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# Communism, Universalism and Disinterestedness: Re-examining Contemporary Support among Academics for Merton's Scientific Norms

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**Abstract** This paper re-examines the relevance of three academic norms to contemporary academic life – communism, universalism and disinterestedness – based on the work of Robert Merton. The results of a web-based survey elicited responses to a series of value statements and were analysed using the weighted average method and through cross-tabulation. Results indicate strong support for communism as an academic norm defined in relation to sharing research results and teaching materials as opposed to protecting intellectual copyright and withholding access. There is more limited support for universalism based on the belief that academic knowledge should transcend national, political, or religious boundaries. Disinterestedness, defined in terms of personal detachment from truth claims, is the least popular contemporary academic norm. Here, the impact of a performative culture is linked to the need for a large number of academics to align their research interests with funding opportunities. The paper concludes by considering the claims of an alternate set of contemporary academic norms including capitalism, particularism and interestedness.

**Keywords** Academic values · scientific norms · Merton · Weber

## Introduction

There is renewed interest in the values that define academic life prompted, in part, by policy-led attempts to 'professionalise' aspects of academic practice (e.g. Higher Education Academy 2006) and contemporary debate about the limits of academic freedom. However, the policy-led agenda defines academic values largely in relation to the teaching function

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while debates concerning academic freedom tend to exclude consideration of broader academic values. Historical accounts of academic values provide a useful starting point in re-examining academic values and are linked to a broad religious and secular conception of academic life as a 'vocation' rather than just a 'profession'.

This paper will re-examine these influential accounts of academic values and develop a contemporary interpretation of the values that underpin commitment to the academic 'vocation'. The empirical part of the paper, which represents work in progress, will test out the contemporary relevance of Merton's institutional norms through a web-based survey of academic values. In questioning the contemporary sway of Merton's norms they will be contrasted with an alternative set of academic values: capitalism (or individualism), interestedness and particularism.

## Weber's Academic Values

The notion of academic values is widely associated with the extensive literature that surrounds discussion and debate about academic freedom. This literature is often restricted to considerations concerning academic staff rather than students. In understanding the broader concept of academic values, a useful starting point is provided by Max Weber's address to a student association of the University of Munich on the topic of 'Science as a vocation'. By 'science', Weber was referring to the scholarship of academics not just engaged in the 'hard' sciences, but what is sometimes termed the 'soft' or social sciences. He argued that academics needed to be specialists to achieve anything of note and pursue a research question with unwavering intent. In his words, the scientist needed to 'put blinders on himself' (Weber 1919:59). Ultimately, whatever an academic might achieve would be quickly outmoded by the work of others. Realisation of this reality meant that the academic must work without vanity with the sincere hope that their work would be superseded in the continual search for truth and knowledge. Weber's account paints academic life as a lonely and self-sacrificing vocation. As one might expect from the author of 'The Protestant Ethic and the Spirit of Capitalism', Weber's vision is based on secular asceticism. Another element of this asceticism was Weber's demand for 'self-restraint'. This referred to the responsibility of academics, as Weber saw it, to keep their own political and moral beliefs in check. He was opposed to the academic who uses the lecture theatre as a platform to 'propagate his own ideals' (Weber 1919:22).

Weber's lecture needs to be understood in the context of the German university in the early twentieth century and his concerns regarding the growing power and influence of politicians and bureaucrats. The later complicity of many members of the academic class during the subsequent rise of Nazi power demonstrates the prescience of Weber's analysis (Shils 1973). Weber's vision of what it means to be an academic is a lasting one: specialisation, individual self-sacrifice and ethical 'neutrality'. It represents the popular planks of the modern research university based, as it is, almost entirely on *Wissenschaft* (i.e. the making of knowledge via research) as opposed to collegial or spiritual virtues (Schwen 1993).

## Merton's Institutional Norms

In *The Social Structure of Science*, Robert Merton (1942) identifies four 'norms' which he believed applied to the work of scientists. While Merton used the word 'scientist' this, in

effect, included academics from social as well as human sciences and may be taken to apply to the academic community more generally. It is in this context that we will use the word 'academic' in place of Merton's use of the word 'scientist'. The first of Merton's norms is 'communism'. While this word carries complex linguistic and historic connotations, Merton was clear that for academics communism implied that the results of their research should be the common property of the whole scientific community.

> 'The scientist's claim to 'his' intellectual 'property' is limited to that of recognition and esteem…'
>
> (Merton 1942, p 273)

Universalism is the second of Merton's norms. This term was used by Merton to refer to the application of 'preestablished impersonal criteria' (p 270) in judging the validity of knowledge claims. This norm asserts the importance of the scientist staying detached and analysing all data in an objective way which enables the creation of universal or objective knowledge. Truth claims are thus related to objective data and transcend race, class, political and/or religious barriers.

> 'The Haber process [the scientific method of producing ammonia developed during the Second World War] cannot be invalidated by a Nuremberg decree nor can an Anglophobe repeal the law of gravitation.'
>
> (Merton 1942, p 270)

Disinterestedness is the third of Merton's norms and carries with it the expectation that scientists should have no emotional or financial attachments to their work. Merton assigned high moral standards of personal integrity to scientists who, he argued, were motivated and rewarded through recognition of their achievements rather than monetary gain. Scientists, according to Merton, are interested in finding out the truth even if the truth proves the scientist wrong.

Merton's final norm is organised skepticism. This demands remaining skeptical about the results of research, including the potential shortcomings of one's own work, until all the facts are established. It implies caution in reaching conclusions rather than conviction that they have something more to offer than findings that are tentative trials that are inconclusive. Organised skepticism further refers to the expectation that academics will continually challenge conventional wisdom in their discipline.

## Weber and Merton Norms Today

Sometimes Merton's four institutional norms are also known through the acronym 'C.U.D.O.S.'. They are closely related to and owe a large debt to Weber. For example, the ethical neutrality that Weber promotes is about the disinterestedness and total dedication to pursue the objective truth rather than being distracted, as Weber saw it, by politics. While Merton's norms have been subsequently criticised as idealised, they represent, at least at a superficial level, a persuasive formulation of the academic: detached, methodical and committed to the search for the truth rather than personal

glorification. Both Weber (1919) and Merton (1942) offer classic accounts of the values that define academic life as a vocation. Weber's vision of what it means to be an academic may be characterised in terms of the value(s) of specialisation, individual self-sacrifice and ethical 'neutrality'. Merton reinforced Weber's secular asceticism through his set of institutional norms.

However, the expansion of higher education in the twentieth and twenty first centuries means that the disciplinary and professional traditions of those now working as academics in universities has also widened considerably. In particular, the growth of commercial and allied health related subjects has brought a new cadre of professionals into higher education institutions from nursing, business and the creative arts. The subject base of university education is not the only thing to have changed over the last 60 years since Merton identified his four institutional norms. University education has undergone a radical transformation in its funding structure and dependence on national government as well as levels of participation. Academic life has also been increasingly exposed to the culture of research audit and the particular competitive pressures such processes bring in their wake. Therefore, the academic values asserted by Weber and Merton need to be tested for their contemporary relevance.

## Methodology

A web-based survey instrument was designed to test out the extent to which academics agree with three of Merton's four institutional norms. Four value statements were designed to test out the extent to which respondents either agreed or disagreed with communism, universalism and disinterestedness. The value statements were carefully constructed to represent an equal number of confirming and disconfirming perspectives with respect to Merton's values. For example, in relation to the norm of 'communism', the following two statements represent an affirmation and a disconfirmation of this value respectively:

Question 6: I am in favour of sharing my teaching materials with my peers

Question 13: I feel it is important to protect my individual property rights

The survey tested out these value statements through a four point Likert agreement scale that deliberately created a 'forced choice'. To avoid habituation in response affirming (positive) and disconfirming (negative) value statements were interchanged. This technique was adopted to encourage the respondent to think carefully about each statement before responding. Organised skepticism was excluded from this analysis for two reasons. Firstly, prior analysis of the literature did not suggest that this value had necessarily shifted or been challenged in the same way as the first three: communism, universalism and disinterestedness. Secondly, difficulties were encountered in constructing value statements that adequately reflected positive and negative positions with respect to organised skepticism as a value.

The survey data were analyzed in three steps. Firstly, the method of weighted average was calculated. This computes an arithmetic mean of a set of numbers in which some elements of the set carry more importance (weight) than others. Weighted average was achieved through counting responses that indicate levels of agreement or disagreement with statements associated with each norm. In the analysis, the level of agreement or disagreement was not taken into account in order to create a simple

'agree' or 'disagree' dichotomy. In each affirming statement responses that agreed were scored as 1, and those that disagreed were scored as −1. However, in each disconfirming statement, responses that agreed were scored as −1 and those that disagreed were given a score of 1. The weighted average of the three norms thus lies between 1 and −1. If the result is close to 1, this suggests that respondents were more likely to agree with the related norm. In contrast, if the result is close to −1, it suggests that the respondents in general are more likely to disagree with that related norm. In this way, it is possible to calculate levels of agreement with each of the three norms presenting a general picture of the respondents' attitudes.

In the second step, simple statistics were generated to reveal the extent to which respondents agreed or disagreed with each of the value statements. The responses to each set of four statements related to each norm were collated and analysed. The third step involved cross-tabulating the results by gender, subject area, length of experience and level of seniority, aiming to reveal which attributes of the respondents had had some influence on their responses to the questions. The Chi-Square test was applied to the data set to determine if there were any statistically significant relationships between the different factors where the *p*-value was smaller than 0.05.

## Results

Six hundred and seventy one responses were received to the questionnaire between 23 May and 14 June 2007. The high number of responses was achieved through the co-operation of a number of subject centres within the UK Higher Education Academy. This resulted in the online survey being included in a number of electronic communications by subject centres. Hence, the sample was self-selecting with most respondents drawn from UK universities. While the sample includes a broad range of academic staff from different disciplinary fields and levels of experience, this does not necessarily imply that it is representative of the academic profession as a whole. Nevertheless, published statistics indicate that the male/female percentage ratio of UK academics is 58:42 (HESA 2007) and the sample closely reflected this ratio with male respondents (54 per cent) slightly in the majority. Most respondents identified their subject area as either Arts and Humanities (44.7 per cent) or Social Sciences (20.1 per cent). The majority of respondents identified their current role as that of a lecturer (65.1 per cent), or equivalent in a North American context, while full professors represented just over 1 in 10 of respondents. In the UK, official statistics indicate that 9.1 per cent of academics are employed at professorial level, the equivalent of full professorial status in North America (HESA 2007). In terms of working experience in higher education, respondents were relatively evenly spread between those with less than 10 years (48.2 per cent) and those with 11 or more years (51.8 per cent).

### Communism

Communism, in academic life, refers to the common ownership of intellectual property. The weighted average method resulted in a score of 0.5034 indicating support for communism as a norm. Responses to the individual statements affirming communism as a value demonstrated very high levels of support. 507 out of 671 respondents supported these affirming statements. One example is that 95% respondents favoured the sharing

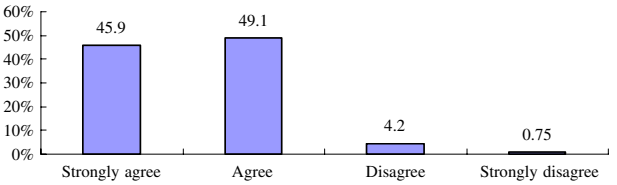


**Fig. 1** Respondents in favor of sharing teaching materials with peers and results of their research in progress ($n$=671)

of teaching materials with peers and the results of their research in progress (see Fig. 1).

In contrast, just 44 per cent of respondents were in support of disconfirming statements in relation to communism which were intended to test support for statements that represent capitalist norms such as protection of individual property and competition within the academic community to be the 'first' rather than share knowledge freely. For example, three out of four respondents agreed that it was important to protect their individual property rights. Respondents were also asked about whether they tend to be secretive about their research in progress due to a concern that someone else may beat them to publication (Fig. 2). While most disagreed with this statement (87.9 per cent), just over one in ten respondents agreed with the statement to some extent illustrating the importance of competition, and the presence of distrust, in academic life for these individuals.

Cross-tabulation of responses by subject area indicated some variation based on disciplinary differences. More than 1 in 5 respondents from the natural sciences (21 per cent) agreed that they were secretive about their work in progress compared with 13 per cent of those from both the social and applied sciences and 11 per cent of academics from the Arts. However, using Chi-Square tests, the variation based on disciplinary differences is not statistically significant suggesting that respondents' perception of secrecy about their work in progress is largely independent of their disciplines. Similarly differences in responses to value statements by gender were unremarkable with no statistically significant relationship between respondents' perception of secrecy about their work in progress and gender although male respondents (14 per cent) indicated that they were slightly more likely to act in a secretive manner than their female counterparts (10 per cent). The Chi-Square tests suggest that the level of seniority of respondents did not affect significantly their responses to whether it was important to protect intellectual property rights. Academic managers (89 per cent) indicated a higher level of agreement with the importance of protecting intellectual property rights compared to lecturers (71 per cent) while the seniority of respondents did not affect their perception of intellectual property rights in a significant way.

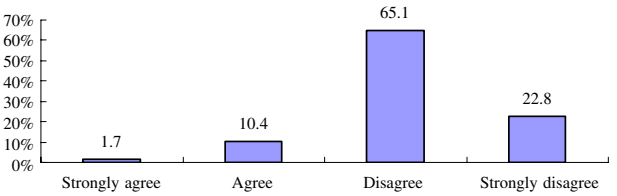


**Fig. 2** I tend to be secretive about my research in progress as I am concerned that someone else may beat me to publication ($n$=57)

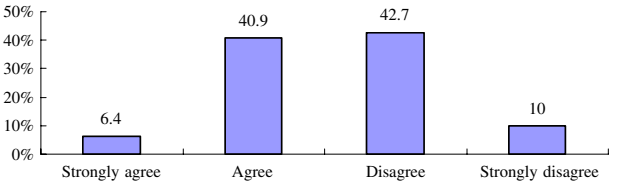


**Fig. 3** As far as possible, I try to ensure that my intellectual work is not influenced by my personal beliefs and values ($n$=60)

## Universalism

Universalism refers to the belief that academic knowledge should transcend national, political, or religious boundaries. The weighted average for universalism indicated modest, if slight, agreement (0.0443). Four statements were contained in the survey designed to affirm and disconfirm the value of universalism, examples of which appear as Figs. 3 and 4, respectively. The survey data reveal that respondents were only slightly more in favour of universalism affirming statements (434 responses) as opposed to those disconfirming it (404 responses).

Of the statements affirming universalism, 82 per cent of respondents agreed that it is important to be able to claim that one's research is generalisable or valid beyond its immediate context although just over half (53 per cent) also indicated their agreement with the statement that their intellectual work was influenced by their personal beliefs and values. This finding was confirmed by responses to an allied statement that indicated that over 90 per cent of respondents believe that their teaching and research is substantially influenced by their own personal values. This differs from the implication of universalism that academic knowledge can be neatly divided off from such contextual factors. This finding is perhaps a reflection of varying perspectives about the nature of knowledge. Merton's principle of universalism and the 'value neutral' academic represent the basis of a 'positivist' paradigm. A positivist frame of reference holds that the researcher can remain independent of the phenomenon being scrutinised. This is what Brew (2001) terms one of the 'traditional rules' of the research process and is part of a tradition more closely associated with the 'hard' sciences where large data sets are used to test out hypotheses. However, support for interpretative or social constructivist perspectives has grown since the 1960s (Berger and Luckmann 1966). Here, academics across a range of disciplines argue that individuals socially construct their own version of reality rather than discovering 'facts'. They may also hold to the belief that an objective viewpoint is illusory because of the role political power plays in the development of knowledge (Foucault 1972).

However, while respondents were cognisant of the extent to which their own personal values impact on the search for universal truths, this did not dim their support for developing research and scholarly work that could transcend its immediate context. Almost half of the respondents (47.3 per cent) agreed that they try to ensure that their intellectual work is not influenced by their personal beliefs and values (see Fig. 3).

82 per cent of respondents (see Fig. 4) agreed that it is important for research to be generalisable or valid beyond the national context, for example. This level of difference

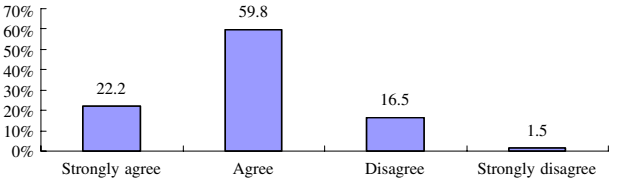


**Fig. 4** I think the extent to which research maybe generalisable or valid beyond its immediate context is important ($n$=54)

between respondents in the applied sciences and the arts was apparent in responses to the other three questions in relation to universalism.

In applying the Chi-Square test it was found that there are statistically significant differences between respondents on the basis of cross-tabulating the results by subject area. This suggests that respondents' support for making research generalisable or valid beyond its immediate context depends on their subjects. For example, respondents from the applied sciences (90 per cent) were much stronger supporters of making research generalisable or valid beyond its immediate context than their colleagues from the arts area (78 per cent). In respect to gender, female respondents (93 per cent) were slightly more likely to agree that their personal values have a substantial impact on their teaching and research than male respondents (89 per cent). However, the Chi-Square tests result suggests that respondent's agreement is independent of their gender.

Analysis of responses by level of seniority revealed slight differences of emphasis rather than substantive disagreement, but these differences are not statistically significantly in spite of the fact that academic managers (63 per cent) showed strongest support for the statement that intellectual work should not be influenced by personal beliefs and values, while research assistants showed the least support for this statement (35 per cent). Interestingly, full professors placed less emphasis on the importance of generalising results or keeping their personal values out of the intellectual arena than lecturers.

## Disinterestedness

Disinterestedness is about being personally detached about truth claims in the sense of being swayed only by the evidence rather than campaigning for a particular point of view or outcome. In Weber's terms, it is about being 'neutral'. However, it is also associated with pursuing a research (and teaching) agenda that reflects personal academic interests rather than the demands of funding agencies, government priorities or university strategies.

The survey data indicate that the norm of disinterestedness is perceived as the least popular contemporary academic value behind communism and universalism (see Fig. 5). Only 376 out of 671 respondents agreed with disinterestedness affirming statements. More respondents (423) agreed with disinterestedness disconfirming statements. This means, in effect, that academics are not supportive of the norm and suggests that 'interestedness' may more appropriately characterise contemporary attitudes (see later discussion).

Over half of respondents (63 per cent) showed emotional and financial attachments to their work. For example, two fifths (42 per cent) linked their research with funding opportunities (see Fig. 6), in spite of the fact that 80 per cent stated that they only pursued research that was of personal interest to them (see Fig. 7).

In further testing out commitment to disinterestedness, respondents were asked whether they should stay out of public debates unless this related directly to their own discipline or

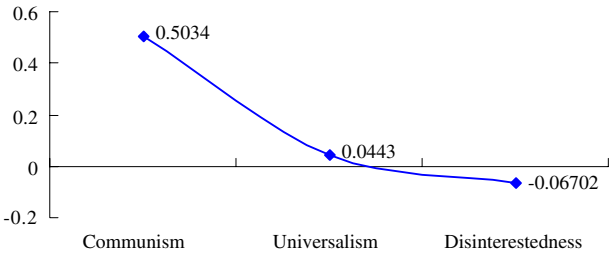


**Fig. 5** Weighted average of three norms (Agree=1, Disagree=−1)

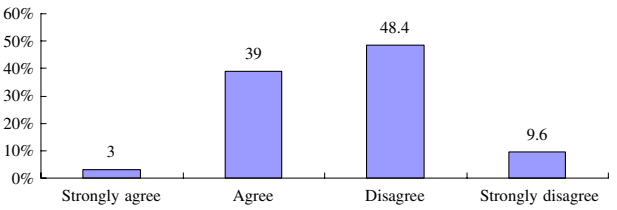


**Fig. 6** I align my research interests with funding opportunities ($n$=57)

subject specialism. However, the majority (68 per cent) disagreed and indicated support for the idea of academics expressing their views in public debates regardless of the extent to which they could draw on subject expertise to support such interventions. Respondents were further supportive of the idea that their research might be applied for the 'good of society' with only around 15 per cent disagreeing with this statement.

Cross-tabulation by subject area indicated substantial differences in relation to some questions. The likelihood of respondents aligning their research interests with funding opportunities is statistically related to their subject field. For example, two thirds of those from the applied sciences (66 per cent) indicated that they aligned their research interests with funding opportunities. This compares to just 32 per cent of respondents from the natural sciences and the arts. Similarly, the Chi-Square tests reveal that respondents' perception of whether academics should keep out of public debates is closely related with their subjects. For example, just 23 per cent of social scientists felt that they should keep out of public debates unless they related directly to their subjects while substantially more respondents from the natural sciences (37 per cent) and engineering (40 per cent) felt it was right to do so. Finally, the desire to pursue research for the good of society was related to the subjects of the respondents. For example, respondents from social scientists (92 per cent) were more likely to consider it important than respondents from the arts (76 per cent).

Gender was statistically related to the extent to which respondents would align their research interests with funding opportunities. Females (46 per cent) were more likely to align their research interests with funding opportunities than males (38 per cent). However, differences in level of seniority were slight and not statistically significant. Both research assistants (57 per cent) and academic managers (52 per cent) were similarly more likely to align their research interests with funding opportunities than either lecturers (39 per cent) or full professors (41 per cent). Full professors (77 per cent) were also the most likely to support the idea of academics taking part in public debates even where this did not relate to their discipline or subject area.

## Merton Re-shaped?

The results of this limited survey indicate that there is still substantial support for at least one of Merton's norms, namely communism. However, it is also clear that they are being

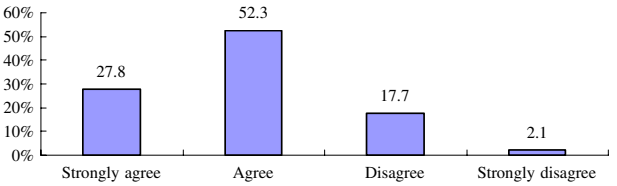


**Fig. 7** I only pursue research that is of personal interest to me ($n$=61)

re-shaped by a number of contemporary trends and influences. While most academics in this survey were supportive of communism as a norm there are more capitalist and individualistic forces at work. There is a strong sense of the importance of protecting intellectual property rights partly, it might be speculated, by a heightened awareness of such rights in a context in which universities have developed more explicit policy positions in recent years on such matters. These policies are designed to maximise the commercial benefits derived from academic work for individual universities rather than share the results of research for the benefit of all. Academic life is becoming increasingly 'performative' characterised by an emphasis on evaluating the 'efficiency' of academic labour through internal and external quality control and audit procedures (Skelton 2005). This means, *inter alia*, that academics are encouraged to seek a public profile rather than shy away from self-promotion opportunities. It also means that academics, especially those working in research-intensive universities, are under pressure to generate external funding even where such funds are not critical to the conduct of research (Lucas 2006). Academic time, as well as resources, must be paid for in a market model of higher education. Audit of research quality in the UK and in other national contexts, such as Australia, further encourage a quasi-market capitalism among universities that threaten the basis of Merton's norm of communism. This norm is also at odds with what Weber referred to as 'the cult of the personality'. On the other hand, the World Wide Web acts as a powerful vehicle for those who are committed to making academic knowledge freely available rather than an economic resource to be leveraged for maximum financial gain.

The pressures of performativity mean that academics can no longer afford to be as committed as they might like to be to disinterestedness as a norm. Indeed, the survey indicates more opposition than support for this norm. 'Interestedness' appears to have displaced disinterestedness. Most respondents indicated that they were comfortable with the idea of contributing to public debate in areas that fall outside their expertise. While Weber would regard such an attitude as an abuse of academic privilege, contemporary academics may regard such interventions as a right as a citizen and as a legitimate extension of academic freedom. Many academics are also prepared to direct or re-direct their efforts toward available funding opportunities. Gaining funding for research and directing one's research agenda in the direction of the contemporary concerns of public policy makers is a fact of life that has re-shaped attitudes to 'disinterested' research. For example, research councils, and other grant-making bodies, are placing increasing emphasis on assessing the 'economic impact' of research work (Walker 2007). Here, there is a risk that researchers will chase grant opportunities where they can demonstrate short-term benefits of their research rather than focus on longer-term, theoretically driven work sometimes referred to as 'blue skies thinking'.

Modern academics are keenly aware of the extent to which their personal beliefs and values shape their intellectual work but most still strive to universalise their research findings. This may be partly due to the performative pressures of research assessment. This creates an expectation that research should be international (rather than 'just' national) and have a demonstrable 'impact'. Such claims are difficult to sustain if one is more committed to particularism rather than universalism even though this represented the position of a substantial

**Fig. 8** Merton's norms and their alternates

| Merton's norm | Alternative norm |
|---|---|
| Communism | Capitalism |
| Universalism | Particularism |
| Disinterestedness | Interestedness |

minority of respondents. According to Bourdieu (1989), the intellectual rejects particularism and asserts universalism because they feel that they have things to say that transcend national, cultural and other social boundaries. In a more sharply competitive environment that rewards universalist claims, few academics can afford not to aim at this value in respect to at least one aspect of their research work. This analysis suggests that new norms can be contrasted with those of Merton that represent a re-shaping of academic values (see Fig. 8).

These contrasting norms represent an alternative politico-economic orientation to the set of values proposed by Merton. In contrast with communism, capitalism as a norm would imply a belief in maximising individual financial return on academic endeavour in a market economy. Here, conceptualising the role of research as an income generation activity affirms this alternative norm. Particularism implies a belief that knowledge is individually constructed on the basis of social experiences and political forces. It implies a rejection of absolute social, cultural or religious values in favour of moral relativism. A particularist stance might further be characterised by opposition to the cultural hegemony of Western products, systems and modes of thought. Finally, interestedness is closely related to the belief that academic enquiry can never be a value-free, dispassionate analysis of the observed 'facts'. It is a norm that essentially rejects the positivist paradigm.

## Conclusion

The results of the survey do not necessarily represent a 'shift' in values as Merton's norms were not based on empirical data. While this research sample was broadly representative of academic staff by gender, this does not necessarily imply that it is representative of the academic profession in all respects. However, contemporary performative pressures on academic life may be having an impact in shaping, or perhaps re-shaping, some Mertonian norms. This is particularly apparent in respect to the norm of disinterestedness where large numbers of academics pragmatically align their research interests with funding opportunities. This finding may be related to a more competitive market-based university environment apparent in the UK and elsewhere internationally where it has been argued that the canons of scientific inquiry have been compromised by commercial pressures (Bok 2003). Despite these pressures, the norm of communism, in particular, still attracts strong popular espoused support which crosses disciplinary fields. The balance of evidence from this survey, though, suggests that market-based and commercial pressures might be beginning to subvert the Mertonian ideal. However, respondents' support of universalism and disinterestedness varies with their subjects. In general, respondents from applied sciences showed stronger support for these two norms than respondents from the other subject fields.

While the value statements in the survey have sought to represent the norms originally conceived by Merton, it is recognised that other interpretations may prevail. Further research might use a broader set of value statements to more deeply reflect differences in attitudes to academic values. Alternately, it might centre on a depth study of just one of Merton's norms being able, in the process, to elaborate the dimensions in more detail.

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