

Bourdieu's field theory applied to the story of the UK radiography profession: A discussion paper

Introduction

When reading through the history of radiography, there appear to have been conflicting views about whether radiography could be called a profession. One of the issues is that it is difficult to define a profession, with many 'tick-list' type checks of 'profession' available. Adding to the difficulty, there are disagreements between different authors of these definitions, as Sahin-Dikmen¹ and Whiting² found when writing about the professions of architecture and radiography respectively. With no single accepted definition of a profession, it might be difficult to decide whether radiography is indeed a profession.

Using Bourdieu's concept of 'habitus', the replacement of the concept of 'profession' with that of 'field' surrounded by borders, and of 'symbolic capital'³⁻⁵ this paper argues that radiography is a profession when using Bourdieu's field theory and that a 'tick list' type of evaluation of professionalisation is not useful or required when reaching this conclusion for radiography or other professions. To grow and maintain its position as a profession, radiography has been protecting and expanding its borders through time as this paper explores. To start there is a brief explanation of the terms Bourdieu used in his writing, before looking into the history of radiography as a profession and applying Bourdieu's theories.

In radiography, reference is sometimes made to the patient's bodily habitus in reports, for example McKiernan⁶ and Schneider⁷ with reference to ultrasound scanning, while Woods⁸ and Beck⁹ discussed bodily habitus and plain film radiography. In the context of imaging, habitus refers to the physique or body-build. However, for Bourdieu, habitus is an

embodiment of the values and dispositions within an individual, and not only the physical appearances as radiographers understand the term. Bourdieu described habitus as:

...an acquired system of generative schemes objectively adjusted to the particular conditions in which it is constituted (p95) ³.

This means a person's habitus is formed by the influences on them and Wacquant, who worked closely with Bourdieu, suggested there is a primary habitus shaped in childhood, and a secondary habitus shaped by 'the specialized pedagogical labor [*sic*] of the school and other didactic institutions' ¹⁰, such as higher education institutions teaching radiography.

Bourdieu defined a field in terms of a network loosely holding its occupants with common attributes, each of whose position in relation to their field is dependent upon the power, or capital, they possess. Bourdieu likened people within the field, such as radiographers in the field of radiography, to players in a game ¹¹. This suggests that radiographers are players who 'have a feel for the game' ¹² within the field of radiography, holding different positions within one large field according to their clinical or educational work. Each member of the field holds the knowledge and skills to be a radiographer within their habitus and is able to enact them in their work. For the game to work, all players need to have an interest in the game and must build symbolic capital to maintain the field in which they operate ⁵.

Expanding on the term symbolic capital, Bourdieu outlined three forms of capital, first economic capital such as income or property, secondly cultural capital such as holding academic qualifications which could be converted to economic capital, and thirdly social capital such as a network of personal relations which again may be convertible to economic capital ⁴. Each of these three types of capital can be seen as symbolic capital:

...which is the form that one or another of these species may take when it is grasped through categories of perception that *recognise* its specific logic or, if you prefer, misrecognize the arbitrariness of its possession and accumulation. (*italics in the original*) (p119) ¹¹.

This suggests that it is not enough to accumulate symbolic capital, as it needs to be seen and understood to be such by outsiders, for example those in other professions or the public.

Emergence of the field and profession of radiography

As Bourdieu ¹¹ suggested, it is important to outline the historical background of a field to understand the dynamics and structure within the field. UK radiographers were first recognised as a separate group of health care workers ¹³ in 1922 when the first radiographers qualified under the Society of Radiographers (SoR) aegis ¹⁴. The SoR was founded in 1920, ironically in light of future professional boundary issues between radiographers and radiologists, by two radiologists. Bentley ¹⁴, presented an insight from a SoR meeting in 1935 which showed that the professional status of radiographers was already under consideration when it was suggested that if a candidate wanted to sit the Membership examination, they should have been educated at a recognised teaching centre. There is no explanation of how this training would raise the radiographers' status, but the suggestion is that radiographers should have a recognised practical training for a vocational occupation rather than just the ability to pass an examination. Moodie ¹⁵ suggested that examination was necessary to maintain high standards of professional knowledge since by 1929 the adverse side effects of X-rays were becoming known. Further, the SoR suggested that 'the quality of a radiographer was implicit in his [*sic*] qualification' ¹⁵, making clear the need for radiographers to possess a body of knowledge before practising. This dual aspect of training, both academic and practical vocational skills with similar weighting on the importance of each was present at the inception of the radiographer education and is still a consideration when developing curricula for radiography degrees today but it is not clear if this makes radiography a profession.

Exploring the use of Bourdieu's replacement of the concept of 'profession' with that of 'field'

As mentioned in the Introduction, there are many suggestions about how to define a profession and what a profession is, some with lists or tick boxes of essential characteristics and traits such as behaving morally and ethically or having specialist knowledge, all of which it seems *need* to be matched in order for an occupational group to be called a profession ¹⁶⁻
¹⁹. Whiting, ²⁰ a radiographer who wrote about professionalism in radiography, noted thirteen characteristics of a profession but found similar disagreement between different authors about which should be included when judging whether 'profession' was a fair epithet for any occupational group. It is difficult to work out if any profession is a *true* profession based on these trait and characteristics approaches due to the contradictions between authors and the different interpretations that may be made. Using Bourdieu's idea of replacing the concept of 'profession' with that of 'field' can help overcome this problem

Bourdieu made few remarks about the concept of professionalism, which Schinkel and Noordegraaf ²¹ suggested may be due to Bourdieu's discussion of the concept from his perspective as a French citizen. However, Bourdieu ¹¹ wrote that he wanted to replace the concept of 'profession' with that of 'field', into which the players of the game can only join once they have the required skills and knowledge. Other authors have since written about this idea ^{1,21} although no other papers could be found by writers in healthcare using this particular concept. Noordegraaf and Schinkel ²¹ suggested that Bourdieusian concepts of field, habitus and capital, particularly of symbolic capital, could indeed be used to give an insight into professionalism and that professionalism is itself a form of symbolic capital which is socially constructed, meaning that although it has no actual value, it is accepted by society as something of value. Using this definition, radiography can be seen as a field, with the members holding the knowledge and skills of radiographers.

Putting replacement of the concept of 'profession' with that of 'field' to the test for radiography

Having described radiography as a Bourdieusian field, the next step is to explore how the concepts of profession and field apply to radiography. To be recognised as a field or profession, an occupational group needs recognition as such by others. For radiography, these others are medical practitioners, other allied health professionals (AHPs) and nurses, and also service users and the public. However, as discussed here, there are many definitions of 'profession' between which there is variation in what exactly constitutes a profession. Using Bourdieu's notion of a 'field' to represent a profession, it is less important to know what exactly a profession *is* and more important to know *what it does* to maintain its position. Writing from an American perspective Campeau ²² suggested that non-medical health professions have gained respect and professional recognition by promoting the education of practitioners and by defining their role themselves as professionals. In the UK, one of the ways the SCoR asks radiography to affect the view of others is by increasing the range and volume of research performed by its members ²³. This is an attempt to increase the symbolic capital of radiography, thus strengthening the borders of its field and strengthen its identity as a field or profession.

Freidson ²⁴ suggested that occupations he called 'paramedical' professions need to control an area of work separate to that of the body of medicine, but that this does not make them professions in themselves. He wrote that the professionalisation of medicine began with the advent of university tuition for medical doctors. Following his argument, university tuition for other groups would also confer professionalisation. Freidson was writing in 1988, around the time that in the UK, AHPs, were already moving to university-based education so should, in his view, be professions.

Considering these descriptions of profession, radiography is a 'profession' if a field concept is used to reinterpret the original discourses. The next section looks at what writers in radiography itself have said about its status.

The SCoR's own discourse is one of professional status, which, according to the available literature outlined next, was achieved many years ago. In 1937 State registration of radiographers became a reality; a situation which Moodie ¹⁵ suggested conferred 'professionalisation' since he maintained that registration means that authorities recognise the high standards of the members of the profession, in other words there was external recognition of the profession by the State. This is an example of the recognition of symbolic capital held by the profession and adding to it by conferring State recognition. The Registrar of the Council of Professions Supplementary to Medicine said in 1961 that 'supplementary does not mean subordinate' while Moodie ¹⁵ said that the State registered radiographer title 'on paper at least it put an end to the master servant relationship with the doctor' (p70).

Denley summed up the progress of radiography into a profession, saying:

I wonder if the founders of our Society realised that within a period of 50 years the few bits and pieces which they [the society] were then trying to link together would have developed into a profession which would be given State recognition...(p192) ²⁵.

Denley ²⁵ continued that this was an important step in the history of radiography, and by inference for the profession.

With registration, radiography (along with other non-medical groups including physiotherapists and speech therapists) became recognised by the State as a profession.

The Health and Care Professions Council (HCPC) now sets standards for the professional conduct of health professions including radiographers (HCPC, 2013) as does the SCoR, who publish a Code of Professional Conduct ²⁶. The word 'professional' in each title confirms the status that each organisation gives to radiography.

According to the radiographic discourse, radiography has long claimed to be a profession, as outlined above, but there have been voices historically within radiography offering less-positive views. Writing soon after the move of training into higher education in 1992, Hammick identified the importance of research to radiography in its *claim* to be a profession, saying:

Systematic enquiry to assemble new knowledge, and to legitimize present practice(s), is vital to support the claim to professionalism by radiography practitioners (p135) ²⁷.

Several years later, in 2006 Adrian-Harris, a radiography educator, questioned whether radiography was still an emerging profession. He suggested that a profession, particularly one in the medical sphere should have the following characteristics:

...responsibility to the public, a complex body of knowledge, controlled admission/entry into the profession and, in some definitions, autonomous practice and the need for continuing professional development (CPD) (p47) ²⁸.

This list of items recalls the tick box checks that can be difficult to use to define a profession, due to the inconsistencies between different lists and lack of empirical evidence for the inclusion of items, unlike Bourdieu's replacement of the concept of 'profession' with that of 'field' where there is no need for fixed criteria. Adrian-Harris ²⁸ suggested that the profession had made little progress in these areas listed in the past 10 years (from 1995) or the past 30 years (from 1975) and that radiography was still an emerging profession at the time of writing.

Hogg et al. ²⁹ used Downie's ³⁰ definition of a profession to suggest that although there were clear advances in professional status when comparing the position in 1980 to that in 1920, and again in 2007, radiography was still not a true profession in the traditional sense, but they only used Downie's criteria to reach this conclusion. They did however suggest that research, amongst other factors, has increased the radiography knowledge base, which was

one of Downie's criteria for a profession. However, like Adrian-Harris ²⁸ before them, they seemed to feel that the evidence given to show that radiography is a profession was still not enough, while constantly referring to radiography as a profession in this and another publication four years later ^{31,32}. Perhaps the years since then have seen more change than before as more radiographers become research active and there are increasing numbers of radiographers holding doctoral degrees meaning the profession can display their 'symbolic research capital' which might have changed this opinion now within radiography at least.

As Whiting ^{2,20} said, it is difficult to define 'profession', but she considered that radiography was still moving towards professional status during the fifteen years up to 2009. Whiting suggested that these changes included increased education for radiographers that would lead to:

...opportunities for radiographers to influence changes in practice, negotiate further role extensions, and contribute equally with other professional groups -thus validating professional status (p4) ²⁰

While increased opportunities for radiographers represents progress for the profession, the opportunities do not in themselves 'validate' the professional status but could be seen as ways in which radiographers are increasing their capital by doing boundary work around the field of radiography. Bourdieu ³ described boundary work as the struggle to maintain and in some cases push at the boundaries of a field for example by increasing the scope of practice and having a body of research work which has evolved with the introduction of advanced and consultant practitioners in radiography. Whiting acknowledged this is a continuous process, saying:

Without substantial practice-based research, radiography cannot satisfy its responsibilities towards quality and effectiveness – moreover it restricts radiography's authoritative influence within healthcare, which further undermines professional status (p4) ²⁰.

Part of the importance to radiography of being a profession is to bring status and respect which Whiting²⁰ suggested will bring a concomitant improvement in the quantity and quality of student applicants in terms of 'skill, humanity, academic ability, and ambition'²⁰ to the profession. She suggested this was due to increased competition for places, leading to increased patient care and public visibility of and trust in the profession.

The main argument by these writers is that radiography is not a profession when compared to different criteria for defining a profession. However, as mentioned in the Introduction, there is disagreement about what defines a profession, and the choice of benchmarks vary. This is where Bourdieu's¹¹ suggestion of replacing the concept of 'profession' with that of 'field' makes sense as it offers no definition of profession but does offer the concept of 'field' as a way to think about occupational and professional groups. Based on this concept radiography is a profession when using Bourdieu's field theory, because it is a protected and recognised field. Perhaps regardless of the label given by others to radiography, what is important is the work done by its members for the benefit of patients. A thread runs through some of these writers above, which suggests that an increase in research activity could improve the way others see radiography as a profession through their recognition of symbolic capital within the field of radiography and work at the borders of the field and this concept is discussed next.

Maintaining and expanding the field: Professional fields and boundary work

Applying Bourdieu's notion of replacement of the concept of 'profession' with that of 'field' means that the profession of radiography, as all professions, must constantly attend to their borders or boundaries both maintaining them and pushing on them. For radiography, those at the edges of the field include radiologists into whose field radiographers are trying to extend their reach, and other health professionals from whom radiography is defending the boundaries of their field. Some of the resistance to radiographer role extension may be

explained by the field of radiologists strongly maintaining their borders, eventually delegating less desirable tasks which has led to radiographer role extension.

Larkin³³ noted that as early as 1903 there were comments about lay (non-medically trained) radiographers in the British Medical Journal and a position evolved where lay radiographers could practise radiography but could not offer a diagnosis based on the images produced.

Larkin³³ also reported on the issue of the medical profession basing some of its control over the use of X-rays on the fact that they are dangerous due to their nature as ionizing radiation even though at the time, the early twentieth century, the nature of this danger was not fully understood. Nevertheless, as part of their professional boundary building, radiologists claimed that public safety could only be maintained by them having supervisory powers over anyone who was unqualified as a medical doctor and using X-ray equipment.

the 1920's, when radiology and radiography were emerging as professions, radiologists resisted allowing anyone but medical practitioners, in other words themselves, to report on X-ray images³⁴. This can be interpreted as boundary work by early radiologists to make their position clear not only as being above radiographers but also being equal to other medical specialities. In a study of radiologists, Burri³⁵ suggested that there had been a breakdown of some of the barriers between radiologists and radiographers as the result of new technology such as Computerised Tomography (CT) and Magnetic Resonance Imaging (MRI). In the 1970's when these changes in image production started, Burri drew on Barley's³⁶ observations of radiology departments to suggest that these changes to the barriers came about because the new technologies had to be learned by looking at images and discussing them as they were produced rather than later in a reporting session. In other words, radiologists came out of their reporting offices and into the scanner control rooms, where the radiographers worked. However, at that time radiologists still resisted allowing radiographers to report on the images demonstrating in Bourdieu's¹¹ words, the 'space of competition and

struggle' at the borders between the professions. Burri ³⁵ continued with a discussion of radiologists defending their professional field against other medics, which centred on radiologists feeling that they have the best knowledge and experience to interpret and report on images. This attitude may account for the longstanding resistance towards radiographer reporting as in the past radiologists resisted reporting by *any* other group or profession outside the boundaries of radiology.

The power relationships in caring professions including nursing, remedial therapies and social work were explored by Hugman ³⁷ with an observation that less desirable tasks may be passed down to an 'inferior' profession. While his work did not specifically include radiographers their background is similar to the other professions included, and Hugman's theories can help to explore power and the radiography profession in a like manner. Hugman ³⁷ suggested that there is a difference between 'caring for' a patient and 'caring about' a patient. 'Caring for' a patient involves the physical acts of caring for a patient such as administering medicines and changing soiled linen, physical tasks historically associated with women, either in the home or in a professional caring role and which can be equated to less-desirable tasks. Witz ³⁴ discussed professions and patriarchy, writing that although radiography was mixed gender from the beginning, male radiographers who were mainly army personnel had sought to exclude females, who were civilians, by setting up a diploma and examination. The premise was that females would be unable to cope with the rigours of the training and lack the academic abilities needed to pass the exams. However, this exclusion attempt was not effective, and by the 1920s, radiography was a female dominated occupation. However, radiology was a male dominated profession and Challen et al. ³⁸ suggested that this gender imbalance may have led to a lack of confidence within the female dominated profession of radiography, leaving radiographers in the 'caring for' role. By contrast, 'caring about' is described as a hands-off thinking task such as prescribing the

medicine or being concerned, (at a distance from the patient), about cross infection risks, which are associated with the historically masculine role of medicine. For medical imaging this can be interpreted as the 'caring for' duties of the radiographer looking after the patient being imaged, while the radiologist is 'caring about', more at a distance reporting on images taken, in some cases after the patient has left the imaging department. However, the roles of both professions are not always as clear-cut as this and, like other professions, have increasing overlaps.

Writing in 1983, before radiographer role extension was happening, Larkin ³⁹ suggested that medical specialities had found space and resources to develop by passing those tasks deemed less pleasant or lacking in esteem to other members of the health labour force. An example of this was the way radiologists delegated to radiographers the reporting of some, perhaps more basic, radiographs so that radiologists could concentrate on reporting the 'new' imaging formats such as CT and MRI. This process of delegation of tasks from an established professional group such as medicine implies that the new group of operators is in some way inferior to the first group. Larkin ³³ suggested that radiology started this way itself as a new division within medicine, so having a low status themselves compared to established branches of medicine such as general physicians and surgeons. At the beginning of the twentieth century, they shared this low status with specialists such as anaesthetists, pathologists, and obstetricians. Witz ³⁴ commented that radiologists passed less-desirable tasks to radiographers, in those times the act of producing the images, while keeping the task of reporting images to themselves. Thus, radiologists were working on strengthening the boundaries of their own profession by delegating the less desirable tasks to others. Since radiography evolved as a lower status to radiology, it may be that the radiology profession, in an effort to boost its own status, suppressed the status of

radiography more than might have happened if radiology had already been an established division within medicine.

However, some twenty years after the inception of radiographer reporting, a skill previously wholly within the domain of radiologists, there are numerous research papers written by radiographers showing similar results to radiologists in reporting, for example Piper et al. ⁴⁰, Brealey et al. ⁴¹ and Woznitza et al. ⁴². Snaith et al. ⁴³ showed how advanced and consultant practice was established in radiography. and that these roles go beyond taking tasks from radiologists to fully supporting service delivery. In Bourdieusian terms radiographers are now not only extending their practice by pushing at the boundaries between themselves and radiologists but also have new roles and activities which are now accepted as being within their own field.

Conclusion

The use of Bourdieu's replacement of the concept of 'profession' with that of 'field' can be used as a guide through the practical issues faced when evaluating whether or not radiography is a profession ⁵. The conclusion, based on the argument through this paper, is that using Bourdieu, radiography can be considered to be a field and thus as a profession, and one which is working to maintain its status by increasing its symbolic capital.

Radiography is doing this by increasing the research output and evidence base of the profession and through role extension into what were previously considered to be radiologists' tasks and roles.

Implications for practice

Radiographers can perhaps be assured that radiography is a profession when using Bourdieu's field theory and it should be proudly described as such. This paper shows how

theoretical frameworks and concepts from outside radiography can be used to support new ways of thinking within the profession which may be useful to future writers and researchers.

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