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Competing Institutional Logics in Universities in the United Kingdom: Schism in the Church of Reason

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Abstract

Theoretical literature on institutions emphasizes the importance of logics - shared rationalizations - in determining many aspects of organizations. In this literature, universities are often discussed as an example of an institution with a particularly strong and cohesive logic, one rooted in notions of academic excellence and the pursuit of universal knowledge. However, more recent literature has argued that multiple institutional logics often compete and conflict with one another in a single organization. In this paper, we use the notion of competing logics to examine how academics in the United Kingdom understand the university as an institution. We perform a factor analysis on questionnaires completed by academics to identify overarching rationalizations of universities. Our analysis suggests three competing logics - autonomy, utilitarianism and managerialism - characterize universities as institutions. We show these multiple logics introduce conflict and paradox into the model of the university, and discuss the practical and theoretical implications.

In his classic novel *Zen and the Art of Motorcycle Maintenance*, Robert Pirsig (1974/2011) describes an idealized vision of the university as a “church of reason”. The novel’s protagonist proclaims,

The real University... has no specific location. It owns no property, pays no salaries and receives no material dues. The real University is a state of mind.... The real University is nothing less than the continuing body of reason itself.

In addition to this state of mind ... there’s a legal entity which is unfortunately called by the same name but which is quite another thing.... Confusion continually occurs in people who fail to see this difference... They see professors as employees of the second university who should abandon reason when told to and take orders with no backtalk, the same way employees do in other corporations. They see the second university, but fail to see the first (Pirsig, 1974/2011, 138)

Pirsig thus articulates the distinction of the idealized institution - the “first” University - and the many specific organizations that implement this institutional model, the “second” university.

Reflecting the confusion Pirsig observes, contemporary media and policy discourses on higher education hold wildly different views on the purpose of universities (Collini, 2012). These views range from the traditional “ivory tower” to a range of social and economic purposes, including driving employment growth, spurring innovation, and creating a more just and fair society. Despite their long-standing historical traditions, it is therefore unsurprising that the fundamental nature and purpose of universities remains a question of some discussion and debate. With many possible views on the nature and purpose of universities, heterogeneous and even polarized understandings within an individual university become increasingly likely. For individual universities, this entails that its staff are increasingly likely to hold differing views on the ultimate purpose to which they are contributing. However, conceptualizing and measuring these differing understandings of universities’ purposes are challenging tasks, which require an overarching framework of the different ways in which one could understand universities as institutions.

This paper uses a questionnaire administered to academic staff in universities in the United Kingdom to develop a framework and set of empirical dimensions to understand and study the institutional logics of universities. Our motivation is that a rigorous and well-informed discussion of competing institutional logics within higher education requires a conceptually and empirically validated framework. Although a large body of literature investigates

universities as institutions, an empirical framework to guide discussion and analysis of institutional logics in higher education is absent from the literature. We begin by reviewing developments in institutional theory and problematizing the dominant trends in applying institutional theory to higher education research. We then present our methods and analysis, which identify three principal dimensions to universities' institutional logic, which focus on universities as autonomous, utilitarian, and managerial institutions. We analyze how positions on these dimensions vary between and within institutions, and conclude by discussing our contribution to the literature and identifying areas for future research.

Institutional Theory and Competing Logics

The study of institutions – durable and predictable forms of social organization - is a longstanding concern of social research (Giddens, 1984). While early studies viewed institutions as a functional necessity of complex societies (e.g. Durkheim, 1895/1982, Parsons, 1951), the neo-institutional approach (hereafter institutional theory) emphasizes the importance of shared rationalizations or “logics” in defining institutions (DiMaggio and Powell, 1991; Meyer and Rowan, 1977). Advocates of institutional theory argue that these logics - “organizing principles, practices and symbols” (Thornton et al, 2012, p. 2) - are often more important in influencing organizations than functional concerns, the drive for greater efficiency, or coercive power (Meyer and Rowan, 1977).

Following Pirsig's analogy of the two universities, we differentiate between *institutions* - durable and predictable forms of behaviour and interaction that are “the more enduring features of social life” (Giddens, 1984, p. 24) - and *organizations* - coordinated and controlled systems of collective behaviour. Thus, afternoon tea is a British institution, but not an organization. However, we draw upon the longstanding study of “institutionalized organizations,” those organizations that derive their durability and order through clearly articulated and often elaborate rationalizations of their necessity and legitimacy (Meyer and Rowan, 1977). Given this conceptual approach, institutional studies of organizations often analyze professional roles, normative codes of conduct, and certified knowledge as a way to understand the logics that underpin and define organizations (Thornton and Ocasio, 2008). The literature on organizational institutionalism is expansive, spanning several decades and crossing the boundaries of social science disciplines including sociology, management studies, and political science (Greenwood et al, 2011).

It is not surprising that universities have been the subject of much research from institutional

perspectives, as they are highly rationalized institutions with logics rooted in the search for universal knowledge, academic autonomy, high standards of excellence and an associated academic professional structure (Frank and Meyer, 2007; Meyer et al, 2007; Krücken and Meier, 2006). Evidence of the coherence and persuasiveness of this model is evident in its rapid expansion around the world, often with little variation given the different social and economic contexts in which it is implemented (Ramirez, 2010; Schofer and Meyer, 2005).

While literature has identified the rationalization of universities as institutions, a more recent development in institutional theory has been a focus less on studying the particular logics of institutions and more on the multiple, competing and even contradictory logics that simultaneously exist within institutions (Thornton and Ocasio, 1999). For example, Greenwood et al (2011, p. 318) describe how,

Academic science departments in universities...function in a context where the logics of science and of commerce are both in play and yet prescribe different behaviours—such as open publication and the pursuit of knowledge versus the proprietary retention and commercial exploitation of research results

Thus, competing logics provide a way to explain complexity, paradox, and change within organizations. If shared institutional logics make organizations stable and durable, then competing logics explain how organizations can change over time.

The field of higher education studies offers some useful points of departure from which to consider competing logics in universities. For example, literature on the “missions” of the university examines how its “core missions” of teaching and research have shifted and expanded to encompass public engagement, and national development, and the growth of knowledge economy (Scott, 2006; Vincent-Lancrin, 2004; Watermeyer, 2011). Another example is found in the substantial body of literature that has developed around Clark’s (1998) notion of the “entrepreneurial university,” which describes the development of cross-cutting and integrated organizational characteristics such as risk-taking, adaptation, innovation and responsiveness (Guerrero and Urbano, 2012). Similarly, Etzkowitz and Leydesdorff (1997), develop the “triple helix” of university-government-industry relations as a model (i.e. a rationalization) of universities’ role in innovation and knowledge intensive economies.

The bodies of literature on institutional missions and the entrepreneurial university therefore suggest the possibility of competing institutional logics within universities, more so than is

suggested in many studies that explicitly use institutional theory and focus on the strong, single rationalization of the university. A smaller body of literature has explicitly used multiple institutional logics as an approach to higher education research. For example, Lepori et al. (2014) identify three “ideal types” for joint research programmes funded by the European Union: integration, collaboration, and coordination. Additionally, Seeber et al study the characteristics of 26 European Universities in terms of their rationality, hierarchy and identity, finding “two...ideal-typical models often depicted in the literature of the ‘traditional’ and the ‘managerial’” (Seeber et al, 2015, pp. 1466-7). While these studies apply the competing logics perspective to the universities studied, we propose that the literature would benefit from a more generalized model of competing logics in university; one that allows comparison of both individuals’ differing views on the university as an institution as well as differences in logics between universities.

Scope of the Study

The goal of our analysis is not to identify or characterize the logic of universities in an absolute sense, but rather to establish a framework for understanding universities as institutions, recognizing that this framework will accommodate many competing (or even opposing) institutional logics.

The goals for this framework are as follows: First, that it establishes dimensions rather than measuring or characterising *the logics* of universities in an absolute sense. These dimensions should be robust to multiple and even contradictory views on universities’ institutional logic: although individuals may hold very different positions on these dimensions, the framework must be able to accommodate these competing views. Second, these dimensions should be truly independent from one another. In other words, it should be possible to observe variation on one dimension of the framework without any probabilistic expectation of an increase in the other dimension. Third, the framework is empirically derived rather than conceptually motivated. In other words, rather than starting with a set of concepts and relations between them (for example, from theoretical literature) that we deductively test through empirical data, we are collecting a relatively broad base of empirical data in order to inductively develop a plausible theoretical model.

Methods and Data

Our primary data are survey responses (N=306) from academic staff at 18 UK universities administered by email in March 2017. The survey consisted of 28 randomly-ordered

statements about the purpose of universities (Table 1), which were derived from a broad literature search on the purposes of higher education, including several recently published edited volumes (See the Appendix for a mapping of questionnaire items to the literature). Possible purposes for higher education discussed in this literature were then grouped into themes and adapted into survey items. Respondents rated their agreement with each item using a continuous slider scale. The scale recorded responses as a numerical value between zero and 100, with “disagree” (left) and “agree” (right) labelled endpoints, and without displaying the associated numerical value to respondents. The survey was piloted with a group of academics, who also provided feedback on the wording of the items.

In addition to these ratings, we collected summary information on respondents’ role in the university, time in the role, the number of institutions at which they had worked, their experience working or studying at universities outside the United Kingdom, age and gender. We also asked respondents to classify their academic discipline using the Joint Academic Coding Systems principal subject codes (Higher Education Statistics Agency, 2017). These variables are used to explore how academics’ ratings to the statements on the purpose of universities are related to their experience in higher education, including the academic culture of their discipline, as well as wider sociological influences.

[TABLE 1 – SURVEY ITEMS]

The survey was administered using a stratified random sample; the population of 157 higher education institutions for which data are available from the Higher Education Statistics Agency (HESA) was classified according to three strata. The first stratum was country or region, with categories for London, England (non-London), Wales, Scotland and Northern Ireland. The second stratum was the size of the university in student enrolment, classifying organizations into four equally-sized quartiles. The third stratum was based on the research intensity of the university, based on the combined research funding from grants and quality assessment (i.e. the) as a percentage of the total institutional expenditure, again using a quartile classification. Universities were randomly selected from each non-empty combination of the three strata (i.e. combinations for which there was at least one university), yielding a total sample of 18 universities.

For each of these 18 universities, a list of faculties or departments (i.e. top-level organizational units) was constructed, and two were selected at random for inclusion in the sample, on the basis that would conservatively achieve a target sample size of 200 responses.

The sample of respondents was constructed by automatically extracting email addresses for academic staff listed on the websites of 18 universities.

We chose to focus on academic staff because this group enables the greatest insight into the cohesiveness and coherence in the institutional logic of the university. As the organization's investment in labour-time, academic staff represent the primary productive force of the university and also account for a large share of overall expenditure. This focus does not imply that academic staff are the only relevant stakeholders, and it would be worthwhile to validate our results with other relevant groups (e.g. students and employers).

Our analysis consists of three parts. In the first part, we use well-established techniques of exploratory factor analysis EFA (Fabrigar and Wegener, 2011; Lawley and Maxwell, 1971) to identify a plausible and parsimonious set of dimensions that underlie respondents' ratings on the 28 survey items. This approach is primarily inductive and geared towards generating a model of the competing logics in universities.

In the second part of the analysis, we examine how respondents' positioning within these dimensions varies by institution and across professional and demographic groups. We do so using a multifactorial analysis of variance (ANOVA) (Chambers and Hastie, 1992) to identify institutional and demographic categories that significantly explain the overall variance in response data. In the third part of the analysis, we examine institutional averages on these three dimensions as they are related to characteristics of the institutions themselves. All files used in the analysis are available online, and the analysis can be reproduced using open source software.¹

Analysis

Exploratory Factor Analysis

The first consideration in the EFA is the number of dimensions to extract from the data. This involves a trade-off between the parsimony and detail of the analysis. An analysis with fewer factors results in a simpler and more coherent analysis, but it may collapse or combine distinct variables into a single factor. Conversely, an analysis with many factors may do little to reduce the complexity of the data and therefore may not produce a coherent model of the data. The examination of scree plots is a common approach to determining an appropriate number of factors to extract; scree plots show the variance explained for each factor in the

¹ <http://bit.ly/HEInstitution> (all linked content is anonymized for peer review)

analysis; each additional factor explains less variance than the one that preceded it, such that there is diminishing return to adding additional factors to the analysis. Common interpretations suggest determining factors by the “elbow” of the curve, all factors with an eigenvalue greater than that found in a randomized data matrix (i.e. the parallel method - Hoyle and Duvall, 2004) , or all factors with an eigenvalue greater than one. We opt for the first two approaches and therefore identify a three factor as analysis as appropriate based on our scree plot (Figure 1).

[FIGURE 1 HERE - SCREE PLOT]

Figure 1: Scree plot for different numbers of factors. The plot shows a decreasing amount of variance explained by each additional factor. Based on the “parallel” method and the number of factors with an eigenvalue greater than one, we opt for a three-factor fit.

The results of the EFA using a three-factor fit are shown in Table 2. The survey items loaded onto the three factors show how they represent distinct rationalizations of the purpose of universities. The first factor, which we term “autonomous,” focuses on a traditional understanding of universities as institutions of autonomous intellectual enquiry, identifying the university as a forum for debate that promotes critical thinking and social critique. This rationalization of the university also identifies the importance of academic freedom, the pursuit of social justice, and the nonconformist nature of universities (indicated by the negative factor loading on “encourage conformity”).

[TABLE 2 - EFA RESULTS]

In contrast, the second factor, which we call “utilitarian,” focuses on universities as agents in the knowledge economy, rationalizing them as providing employable skills for students and knowledge for economy growth. It clearly embodies much of Clark’s (1998) notion of the entrepreneurial university, defining innovation and entrepreneurialism as key aspects of universities’ institutional logic. Finally, the third factor, which we call “managerial” characterizes universities as hierarchical, bureaucratic and competitive organizations. This rationalization of universities is discussed heavily in literature on new public management (Bleiklie, 1998; Deem and Brehony, 2005), which describes the application of private sector management models and performance metrics in the public sector.

For the purposes of developing a concise empirical framework, those survey items that are of the greatest interest are those that (a) are uniquely associated with one of the three factors and (b) have a relatively strong association to the factor (i.e. a loading of greater than 0.3). These

survey items therefore contain the most information to differentiate how respondents relate to the three factors, which can then constitute three independent dimensions for measuring institutional logics of universities.

The factor loadings also provide some indication of the points at which these dimensions intersect one another. For example, the autonomous and utilitarian logics both view innovation as a key characteristic of universities, while the utilitarian and managerial logics both view universities as competitive environments. Although the dimensions are unique and independent of one another, the results show that there are certain topics or issues on which they intersect.

Analysis of Variance

Defining a set of dimensions to measure the institutional logic of universities enables examination of variation of individuals' positions on these dimensions. Using ANOVA, we examine the extent to which positions on the three dimensions vary across variables such as discipline, time in the sector, international experience and gender as well as across institutions. There are several reasons that one might expect differences across demographic variables. For example, academics with more time in the sector would have been acculturated to academia under earlier policy regimes, while those who have worked abroad might have been exposed to different university cultures. Therefore, we use ANOVA as a preliminary analysis of whether these respondents take different views on the institutional logic of universities.

Results (Table 3) show that many of these variables are not significantly related to the three dimensions we establish in the data. In other words, variation across the groups is approximately equal to variation within groups, so there is no evidence suggesting that either demographic factors (i.e. age, gender) or an individual's experience in higher education systematically influence how they view the institutional logic of universities. Furthermore academic discipline - often identified as a key carrier of academic culture (Becher and Trowler, 1989) - is not related to individuals' responses. The non-significance of discipline might appear to be attributable to the relatively large number of disciplines in the JACS codes, which could obscure distinctions between larger groups of disciplines (e.g. between the sciences and the arts). However, a coding of five overarching families of disciplines did not reveal significant differences, which suggests that disciplinary views on the logic of universities are largely homogenous.

[TABLE 3 - ANOVA RESULTS]

However, results do show that responses between institutions are significantly different. Thus, the institutions sampled appear to have distinctly different institutional logics from one another. These results are interesting and somewhat unexpected in that universities are often described as universal institutions, a common model that is implemented in different contexts with relatively little variation (Frank and Meyer, 2007). In contrast, disciplines are viewed as “tribes” with distinct academic cultures. Our results reveal that universities are more differentiated in their institutional models than one might expect based on the existing literature.

Institutional Characteristics and Logics

The results of the ANOVA (Table 3) show that differences in institutional logics are particularly marked across universities, raising the question of how these differences relate to characteristics of the institutions themselves. We investigate this relationship by looking at correlations between average institutional scores on the three dimensions and key institutional variables using data from the Higher Education Statistics Agency (HESA):

- **Total Enrolment:** The number of students as full-time equivalent.
- **Research Intensity:** Income from research grants and quality-related funding (i.e. research assessment) as a percentage of total staff expenditures.
- **Academic Staff:** The number of academic staff as a percentage of all staff in the institution.
- **Graduate Employment:** The total percentage of students who found employment or continued in further study six months after graduation.
- **State School Students:** The percentage of first-year students who attended a government-funded (rather than private) secondary school.

Results (Table 4) show that the research is most strongly related to the factor scores: Universities that have more funding from research are more likely to view the university as an autonomous institution and less likely to view it as a managerial institution. Additionally, the social background of students is strongly related to the dimensions: universities with more students from state schools have lower scores on the autonomy dimension, and higher scores on the managerial dimension.

[TABLE 4 – MEAN CORRELATIONS]

Another important consideration is the variability in these scores within institutions. Examination of variation gives insight into the extent to which individuals working within the institution are in agreement on its purpose. Conversely, it is possible that in some organization, there is heterogeneity in how individuals understand the logic of the underlying institution, meaning that competing or conflicting logics are in play. Results (Table 5) show that variation in the three dimensions is also related to other characteristics of the universities studied. Again, research intensity is strongly linked to institutional logics: research intensive universities have less variation in individual respondents' positions on the three dimensions of institutional logic. This finding suggests that there is greater homogeneity and coherence among academics on the overall logic of the institution in research intensive universities. Additionally, variation in the autonomous dimension is highly correlated to students from state schools, meaning that variation in how academics perceive this dimension increases as with the number of students from state schools. Most other correlations are very low, suggesting that the presence of competing logics is otherwise not related to these university-level characteristics. Overall, results from the correlations support the notion that the dimensions established are meaningful in relation to characteristics of the institutions, particularly its level of research activity and the social background of its students.

[TABLE 5 – SD CORRELATIONS]

Discussion

Our analysis of survey data provides a framework to understand the ways in which academics understand the institutional logics of universities. We show that ratings of academics' agreement with a broad range of statements about the purposes and nature of universities can be reduced to three principle dimensions: the autonomous, utilitarian and managerial logics of universities. These dimensions relate to characteristics of higher education and trends identified elsewhere in higher education literature. For example, the autonomous dimension closely resembles the notion of universities as an "ivory tower" with high standards of research and teaching excellence (Ramirez, 2010). The utilitarian logic closely matches policy discourses on the knowledge economy, in which universities develop human capital through their teaching and spur knowledge-intensive industries through research. Finally, the managerial dimension closely matches observations from the literature on new public management (e.g. Deem and Brehony, 2005). Thus, existing literature suggests that dimensions established in our analysis are a plausible analysis of institutional logics in higher

education. The three dimensions we find in the data go beyond the existing literature on competing logics (Seeber et al, 2015), which differentiates only between the “traditional” and “managerial.”

One key contribution that arises from the analysis is an empirical framework for the institutional logics of universities, which can be used in other studies to understand how respondents view the university as an institution. Taking the four items with the highest loadings from each factor, results in a succinct framework of 12 items that summarize individuals’ views on these three dimensions (Table 6).

[TABLE 6 - FRAMEWORK]

It is our intention that this framework could be applied in other survey-based higher education research. The potential applications of the framework are numerous, for example, it could be used to study cross-national differences in understandings of the university, and how these understandings may be related to and influenced by national policies and funding models. Additionally, these three dimensions could be used to study the influences and effects of leadership and management leadership within universities. The competing logics literature is also heavily focused on organizational change (Greenwood et al, 2011; Thornton and Ocasio, 1999); so the institutional logics identified here could be used to study change in universities (for example, in response to new policies or funding models).

We began this endeavour by exploring how individuals’ positions on these three dimensions are related to demographic variables, and we have identified institutional differences as particularly important. This result differs from other literature that emphasizes disciplinary identities (i.e. “tribes and territories”) as a defining characteristic of universities (Becher and Trowler, 1989). However, the higher education sector landscape has changed considerably since that time, involving a wide range of institutional types, and our findings are consistent with Trowler et al’s (2012) revisiting of “tribes and territories,” which views disciplines dynamic constellations rather than fixed groupings.

Our results also show the marked difference in how institutional logics vary across universities; highlighting the variation in how academics understand the rationality of the university. Although higher education has been an important context in the development of institutional theory (Frank and Meyer, 2007; Meyer et al, 2007), much research has focused on the highly rationalized and monolithic logic of the university as an institution of teaching

and research excellence, rather than considering the multiple logics at play and their implications for institutional change and complexity. Again, this finding is somewhat related to context, particularly the heterogeneity of institutional types in UK higher education, while the core institutional literature often focuses on the established “world class” universities as an institutional type (e.g. Ramirez, 2010). Nevertheless, our findings suggest that it is worth considering the multiple and competing institutional logics found in universities.

While our study demonstrates the insights of competing institutional logics as a theoretical approach; it does not preclude further exploration of the complexity, messiness and potential oppositionality of value dimensions in higher education that may be elucidated and made explicit through this approach. Thus, while our contribution here focuses on identifying and understanding these three discrete dimensions as the dominant axes of academics’ institutional rationalizations, we suggest that further research may show how these dimensions can be antagonistic and produce contradictory terms of reference.

We speak here to the way in which academics rationalize their institutions may well lack symmetry with the realities of their institutional environment. For example, in the relationship between research income and academic autonomy, we also see the primacy afforded to academic capitalism and the irony that academics feel most in control where their ability to exercise their intellectual license in those environments is mostly oriented towards, to put it crudely, fetching cash. Their vision of autonomy is thus only secured through compliance with the performance management expectations of their institutions and funders. This contingency reflects what Brown (2015) calls neoliberalism’s “stealth revolution” and consequent fog that seems to disable academics’ capacity to scrutinize that directly in front of them, or in a Marcusean (1964) sense, it may be evidence of a hitherto imperceptible tightening of technocratic rationality for higher education. Conversely, we may explain this seeming contradiction of logic as the response, albeit unwitting, of academics to the contraction of an intellectual license, the naturalization of a neoliberal mind set, and therefore self-confidence in the credibility of the terms of reference that inform their working lives.

Furthermore, we would argue against the possibility of completely discounting a utilitarian logic in the contemporary milieu of transparency, public accountability for science, and policies for regulating teaching that are strongly predicated on employment outcomes. An interpretation of these results is that academics construct a ‘reality’ of life in higher education choreographed by and ostensibly restricted to the immediate – and we opine often quite

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We speak here to the way academics’ institutional rationalizations may lack symmetry

contrived – experience of their institution. Consequently, the extent to which respondents and institutions are positioned more strongly on one logic than another can be explained as much by self-deception as by self-perception, or by scholarly hubris acting as apology for ambivalence. Thus, we propose that although these dimensions establish an empirical framework for institutional logics of universities, these logics are locally dependent rather than systemically informed or holistically reflective. Observing the degrees of separation and/or points of dissonance between the dominant logics in higher education exposes the contradictions that occur within individuals themselves, inside seemingly cohesive higher education institutions, and across the higher education sector as a whole.

In addition, our results highlight the inherent tensions and contradictions in the rationalization of the university, both at the individual and organizational level. This type of tension is addressed in a growing body of literature on the importance of paradox in organizations, in particular the view that in many organizations paradoxes are not temporary errors or problems to be resolved, but rather an enduring and necessary feature of the organization that can actually offer durability and sustainability (Putnam et al, 2016; Smith and Lewis, 2011). Thus, it is rather striking that one finds paradox within the dimensions that organize institutional logics of the university; specifically, to notion of autonomy is largely incompatible within a utilitarian or managerial view of universities. Any given university – or any articulation of the purpose of universities – is inherently unable to encapsulate these contradictory logics.

The key issue therefore is not whether these paradoxes exist – as they are clearly core to the contemporary logics of the university – but the extent to which they act as a source of stability or, in contrast, transformation. The paradox literature shows how paradoxes can actually serve as a source of stability (Van den Brink and Stobbe, 2009), and thus it is possible the tension between academic autonomy and neoliberal management could act as an organizing axis of contemporary universities. In contrast, the literature on competing logics often emphasizes the process of transformation, through which a new institutional logic is asserted by a particular set of interests to become the dominant way to rationalize an organization (e.g. Thornton and Ocasio, 1999). This approach is largely consistent with critical studies of the neoliberalization of higher education (Deem et al, 2007; Olssen and Peters, 2005). Thus, we look to future research to examine how competing logics and the paradoxes they entail can both provide durability and introduce change in higher education.

Commented [RW2]: This sounds really odd. Can we rephrase the bit after the semi-colon?

Conclusion

In this article, we have applied theoretical literature on competing institutional logics to the study of universities. As our point of departure, we noted the strong alignment between the development of institutional theory and research on higher education. Institutional theory has drawn upon the unique nature of universities as evidence of the importance of shared rationalizations (i.e. institutional logics) in shaping organizations, and much higher education research uses institutional theory as a heuristic lens. However, we argued that more recent literature on institutional theory has also emphasized the importance of competing and conflicting logics, and that the insights of this literature are not fully exploited in current studies on higher education.

To address this gap, we developed a conceptual and empirical framework for understanding competing logics in universities. This framework can be summarized through a relatively succinct set of 12 survey items (Table 6) that can be used to characterize how individuals rationalize the logic of the university as an institution. This framework opens the possibility for future studies that examine competing institutional logics in universities, with a wide range of potential applications. One key question would be how logics vary across countries, particularly those with different policy and funding regimes. Additionally, this framework would be useful to studies of institutional change (i.e. tracking changes in institutional logic over time) and in studying the presence of contradiction within universities (i.e. those in which there is considerable disagreement on the purpose of institution).

There are, however, certain limitations that should be considered when interpreting the framework that we have proposed. First, our sample consists of academics' views of the university; while other relevant stakeholders (e.g. students, employers, etc) may rationalize the university using different logics. We believe that academics' institutional logics are particularly important, as they show the extent to which the organizations' productive capacity (i.e. its workforce) believes it is engaged in the same mission or enterprise. Second, this is an exploratory analysis and therefore the conclusions are primarily inductive. The framework we have proposed should therefore be tested in future research, for example using confirmatory factor analysis (CFA). Testing and further development should also be undertaken with other stakeholder groups (e.g. students, employers, policymakers); senior managers and professional service staff may be particular important in translating logics from the policy environment into the organizational context of the university.

While exploratory in nature, this study lays a foundation for this work that we hope others will follow in the future. We are particularly interested in the struggles that may lie within these competing rationalizations and their implications; the intersubjective processes and conflicts through which individuals espouse with or adopt a given institutional **logics** as dominant could provide better insights into the ascendancy of neoliberalism and managerialism in higher education, particularly its ability to co-opt or encapsulate autonomous and utilitarian logics. Indeed, a key contribution of the competing logics perspective is to extend institutional theory to more convincingly account for such struggles. We believe that further work using a perspective of competing logics will lead to a more sophisticated and nuanced understanding of universities as institutions; one which can accommodate the prevalence of contradiction, complexity and change by which they come to be increasingly characterised.

Commented [RW3]: 'logic' singular?

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