The internationality imperative in academia. The ascent of internationality as an academic virtue

Julian Hamann\textsuperscript{a} and Lena M. Zimmer\textsuperscript{b}

\textsuperscript{a}Forum Internationale Wissenchaft, University of Bonn, Bonn, Germany; \textsuperscript{b}Center for Quality Assurance and Development, University of Mainz, Mainz, Germany

\textbf{ABSTRACT}

The paper investigates internationality as an academic virtue that is highly relevant for research biographies. The discursive trajectory of this virtue is assessed by comparing ascriptions of internationality in 216 academic obituaries from the US, UK and Germany, from physics, sociology and history, and from the 1960s, 1980s and 2000s. Our analysis reveals that internationality as a virtue is more prevalent in German than in US obituaries, that it plays a greater role in physics than in history obituaries, and that, independent from national and disciplinary contexts, the ascription of internationality increases over time. The results are relevant for research on academic values and on the internationalization of academia. By drawing on obituaries, the analysis conveys how ‘internationality’ developed as a discursive construct, and how it turned into an imperative that academics increasingly have to comply with in order to be deemed honorable.

This paper investigates the question of how internationality became an academic virtue, gaining the huge significance it has for research biographies today. Cosmopolitan values have a long tradition in academia. But, while research has always been built on international recognition, cooperation and mobility, universities are deeply rooted in national, regional and local contexts, and funding structures are still mainly organized along national boundaries (Enders & Weert, 2004). Nonetheless, it is long
established that academia has become more closely and systematically connected over time due to more efficient travel and communication as well as international academic labor markets and communication structures (Huang, Finkelstein, & Rostan, 2014). But when did ‘internationality’ actually become a virtue of the academic profession, defined as a generally desirable character trait that goes beyond individual preferences? And what is the role of national and disciplinary contexts in this process?

Our contribution examines the discursive trajectory of ‘internationality’. It asks whether this academic virtue increased over time and whether effects proceed from different national and disciplinary contexts (Cummings, Bain, Postiglione, & Jung, 2014). We tackle these questions by comparing obituaries in academic journals from the US, UK and Germany, published from the 1960s to the 2000s and in physics, sociology and history. Drawing on this genre allows for insight into shared professorial virtues and can reveal an ‘internationality’ imperative (cf. Altbach, 2013) that distinguished researchers – for example, those honored with obituaries – have to comply with. Since drawing on obituaries allows to reconstruct an ‘internationality discourse’ from the empirical data, the approach does not rely on a pre-defined concept of internationality, but is able to trace – and compare – differing notions of ‘internationality’ over time and between disciplinary and national contexts. Generally speaking, when academics speak of ‘internationality’, they mostly refer to occupying international posts in academic institutions, an international recognition or impact, or international mobility and a cosmopolitan mindset.

The empirical findings underline that internationality is not only a given phenomenon that affects academic structures, cultures and practices. Our study tracks how ‘internationality’ is discursively constructed as a virtue. Ascriptions of internationality are significantly influenced by country, discipline and time: the relative use of ‘internationality’ as an academic virtue is significantly less frequent in the US compared to Germany, and significantly less frequent in history compared to physics. In addition, there is evidence for a significant increase of this ascription over time.
State of research: internationalization of academia

Sociological accounts indicate an increasing internationalization of academia in the twentieth century. Driven by centralized, government-led activities up to the 1970s, and by joint initiatives and university-led activities since the 1980s, the internationalization of higher education is usually described as reaching from personnel exchange and personal mobility of students and researchers, over the exchange and assimilation of the subjects of teaching and research, to national and supranational policies and the mutual influence of higher education systems (Huang, 2014). Among the major causes and effects investigated are case studies of how countries cope with academic mobility, and with competitive and cooperative forms of knowledge transfer (Altbach, 2013; de Wit, 2002). The common denominator of these diverse facets of internationalization is an integration of international and intercultural dimensions into the teaching, research and service function of higher education (Knight, 1999).

The changes internationalization has brought for academia have been covered in a number of studies since the 1990s. Clark’s (1987) seminal research on the academic profession and the Carnegie Foundation’s international survey on the professoriate (Altbach, 1996) have been followed by investigations on academic appointments and employments in various countries (Welch, 2005). These studies highlighted how internationalization influences working conditions and remuneration in the US, in Europe and in developing countries. More recently, a second international survey, subsequent to the Carnegie survey, has produced more up-to-date country reports on the shifting boundaries and working conditions of the internationalized academic profession (Teichler, Arimoto, & Cummings, 2013). Meanwhile, the rich body of case studies has yielded attempts not only to generate more comprehensive, transnational accounts of the way academic professions have changed, but also to be sensible for different disciplinary cultures and practices, and for different academic staff categories (Altbach, 2013).
Since the early 2000s, new concepts have been introduced in order to cover various kinds of internationalization processes. Scholars now distinguish cross-border, borderless, transnational and offshore higher education (Kosmützky, 2015). Simultaneously, research increasingly focuses on cosmopolitanism as an orientation or norm that not only holds chances to solve problems at the global level (Beck & Sznaider, 2010), but also represents an academic qualification that, as a type of cultural capital, is integrated into stratification and power relations of educational arenas (Weenink, 2007). This extensive body of research has granted important insights into various forms and processes of international, transnational, borderless, cross-border or cosmopolitan higher education. However, illuminating how processes of internationalization have influenced academia in general and the academic profession in particular, less attention has been paid to how and when ‘internationality’ became an academic virtue that nowadays is of huge significance for research biographies and academic careers.

**Hypotheses: national contexts, disciplinary contexts and time**

In reference to the state of research, we develop three hypotheses regarding the discursive trajectory of ‘internationality’ in academic obituaries:

- Recent studies draw attention to the formative influence national contexts have on the degree of internationalization (Huang, Finkelstein, et al., 2014). Case studies reveal national differences in the ‘internationality’ of academic staff. The US and the UK, for instance, have a low percentage of academic staff with a degree from another country, academics in these countries appear to value foreign contact far less than in other systems (Huang, Teichler, & Galaz-Fontes, 2014; Welch, 1997), and international work does not figure prominently in hiring and promoting faculty in the US (Cummings et al., 2014). Academic mobility in the US is encouraged, but not necessarily at the international level (Gaughan & Robin, 2004).
Generally speaking, Germany has a substantially higher degree of international involvement and collaboration among its academics compared to the US and UK (Cummings et al., 2014). Since ‘the performance of the US universities and colleges on various aspects of internationalization […] is less then [sic] lustrous’ (Cummings et al., 2014, p. 57), the first hypothesis (H1) is that internationality as a virtue varies between the countries examined, and it is more prevalent in German obituaries than in US and UK obituaries.

Apart from national differences, a second question is how disciplinary contexts influence ‘internationality’. Disciplines have been described to be ‘one of the most powerful factors in shaping internationalization’ (Rostan, Huang, & Finkelstein, 2014, p. 270). Welch (1997) still highlighted that there was no divide between natural sciences and the humanities, and that internationalized disciplines emerged from the natural and the social sciences as well as the humanities. More recent studies, however, in fact reinforce the two culture divide in terms of internationalization. Academics in the sciences, medicine and engineering are more likely than others to be engaged in research that extends across national boundaries (Finkelstein & Sethi, 2014). There is a clear divide between internationally collaborating, publishing and funded natural and medical sciences, on the one hand, and the still more nationally oriented social sciences and the humanities, on the other (Rostan & Höhle, 2014). Since disciplinary contexts appear to have a strong impact on ‘internationality’, the second hypothesis (H2) is that ascriptions of internationality in obituaries vary between the disciplines examined, and are more prevalent in natural sciences than in social sciences and the humanities.

Against the backdrop of the cold war, and after a major phase of internationalization in nineteenth-century Europe (Ben-David, 1977), the 1960s are the decade in which the internationalization of academia sets in as a politically motivated project. The early 1990s represent another
phase of internationalization, this time not bifurcated by ideological conflicts between the East and the West, but influenced by neoliberal policies, a more competitive environment, and paralleled by economic globalization (de Wit, 2002; Huang, 2014). With the transition from elite to mass higher education, the reduction of practical and material obstacles in terms of communication and travel, and not least the rhetoric about the importance and inevitability of internationalization increasing (Cummings et al., 2014), the third hypothesis (H3) is that, independent from national and disciplinary contexts, the ascription of internationality in academic obituaries increases over the period of time examined.

Data and methods: obituaries as sites for academic virtues

The internationalization of academia is usually examined using data that have been gathered in interviews and surveys. This mode of data collection undoubtedly has its own advantages and yields important insights. Nonetheless, interview data can be expected to show reactivity to the research they have been produced for. For example, interviewers could inadvertently introduce their own notion of ‘internationality’ into the interview situation, thereby influencing the statements of the interviewee and the data produced in the process (cf. Lamont & Swidler, 2014). In contrast, obituaries published in academic journals give insight into the delicate matter of academic virtues and values without being reactive to researchers, their questions and assumptions with respect to, for example, ‘internationality’. Hence, in order to systematically access internationality as a virtue that becomes a more and more relevant character trait in research biographies, the study draws on obituaries published in academic journals.

Comparable not only to the biographical genre (Wacquant, 2000), but also to other kinds of peer review that are conducted for journals (Armstrong, 1997), grants or fellowships (Lamont, 2009) or in letters of recommendation (Tsay, Lamont, Abbott, & Guetzkow, 2003), obituaries are
a genre in which highly distinguished research biographies are honored by former pupils or colleagues of the deceased. Understood as sites of collective memory (Fowler, 2007), and as ‘first-rate documents for an analysis of university values’ (Bourdieu, 1988, p. 218), academic obituaries give insight into the ascriptions and virtues that authors refer to when depicting distinguished research careers (Hamann, 2016). The genre conveys ideas of intellectual leadership (Macfarlane & Chan, 2014), or of the changing nature of academic work (Tight, 2008). Obituaries are a site that not only documents the values and norms of respective research communities, but also makes statements about persons and their character. In doing so, the genre reveals what we define as ‘virtues’: personality traits that are supposed to be inherently good and desirable. Thus, obituaries are eminently suitable to understand the ascent of ‘internationality’ as a virtue that, by now, is highly valued in the academic profession.

Nonetheless, the genre brings peculiarities that have to be taken into account. It is characterized by a special relationship between the author and the deceased, who can be a former teacher or a close colleague; it takes into account entire biographical trajectories rather than being confined to manuscripts or proposals; it addresses a scientific school, community or a whole discipline as an audience; and it follows the purpose to consecrate academic lifetime achievements (apart from Bourdieu, 1988; see Fowler, 2007; Hamann, 2016; Macfarlane & Chan, 2014 for more comprehensive characterizations of the genre).

This study builds on a population of 841 obituaries that were published between 1960 and 2010 in academic publications in the US, the UK and Germany. From this population, we selected a sample of 216 obituaries to ensure adequate sample sizes as well as comparability and variability not only between countries, but also between disciplines (Emmel, 2013). We employed stratified purposeful sampling in order to meet three criteria:
An unequivocal ascription of obituaries to a discipline – either physics, history or sociology – and a country – either the US, UK or Germany. This was ensured by controlling the nationality of the author and the deceased, and the national profile of the journal.

Balancing variability and at the same time consistency regarding the journals obituaries were drawn from. In order to approximate a discipline, obituaries had to be selected from a variety of journals representing this discipline, while consistency over time ensured that the measured effects do not stem from differences between journals alone.

Facilitating variability along theoretically relevant comparative dimensions. The sample takes into account the strata country, discipline and time. Supplemented by disproportionate sampling, this approach also ensures sufficient numbers of cases from each sub-population of interest – the country strata (72 cases each), the discipline strata (72 cases each) and the time strata (72 cases each; Table 1).

The choice of the sub-populations followed the principle of theoretical sampling (Strauss & Corbin, 1990). The cases are spread over different countries, disciplines and over different phases. The three countries cover to varying degrees what is considered the center of global academia (Altbach, 2003). This ensures that the data cover important national higher education systems that influence the systems in other, more peripheral countries. The three disciplines in the sample cover the spectrum from the humanities over social sciences to natural sciences (Kagan, 2009). This ensures that the insights generated from the sample can be controlled for discipline-specific aspects.
The three phases cover a broad timeframe that not only includes national statist and neoliberal governance regimes, but also the two most recent phases of internationalization (Huang, 2014). Overall, the variability facilitated by the sample unfolds along theoretically informed sub-populations. This ensures that the sample can address the three hypotheses developed in the previous section. The sample can be structured according to these assumptions (Table 1).

Following a grounded theory-based approach, a first phase of open coding was conducted with the aim to identify prevalent themes by categorizing data according to content in the 216 obituaries. Several recurring codes that referred to ‘internationality’ emerged. A second round of axial coding – a grounded theory procedure to relate, interconnect and refine categories (Strauss & Corbin, 1990) – was conducted until no new sub-themes and relations could be found. This procedure led to the following codes:

- International merits (MERI), assigned to text passages in which academic qualities of the decedents are said to have been internationally

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>US</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>72</td>
</tr>
<tr>
<td>History</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Sociology</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td><strong>UK</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>72</td>
</tr>
<tr>
<td>History</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Sociology</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td><strong>Germany</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>72</td>
</tr>
<tr>
<td>History</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Sociology</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>72</td>
<td>72</td>
<td>72</td>
<td>216</td>
</tr>
</tbody>
</table>
acknowledged. Academics’ impact might have been ‘international, way before the term became fashionable’ (Rehberg, 2003, p. 821), or their work might have been ‘respected on the international stage’ (Roberts, 2007, p. 613).

- **Cosmopolitanism and international mobility (COIM)**, assigned to text passages in which decedents are characterized as internationally mobile cosmopolitans. Academics might be lauded for their ‘international outlook’ (Peacock & Christiansen, 2005, p. 78), or for the fact that their ‘background and orientation were quintessentially cosmopolitan’ (Foster, 2013, p. 6).

- **International institutional posts (INST)**, assigned to text passages in which institutional posts in other countries, for example, research fellowships or guest professorships, are ascribed to the decedents. UK physicists might take up posts at the ‘High Altitude Observatory at Boulder, Colorado’ (Kopal, 1970, p. 147), US sociologists might have been a ‘visiting professor at Nuffield College, Oxford’ (Hauser, 1959, p. 74) and German historians might have enjoyed a stay at the ‘Research Center in Entrepreneurial History at Harvard University’ (Schulz, 2004, p. 419).

The codes represent variations of the motif of internationality, condensed in ascribed academic qualities, individual character traits and institutional posts. In order to grasp the diverse facets the attribution has in academic discourses, and in order to incorporate the spectrum they cover in one measure, the analysis employs a scale:

- **Internationality scale (INSC)** is composed of the three codes international merits (MERI), cosmopolitanism and international mobility (COIM) and international institutional posts (INST). The scale covers different aspects of the motif of internationality. Researchers might be seen as internationally acknowledged without having enjoyed institutional posts abroad, or they might be depicted as internationally mobile, although they are not perceived as being internationally acknowledged.
In order to identify possible group differences regarding countries (H1) and disciplines (H2), one-way analyses of variance (ANOVAs) represent the first step of the analysis. We applied post hoc analyses to identify general group differences between the respective countries and disciplines. Since Levene’s test for equality of variances is insignificant \( (p > .05) \) in all cases, we decided on the relatively robust and conservative Scheffé’s method (Games, 1971). Additionally, we show the concrete correlation between internationality and the individual countries and disciplines with the help of the widely used Pearson’s \( r \) (Chen & Popovich, 2002, p. 9). The influence the date of publication of obituaries has on ascriptions of internationality (H3) is introduced by a scatterplot and a correlation. The analysis of covariance (ANCOVA) examines whether the effects (H1, H2 and H3) persist in a general model and to what ratio the overall variance in the ascription of inter-nationality can be explained by the respective effect of country, discipline and time.

**Analysis and results: the internationality imperative in academia**

The three codes’ and the scale’s quantitative distribution in the sample can be displayed both in absolute and relative terms (Table 2).

The relative numbers refer to the share the respective code has in the total number of codes assigned to each obituary. On average, the codes have been assigned between 0.56 times (MERI) and 0.23 times (COIM) per obituary. With a mean of 1.15 for the internationality scale (INSC), references to ‘internationality’ in general can on average be found in every single one of the 216 obituaries. Weighting how often ‘internationality’ codes have been assigned in relation to all codes of an obituary shows that their mean share on all codes is around 1% per text. The internationality scale (INSC) covers on average 4% of all codes per text. In order to account for the fact that obituaries might differ in their length and in their density regarding the total number of codes assigned to them, the following steps of
the analysis use only relative numbers that are weighted in relation to all codes.

Addressing the hypotheses developed from the state of research, in the next step of the analysis we determine whether and to what degree there are significant group differences regarding internationality as a virtue between countries (H1) and disciplines (H2).

Table 3 presents the results of a single-factor ANOVA between the internationality scale (INSC) and the countries obituaries have been published in. The ANOVA reveals a significant variation between at least two countries ($F_{2,213} = 3.342, p = .037$). The results strongly suggest that it is valid to distinguish between countries and that there are variations between US, UK and German obituaries. In order to pay their last respect to deceased colleagues, academics in the US refer to ‘internationality’ least frequently ($M = .028$), while German academics highlight this virtue most frequently ($M = .048$). This is supported by Pearson’s correlation coefficient, indicating a significant positive correlation between ‘internationality’ and Germany and a significant negative correlation between those ascriptions and the US. Furthermore, the post hoc analysis (Scheffé’s method) shows that the mean variance between the US and Germany is significant ($p = .039$), while the different means between the US and the UK, and between Germany and the UK, are not significant. At least regarding the differences between German, UK and US obituaries, the results confirm the first hypothesis: internationality as a virtue varies between the countries examined, and it is more prevalent in German obituaries than in US and UK obituaries. Significant mean differences, however, can only be detected between German and US obituaries.
Table 2. Means, standard deviations and correlations between variables.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Relative frequency per obituary</th>
<th>Absolute frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M(SD)</td>
<td>Min</td>
</tr>
<tr>
<td>1</td>
<td>MERI</td>
<td>0.56 (0.89)</td>
</tr>
<tr>
<td>2</td>
<td>INST</td>
<td>0.37 (0.66)</td>
</tr>
<tr>
<td>3</td>
<td>COIM</td>
<td>0.23 (0.57)</td>
</tr>
<tr>
<td>4</td>
<td>Scale INSC</td>
<td>1.15 (1.47)</td>
</tr>
</tbody>
</table>

**The correlation is significant at a level of 0.01 (both sides).
*The correlation is significant at a level of 0.05 (both sides).
+The correlation is significant at a level of 0.10 (both sides).

Table 3. Countries: means, standard deviations, bivariate correlations and one-way ANOVA for internationality scale (INSC).

<table>
<thead>
<tr>
<th></th>
<th>M (SD)</th>
<th>r</th>
<th>N</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>.028 (.04)</td>
<td>-.161*</td>
<td>72</td>
<td></td>
<td></td>
<td></td>
<td>.015</td>
<td>2</td>
</tr>
<tr>
<td>UK</td>
<td>.040 (.05)</td>
<td>.023</td>
<td>72</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>.048 (.05)</td>
<td>.138*</td>
<td>72</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td></td>
<td></td>
<td></td>
<td>.481</td>
<td>213</td>
<td>.002</td>
<td>3.342</td>
<td>.037</td>
</tr>
<tr>
<td>Error/within</td>
<td></td>
<td></td>
<td></td>
<td>.496</td>
<td>215</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.496</td>
<td>215</td>
</tr>
</tbody>
</table>

Note: Levene’s test for equality of variances is insignificant (p > .05).
*The correlation is significant at a level of 0.05 (both sides).

Table 4 presents the results of a single-factor ANOVA between the internationality scale and the disciplines obituaries have been assigned to. The single-factor ANOVA reveals a significant variation between at least two disciplines ($F_{2,213} = 3.859$, $p = .023$). The results strongly suggest that the distinction between disciplines is valid and that there are significant variations between obituaries in physics, sociology and history. When paying homage to deceased colleagues, physicists refer to ‘internationality’ most frequently ($M = .050$), while historians ascribe this virtue least frequently ($M = .028$). Between the two, sociologists occupy an intermediate position ($M = .038$). In line with these results, Pearson’s correlation coefficient indicates a significant positive correlation between ‘internationality’ and physics, and a significant negative correlation between this ascription and history. Furthermore, the post hoc analysis...
(Scheffé’s method) shows that the mean variance between physics and history is significant \((p = .023)\). The difference between the means of history and sociology, and the means of physics and sociology, is not significant.

Table 4. Academic disciplines: means, standard deviations, bivariate correlations and one-way ANOVA for internationality scale (INSC).

<table>
<thead>
<tr>
<th>Discipline</th>
<th>M (SD)</th>
<th>(r)</th>
<th>(N)</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>History</td>
<td>.028 (.04)</td>
<td>-.160*</td>
<td>72</td>
<td></td>
<td></td>
<td></td>
<td>3.859</td>
<td>.023</td>
</tr>
<tr>
<td>Physics</td>
<td>.050 (.05)</td>
<td>.164*</td>
<td>72</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sociology</td>
<td>.038 (.04)</td>
<td>-.004</td>
<td>72</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td></td>
<td>.017</td>
<td>2</td>
<td>.009</td>
<td></td>
<td></td>
<td>3.859</td>
<td>.023</td>
</tr>
<tr>
<td>Error/within</td>
<td></td>
<td>.479</td>
<td>213</td>
<td>.002</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>.496</td>
<td>215</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Levene’s Test for Equality of Variances is insignificant \((p > .05)\).

*The correlation is significant at a level of 0.05 (both sides).

At least for the three disciplines considered, the results confirm the second hypothesis: *ascriptions of internationality in obituaries vary between the disciplines examined, and are more prevalent in natural sciences than in social sciences and the humanities*. Significant mean differences, however, can only be detected between natural sciences (physics) and the humanities (history).

In the next step, our analysis turns towards the question of whether the ascription of internationality increases over time (H3). In Figure 1, the scatterplot and the slope of the regression line indicate a slightly positive correlation between the year obituaries have been published in and the share of codes indicating ‘internationality’ on the overall number of codes. There is a significant positive correlation between the internationality scale (INSC) and proceeding years of publication (Table 5). According to this, ascriptions of these virtues are becoming more frequent over time.

The results of the scatterplot and the ANCOVA analysis in Table 5 confirm the third hypothesis: *independent from national and disciplinary contexts, the ascription of internationality in academic obituaries increases over the period of time examined*. In addition, the results illustrate that
effects in terms of national differences (H1) and effects in terms of disciplinary features (H2) persist when the covariate ‘year of publication’ is controlled. Both the two-factor variables (discipline and country) and the metric covariate (year) still have a significant influence. The country an obituary has been published in explains 3.4% of the overall variation of ‘internationality’, the year explains 2.8%, and the disciplinary affiliation has the biggest explanatory power, explaining 4% of the variance. Overall, the model can explain 12.4% of the variance in ascriptions of internationality, which constitutes a satisfactory degree of explanatory power (Cohen, 1988).

Figure 1. Scatterplot with regression line: year obituary has been published in with relative frequency of internationality scale (INSC) per obituary.
Table 5. ANCOVA for internationality scale (INSC) (by country and academic discipline with year).

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>( R^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>.015</td>
<td>2</td>
<td>.008</td>
<td>3.574</td>
<td>.030</td>
<td>.034</td>
</tr>
<tr>
<td>Academic discipline</td>
<td>.018</td>
<td>2</td>
<td>.009</td>
<td>4.331</td>
<td>.014</td>
<td>.040</td>
</tr>
<tr>
<td>Country * academic discipline</td>
<td>.017</td>
<td>4</td>
<td>.004</td>
<td>2.043</td>
<td>.090</td>
<td>.038</td>
</tr>
<tr>
<td>Year</td>
<td>.013</td>
<td>1</td>
<td>.013</td>
<td>5.938</td>
<td>.016</td>
<td>.028</td>
</tr>
<tr>
<td>Error/within</td>
<td>.434</td>
<td>206</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>.496</td>
<td>215</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( R^2 )</td>
<td>.124</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Levene’s Test for Equality of Variances is insignificant \((p > .05)\). \(N = 216\).

Summing up, internationality as an academic virtue in obituaries becomes more frequent over time, and effects proceed from different national and disciplinary contexts. The analysis reveals the following patterns:

- The first hypothesis has been confirmed: the weight internationality has as an academic virtue varies between the countries examined. It is most prevalent in German obituaries and least prevalent in US obituaries. The mean variance between these two countries is significant. Even when the influence of disciplines and time is controlled, the country an obituary has been published in has a significant influence. Hence, in order to be acknowledged, ‘internationality’ is a more pressing imperative for academics in Germany than the US.

- The second hypothesis has been confirmed: ascriptions of internationality vary between the disciplines examined. ‘Internationality’ seems to play a greater role for research biographies in natural sciences than in social sciences and the humanities. Post hoc analysis confirms a significant mean difference between physics and history. Differences between the disciplines examined remain significant even when the influence of countries and time is controlled. The disciplining power of the internationality imperative can therefore be assumed to be stronger in natural sciences than in the humanities.

- The third hypothesis has been confirmed: since the 1960s, ascribed
internationality in academic obituaries increases over time. The publication year of an obituary has a significant influence on the frequency with which the virtue is ascribed, even when the influence of disciplines and countries is controlled. Given the consecration taking place in obituaries, it can be assumed that academics increasingly have to comply with an internationality imperative in order to be acknowledged (enough to deserve an obituary).

**Discussion**

While the quantitative analysis allows for a systematic investigation of correlations between ascribed internationality and the year, the country, and the discipline an obituary has been published in, this approach has its limitations. Our analysis cannot consider how exactly obituaries construct ‘internationality’, or how the genre incorporates these virtues into the narration of successful research biographies. These crucial questions will have to be addressed in future research. Despite these limitations, the current research can make contributions to several strands of the state of research.

The analysis indicates that the discursive trajectory of ‘internationality’, and herewith the extent to which the virtue can be seen as an imperative academics have to comply with in order to be acknowledged in obituaries, changes significantly over time, between countries and between disciplines. The relevance ‘internationality’ has for research biographies is therefore highly dependent on different contexts. In fact, the significant variation between countries and disciplines suggests that it is more appropriate to speak of different discursive trajectories of ‘internationality’ in the respective countries and disciplines. The analytical framework developed is able to assess simultaneously the influence of all three factors – country, discipline and time – in one model.

The results brought forward are of relevance for research on the internationalization of academia. The confirmation of the third hypothesis,
according to which ascriptions of internationality in academic obituaries increase over time, signifies that the virtue becomes more and more significant in order to acknowledge researchers postmortem, and that this trend is independent from national and disciplinary contexts. This indicates that the growing significance internationalization has had for academic structures, cultures and practices, is matched by its ascent as an academic virtue that becomes more and more relevant for research careers. The finding adds to the vast research field of higher education research on internationalization, and it can inform recent studies that see more stability than change in the last 15 years of internationalization in academia (cf. Cummings et al., 2014; Rostan et al., 2014).

The confirmation of the second hypothesis indicates disciplinary differences, most notably between physics and history. While the fact that ‘internationality’ has a different relevance for research biographies in history and physics may not necessarily suggest a divide between the two cultures, the finding can still inform diagnoses of a multi- or transdisciplinary state of academia (Nowotny, Scott, & Gibbons, 2001). The divergence in the virtues of academic disciplines serves as a reminder for the significance of disciplinary cultures and boundaries (cf. Lamont & Molnár, 2002). The stark differences between natural sciences and humanities disciplines that the findings suggest may have their foundation in the humanities’ higher degree of national–cultural embeddedness (Shumway, 1998) and in their peculiar publication cultures (Dávidházi, 2014). Physics, a discipline that is least embedded in national or cultural contexts and most formalized in its research and communication in comparison to the other two disciplines (Crawford, Shinn, & Sörlin, 1993), can correspond best to the growing significance of internationalization. Sociology is taking the middle ground between physics and history. This may be explained by the fact that the discipline is not as tied to particular settings, archives or sites as historical research tends to be, but still relies more on certain language skills and cultural knowledge, and is less equipped with internationally consistent problem definitions and epistemological concepts compared to physics (Kagan, 2009). The
disciplinary differences confirmed by the analysis represent potential for future research, focusing further on symbolic boundaries between natural sciences, social sciences and the humanities (Lamont, 2009), and on the valuation of internationality in respective disciplines.

The confirmation of the first hypothesis, revealing significant differences in the valuation of internationality between countries, can serve as a corrective for diagnoses that see national influences on the wane and assume a denationalized science (Crawford et al., 1993), and internationalized universities (Bartell, 2003) or disciplines (Leask, 2013). The divergent relevance of ‘internationality’ rather suggests that academic virtues are (still) significantly influenced by national traditions. The comparatively low frequency with which ‘internationality’ is ascribed in US obituaries can be explained by an interplay of various factors: cross-border activities in the US are directed by individuals and institutions, whereas academic internationalization is an explicitly political project, for example, in Europe (Marginson, 2009), the US academic labor market is deemed to be more attractive than, for instance, the German one (Marginson & Wende, 2009), which in turn is explained at least partly because the US (and the UK) constitute the center of global academia (Mosbah-Natanson & Gingras, 2014). ‘[C]ertain traditions of isolationism and perceptions of self-sufficiency’ (Welch, 1997, p. 334) might play a role as well. Whatever the explanations for differences between countries may be, it is obvious that the virtue of internationality is not established in the center of global academia, that is, the US. Rather, it is those in the (relative) periphery, in the need to demonstrate mobility, that define ‘internationality’ as especially valuable for research careers. The national differences call for further research on country-specific academic virtues, and on national peculiarities regarding the value of internationality.

What was the added value of drawing on obituaries when contributing to the study of ‘internationality’ as a virtue of the academic profession? Investigating a data source like obituaries, the analysis could highlight several important aspects that would not have been made as clear with most
other data. Our contribution reveals a discursive dimension of ‘internationality’ that the state of research has widely neglected so far. We argue that ‘internationality’ is not merely a given phenomenon that affects academic structures, cultures and practices, but that it also has a trajectory as a discursively constructed professorial virtue. This virtue is ascribed to researchers in order to acknowledge and honor them, which in turn indicates the significance the ascription has in the field at a given point in time. Drawing on obituaries, a genre that is soaked with symbolic positioning and authoritative practices, the paper also sheds light on the disciplining power that the discourse of internationalization exerts on academics. Since it is a virtue that, over time, is increasingly ascribed to deceased academics in order to acknowledge and honor them, internationality not least represents an imperative and an expectation academics have to comply with, even when they are still very much alive.

Notes

1. This definition of internationalization differs from ‘globalization’, which describes the flow of information, people and resources across borders. Each country may respond differently to globalization, and internationalization is one way to respond (Altbach & Knight, 2007).

2. The obituaries were collected from a total of 59 publications, including academic journals (e.g., British Journal of Sociology for UK Sociology, or Journal of Modern History for US History) and publications from respective professional associations (e.g., Footnotes for US Sociology, or Physikalische Blätter for German Physics).

3. Quotes from German obituaries have been translated by the authors.

4. To account for the small sample size, we also tested the more robust Kendall rank correlation coefficient for comparison (Chen & Popovich, 2002). All findings point in the same direction.

5. \( R = .150 \) \( (p = .028) \).

6. There are no significant interaction effects between the discipline and the country obituaries have been published in.
Acknowledgements

We would like to thank Debora Eicher and Katharina Kunißen as well as two anonymous reviewers for their insightful comments on this paper.

References


Huang, F. (2014). The internationalisation of the academic profession. In F. Huang, M. Finkelstein, & M. Rostan (Eds.), The internationalization of the academy. Changes, realities and prospects (pp. 1–21). Dordrecht: Springer.


Huang, F., Teichler, U., & Galaz-Fontes, J. F. (2014). Regionalisation of higher education and the academic profession in Asia, Europe and North America. In F. Huang, M. Finkelstein, & M. Rostan (Eds.), The internationalization of the academy. Changes,
realities and prospects (pp. 145–181). Dordrecht: Springer.


