial Revolution (Sutherland, 2020). More so, in the *Southern African Development Community* (SADC) region South Africa is a member of, there has been a focus on higher education institutional quality assurance since 2010 already (Ncube, 2010; Rauschmayer et al., 2010).

Overall, the presently prevailing Algerian orientation towards European and North American countries should not be discontinued but reduced in favour of its neighbours and the African continent. The advantage of this approach will be to learn about the challenges, avoid repeating the causes for similar issues, and start reforms.

National higher education system quality assurance

Existing quality assurance instruments, respectively, bodies, namely, the *CIAQES* and the *RNAQES*,²⁷⁸ ought to be revised and adapted to the local context, as the current versions were mainly influenced by European standards and processes – in the form of rather generic and global-oriented consultants’ workshops without intercultural elements – and thus do not account for the micro-level. Therefore, it is suggested to:

- Establish a national system for quality assurance with the participation of academic staff and relevant stakeholders
- Introduce objectives, standards, and outcomes with indicators to measure progress and performance
- Establish national guidelines for implementation including feedback mechanisms with accessible evaluation results
- Include both internal and external self-assessment in the quality assurance plan/framework to allow for effective monitoring

²⁷⁶ <https://www.sagreenfund.org.za/wordpress/wp-content/uploads/2015/04/10-Year-Innovation-Plan.pdf>

²⁷⁷ Draft version: https://www.gov.za/sites/default/files/gcis_document/201809/41909gon954.pdf

²⁷⁸ See chapter 3.2

8.2.5 Stakeholder Participation and Involvement

In the current tense political environment of the so-called *hirak* protest movement, stabilisation of the region is of utmost importance, not least for European countries dealing with issues related to increased migration. Therefore, there is a need for a joint strategy and partnership in graduate employability and labour market-relevance of curricula and training. The present Algerian higher education system – as has been described and as is shown by the findings in this work – is characterised by the quasi-total absence of non-academic community stakeholders, i.e. the private sector, non-state organisations, and the local institutional environment. Those external stakeholders can be meaningfully involved, contribute to the funding, and improve national and international recognition and effectiveness of academic training as well as applied research. The current top-down governance structure needs to be reformed towards a service-oriented approach to take labour-market demands into account, for instance. The lack and non-availability of data should be counteracted by national surveys and research.

The related specific measures proposed are:

- Create a guiding framework to develop and assess entrepreneurship in the field of higher education
- Conceptualise a university ‘third mission’ strategy as well as implementation plan to account for university-society relations
- Introduce Industrial Advisory Panels (IAPs) and representatives in institutional governing bodies to ensure relevance and topicality of curricula for the needed skills match, including improved graduate employability and placement success
- Enhance local community relations by targeted events, such as open days, and reinforced decentralised recruitment, especially for administrative staff
- Set up quarterly or semestrial meetings with the local authorities to discuss concerns and voice interests and needs, such as an environment conducive for business-creation
- Scale-up existing pioneering offices of university-industry relationships on institutional or administrative unit (Wilaya) level
- Privilege, and employ, national start-ups and small and medium enterprises from university graduates for the required technical as well as service roll-out of higher education digitalisation

8.3 Outlook: Hybridisation Agent

Further research

Before referring to higher education research, the ground must be laid by classical sociological studies, mapping actors in the field of (higher) education, sketching respective profiles, such as educational and socioeconomic background, for which only a few data sets are currently available. Likewise, the sociology of political and economic elites, referred to distantly as ‘power/ ‘le pouvoir’ is yet to be elaborated insofar as to examine how those elites reproduce through education. Socialisation elements constructing identity, both including more abstract values such as family and religion, and practices such as language spoken at home and language of instruction, media consumption patterns, the role of academics in public, and the influence of science, should be the subject of study and be mapped out in typologies. The role and influence of religion, and particularly political Islam, at university, is yet unknown. There is also a lack of statistics, e.g. of graduate (un)employment – as has been pointed out in several interviews – so there is a need for quantitative studies to cover the region, age group, and type of diploma.

The knowledge gaps identified in the course of this work within the scope of special interest concern the role and influence of language in higher education and related policy analyses, internal governance structures, below institutional executive-level decision-making processes, as well as student affairs. More so, there are de facto no graduate tracer studies as of now. The Algerian system is also a highly interesting case for quality development, quality assurance implementation, organisational development-related theoretical approaches, as well as governance trends observed elsewhere in the last decade, such as new public management (NPM), and, more recently, bureaucratic politicisation.

Research concerning itself with the classical ‘third mission’ involving stakeholders external to academia, university-society interactions, industries involvement, as well as issues arising from higher education internationalisation developments, such as mobility patterns, does exist, yet, it must be updated, include non-STEM disciplines and be complemented by more qualitative approaches. The role non-university institutions of higher education play in the Algerian system – such as the various *écoles* – is yet to be explored, too, not least in the elite selection and graduate employability research. Likewise, private higher education providers, including curricula content and development, are yet to be taken up in research agendas.

On a micro-level, there is the open question of individual responsibility and attitudes, in contrast to complaints about and blaming of politics and the system, as has frequently occurred in the interviews. The mismanagement underlined may instead point towards persons' competition, distrust, and the lack of cooperation. Not least, those who have motivation can succeed; after all, the diaspora is a product of the Algerian university, too. As for policy-induced system characterisation, the Algerian higher education system is currently undergoing a transition, which, however, is neither characterised by a transformation, nor a complete revitalisation observed in some sub-Saharan countries. Instead, the current development points towards a process of readjustment, the result of which may be labelled 'hybridisation'.

Definition attempt

Higher education hybridisation is embracing, combining, and allowing for the co-existence of both local and global elements within a national higher education system, corresponding to respective policies. This approach implies retaining philosophies as nation-defining elements, derived from a country's history, culture, and religious values where applicable, while, at the same time, set international standards for quality assurance in research and training applied by and within the academic community universally, and enable the framework conditions necessary accounting for universities as complex and self-administering organisations as an integral component of knowledge societies, i.e. institutional autonomy, individual mobility incoming and outgoing, and academic freedom, especially in the social sciences.

Hence, the resulting system is neither unilaterally nationally nor internationally oriented, but a hybrid. It does not reject and retreat itself from higher education internationalisation in its various forms, as a reaction to globalisation processes, yet, it acknowledges the specific and unique political and social environment rather than succumbing to the illusion of objective, neutral institutions free from any parties' interest and ideology. Higher education hybridisation may be a characteristic of, and applicable to, transforming societies and welfare states. It is necessarily preceded by readjustment as a needs assessment in the form of the re-evaluation of international trends of higher education harmonisation not adapted to the local context, which is nowadays exemplified by a hasty, ill-considered adoption of the Bologna Process locally as well as globally.

Application: Change agent

Given the multitude and complexity of an African or Arab context – largely as transforming societies – characterised by political, socioeconomic, cultural, and identity ambivalences,²⁷⁹ it is challenging and lengthy in bureaucratic structures to institutionalise quality assurance in the form of holistic higher education sector reforms. Not least, political will and considerable resources are a prerequisite. For this reason, it is deemed more suitable to respond to the hybrid situation on the macro as well as micro-level by individuals as a team of ‘change agents’ (Lunenburg, 2010; Nikolaou et al., 2007), already existing in other sectors, such as company restructuring in the private sector (Gerwing, 2016), or organisational development in non-governmental institutions (Battilana & Casciaro, 2012). In this way, an inexpensive interim solution is sought and implemented, while paving the way for systematic higher education transformation.

The process of higher education change management (Nordvall, 1982) and institutional development can be accompanied by those agents (Coskun & Krdzalic) familiar with both the local context and international standards, either by their biography as diaspora representatives or as experts with bi/multicultural work experience and specific know-how. Those can work within higher education institutions as a process, regulatory framework, human resources, ICT and quality assurance consultants; conceptualise and manage needs assessments and empirical studies; advise the government, other competent authorities, as well as institutional leadership on a strategic level; facilitate interaction with stakeholders outside the academic community; draft policy documents and national frameworks; conduct pilot projects as the first step of reform implementation; introduce and advise on knowledge and project management and communication structures, and build and sustain networks of actors.

Change agents also work as trainers and coaches for academic and administrative staff in higher education and governing authorities. In this way, they act as a bridge between the presently disconnected micro and macro levels by providing solutions, such as introducing and strengthening a meso level in the form of institutional autonomy in the Algerian case. In doing so, change agents scale-up hybrid coping strategies to manage academic ambivalences on the way to institutionalise strategies in facing the global.

²⁷⁹ See Macamo (2005)

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ERKLÄRUNG

**gemäß § 6 Absatz 2 g) und gemäß § 6 Absatz 2 h) der Promotionsordnung der
Fachbereiche 02, 05, 06, 07, 09 und 10 vom 04. April 2016**

Name: Schoelen

Vorname: Leonie

Hiermit erkläre ich, dass ich die eingereichte Dissertation selbständig, ohne fremde Hilfe verfasst und mit keinen anderen als den darin angegebenen Hilfsmitteln angefertigt habe, dass die wörtlichen oder dem Inhalt nach aus fremden Arbeiten entnommenen Stellen, Zeichnungen, Skizzen, bildlichen Darstellungen und dergleichen als solche genau kenntlich gemacht sind.

Von der Ordnung zur Sicherung guter wissenschaftlicher Praxis in Forschung und Lehre und zum Verfahren zum Umgang mit wissenschaftlichem Fehlverhalten habe ich Kenntnis genommen.

Ich habe keine Hilfe von kommerziellen Promotionsberatern in Anspruch genommen.

Datum

Unterschrift

