

favourable than that for other employee-authors (except journalists), the strong custom and practice of universities has been not to include traditional scholarly subject matter - academic papers, monographs, textbooks - in the category of works made 'in pursuance of' the terms of employment.

Where teaching materials are concerned, the picture is different. Some university statutes have assumed the institution's capacity to claim full copyright in this form of intellectual property. In fact the validity of this claim has not been decided at law; we have no actual decision as to the authority of university administrative powers relative to the powers of the Copyright Act. In practical terms, it would be absurd if, on moving to a new post and in the absence of a prior contractual agreement to the contrary, we left behind not only our old phone number but also our future capacity to give a lecture already given at the former workplace. Such transfer of 'information' - which applies equally to an academic's research 'capital' - is part of the accepted flow in the teaching and research personnel marketplace. The 'value added' through work experience at one institution can be legally exploited at another. Indeed, any other practice would be intolerable for the orderly workings of what is, in this respect, a de facto unified national system.

Conversely, where course materials have been collectively produced for an institutional venture, an individual's departure should not prevent the further use of the materials by her or his former employer. Difficulties can arise where materials are topped and tailed by someone other than the author, or where materials written for use in one context are delivered in another. Such enforced publication happens when an independent company or consortium - of the sort that exists in Victoria - delivers to students in, say, an Islamic context materials that the author would not have chosen to deliver there. After all, it is both polite and intelligent to say one thing to one audience and something different to another. Here is yet another problem to be managed. The answer is neither to denounce the 'commodifying' forces of late capitalism nor to adopt a luddite cringe and never put a lecture into a form that someone or something else could appropriate. Sketching indecipherable hieroglyphs on a transparency might baffle

the aliens of the 'consortium' and thus elude their property claims but it does not represent a rational and professional conduct. The task is rather to define and institute such conduct.

The foregoing are some of the legal and cultural circumstances. Listing them shows something of the multiple forces acting on us to the extent we operate within the field of intellectual property. The papers that follow, four by intellectual property lawyers, three by non-lawyers with an interest in the question, seek to inform the reader on how intellectual property should be administered in the universities. The new 'electric' academic needs intellectual property guidelines.

The relations of academics, individually as well as through FAU-SA, to bodies such as CAL and the Australian Copyright Council remain to be elaborated. We shall likely see realignments of what, in such fluid circumstances, begin to look outdated positions of resistance and strategies of opposition. Beautiful hypotheses totter in the face of circumstances. New dispositions will be forged, not least a shift from thinking, as infringers, how best to elude the Copyright Act and the CAL inspection to thinking, as authors, that we and the CAL are, for some purposes, on the same side. For the time being, the universities remain key sites for the production and dissemination of new knowledge. Clarification should thus be sought for at least minimum standards of protection for academics' intellectual property rights, particularly in industrial circumstances where the emergence of enterprise bargaining makes the role of federal industrial awards less certain. Intellectual property is increasingly a concern for government and the private sector. For this reason, the academic teaching and research community - as producer of and dealer in intellectual property - cannot be untouched by changing public policy and legal and commercial circumstances.

These observations are not intended to induce a negative posture. Rather than encouraging indignant or even apocalyptic talk of the 'debilitating' of science, the 'commodification' of humanistic culture and the 'appropriation' of academics' fundamental rights, the following papers point towards an acceptable management of the difficult issues of intellectual property ownership, control and consumption in universities.

Intellectual property rights in the Australian university context: An overview

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1 Introduction

The purposes of this article are:

- to describe the existing legal position within the Australian universities with respect to the ownership and exploitation of intellectual property rights by staff, students and outside contractors;
- to identify issues that require attention in this area; and
- to suggest some possible solutions to these problems.

2 The subject-matter covered by the rights in question

It is as well to begin this discussion with a brief description of the subject-matter covered by the rights which are compendiously referred to as "intellectual property". These are:

- **Patents for inventions:** useful developments in the areas of science and technology that may be protected by the grant of a patent or petty patent (for less significant inventions). Patents confer a monopoly form of protection that prevents anyone else from exploiting the subject matter of the invention. They run for a limited term of 16 years and must satisfy certain strict requirements before they are granted. These include the need for the alleged invention to be "new", "inventive" and "useful". The patent application procedure is often protracted and costly, but the protection, once obtained, can be very powerful as it gives the patentee virtually absolute control over the use and exploitation of the patented invention.
- **Circuit layouts, or the plans for integrated circuits ("ICs"):** these have only recently become the subject of specialised protection and last for between 10-20 years, depending upon the time when first commercial exploitation of the IC takes place. Unlike a patent, there is no registration procedure, but the protection granted is essentially protection against copying, not a monopoly right (as in the case of a patent). There are also a number of significant exceptions to the protection granted, particularly in the area of reverse engineering, which reduces the value of this protection.
- **Plant variety rights:** once again, these have only recently been made the subject of legislative protection. They are intended essentially to provide breeders of new plant and seed varieties with proprietary rights in those varieties. There is an application procedure which must be followed and certain criteria must be satisfied before protection is granted. This lasts for 20 years and is akin to that of a patent, although it is considerably narrower in scope. Significant amendments to the plant variety rights legislation are likely to be made in late 1993.
- **Registered designs:** this is a monopoly form of protection which is granted for 16 years in respect of new and original designs for the shape, configuration or ornamentation of useful articles. To obtain protection, the design must be registered and there are certain strict tests that must be satisfied.
- **Copyright:** this covers two broad categories of subject-matter:
 - (a) "Works" or creations of a literary, dramatic, artistic or

musical character. Protection arises automatically once the work comes into existence (there is no need for registration or any like procedure as in the case of patents or designs). The term of protection is very lengthy: the life of the human author plus 50 years. Furthermore, the scope of protection granted is extremely wide: it not only prevents unauthorised copying and adaptations of the work, but also extends to other forms of public dissemination, such as performance, broadcasting and cable diffusion. There is no aesthetic or qualitative criterion for the obtaining of protection: so long as the work is not copied from elsewhere and represents the result of the author's efforts and skill, there is no requirement of novelty or inventiveness as in the case of patents or designs. Furthermore, the range of subject-matter protected as works is very wide. Among other things, it includes databases and compilations, computer programs, photographs, design and technical drawings, and buildings.

(b) *Subject-matter other than works.* This category covers subject-matter of a more industrial or manufacturing character where corporate, rather than human, authors are concerned. It covers sound recordings (including CDs, tapes and cassettes), films (including videograms and discs), the broadcast signals of radio and television transmitters, and the typographical layouts of published works. The term of protection given to these subject-matter is shorter than for works (usually for a period of 50 years) and the rights granted are also more limited in scope. Nevertheless, as a matter of marketplace reality, the owners of sound recordings and film copyrights are often able to command higher royalties for the use of their material by third parties than are the owners of copyright in works.

- **Live performances:** protection of a very limited nature has been recently granted to live performers (actors, musicians, dancers, lecturers, mime artists and the like) to prevent the unauthorised recording and broadcasting of their performances. This is not a copyright, but it may enable performers to charge fees for the use of their performances by third parties in particular circumstances. There is a possibility that this form of protection may be enhanced in the medium future.
- **Trade marks:** these are statutory monopoly rights that are given with respect to distinctive marks or insignia, eg a name, invented word, symbol or the like, which a trader uses to identify a good or service with which the trader is associated. Registration is required and the conditions for this are quite strict. Trade marks, however, may be extremely potent weapons in the marketplace, as they are the "flagship" for particular products or services and can therefore be extremely valuable. Protection is for an indefinite term, but it is possible to seek the revocation of the registration of marks where they have not been used, have become generic or have become confusing or deceptive. Sweeping changes in the trade mark law have recently been foreshadowed by the Commonwealth Government and it is possible that new legislation to give effect to these changes may be introduced in the course of 1993.
- **Passing off and unfair competition:** these are non-statutory forms of protection which may enable a trader to protect his or her

reputation or goodwill where another party seeks to pass off goods or services as those of the first trader or otherwise to claim an association or affiliation with that person.

- **Trade secrets:** this is another non-statutory area where protection may be obtained for information of any kind which is unpublished and out of the public domain. In particular, it may protect technological and commercial information that is not covered by patents or copyright.

3 Ownership of these rights at present

The rules governing the ownership of the different types of intellectual property rights described above vary slightly from right to right as well as according to the category of creators concerned. In the University context, there are four main categories to be considered:

- academic staff
- non-academic staff
- outside contractors and consultants
- students

The account which follows is not a detailed one, but differences between the rights concerned are pointed out where these become relevant.

3.1 Academic staff

The general position is that the intellectual property rights in any creation made by academic staff belong to the University if that creation has been made in the course of their employment pursuant to a contract of service.

The first requirement is that they are employees, ie employed by the University pursuant to a contract of service. There is no precise test as to what constitutes a contract of service. In some instances, it may be easily established by pointing to the control that the alleged employer can exercise over the individual's daily activities. In others, there may be an absence of close control, but it is clear that the person is completely integrated into the employer's organisation in that he or she attends there daily, receives a regular salary, superannuation and holiday benefits, and so on. This is probably the case with the great majority of academic staff, even though they may receive relatively little direction from their departmental heads, Deans or the Vice-Chancellor as to how and when they must carry out their jobs.

The second requirement is that the subject-matter in which the putative intellectual property rights exist must have been made in the course of their employment subject to that contract of service. This necessitates an examination of the terms of that contract. In general (although the wording has varied over the years), the contracts of most academic staff require them to carry out three principal functions: teaching, research and administration. It is then necessary to ask whether the subject-matter in question was made in the course of carrying out one of these functions. Because academic staff do not work according to set hours (apart from lecture and class times and meetings), it is possible for all these functions to be performed outside the hours when the University is generally open and away from the University, eg lectures or papers for a committee meeting may be prepared at home at night or at the weekend, as might the writing up of a particular piece of research. In the case of teaching and administration, however, these functions are reasonably well defined and it should always be possible to determine whether what has been created was done for the discharge of that particular purpose. In the case of research, this inquiry may be more difficult, and it will be necessary to determine the broad area of research in which that staff member is employed to work. If this were not so, it might be possible for the University to lay claim to the ownership of the fruits of any research whatever that is performed by a staff member, even though this falls completely outside the discipline in which that person is employed to teach and research. An extreme example of this would be the professor of chemistry who makes a breakthrough in Shakespearean scholarship in her spare time. A more borderline instance would be the mechanical engineer who pioneers a development in a related field, such as electrical engineering or computer science. Further-

more, even if the subject-matter in question does fall directly within the staff member's stated area of expertise, it may still not belong to the University if it was done in conformity with the University's outside work rules which permit staff members to exercise their skills outside the University for their own benefit.

Assuming that the above two requirements are satisfied, ie that the staff member is employed under a contract of service and the subject-matter was made pursuant to the terms of that contract, the general position is that the University owns any intellectual property right or rights which exist in that subject-matter. This is subject to two exceptions:

- Any express condition in the contract of employment that might touch upon the ownership of relevant intellectual property rights: given the University's initial strong position, these provisions would usually be in the employee's favour, eg a provision that specifically assigns to the employee a share in the ownership or exploitation of the rights in questions or a share of any royalties derived from their exploitation.
- Any variation of the contract that has occurred through a "custom" of the workplace or through the University waiving its rights or some of those rights. This is of particular relevance in the area of copyright. Traditionally, universities have made no claim to the copyright in any of the works or other subject-matter made by their academic employees. There may be a number of reasons for this, including tradition and/or the desire to avoid involvement in the management of rights that are often numerous and of limited pecuniary value. Whatever the reason, it is possible to argue now that there is a term in the contracts of all University academic staff that has arisen by custom and which has the effect of vesting all copyright in the works and other similar creations in the staff members themselves. This is probably the correct view, as otherwise all publishing contracts signed by academics would be potentially invalid, as the staff members would then have no rights to sell or license to their publishers. For this position to change, it would be necessary for the University to make an express declaration to this effect in staff members' contracts of employment so as to bring the custom to an end and to restore the normal position that otherwise applies with respect to employees' copyright. In the case of patents, designs and other similar rights, it seems clear that no similar custom has arisen, as most Universities have been careful to ensure that these rights are retained: see, for example, the current Patents and Inventions Statutes of Monash and Melbourne Universities. The distinction between copyright and patents may appear anomalous, but in the past it has probably excited no particular attention, as copyrights were generally of small value while patents could be potentially worth many millions of dollars. This position is now changing, as some copyright material may be just as valuable, eg computer programs, electronic data bases, films and so on.

3.2 Non-academic staff

The same legal rules that apply to academic staff apply to this group, although their impact may be considerably different. With this group, it may be easier to define their terms of employment, with the consequence that anything created in the course of carrying this out will clearly belong to the University. Thus, technical staff employed in laboratories or workshops will usually have clearly defined functions, and it will only be where they carry on work outside those limits that questions of non-University ownership of inventions, etc, will arise. For those employed in the administrative sections of the University, there would be no doubt that the University owns the copyright in all reports, memoranda and other documents prepared in the course of their duties.

3.3 Outside contractors and consultants

Where work is done for the University by outside contractors or consultants, the general position is that ownership of any intellectual property rights will belong to those persons rather than the University,

subject to any contrary agreement between the parties. This may give rise to shared ownership of rights where work is done jointly by outside contractors and University employees. Further complications may arise where work is done by University employees, but is funded from outside sources. In each of these cases, however, the ownership of any intellectual property rights can be dealt with expressly in contractual arrangements between the parties.

3.4 Students

As students are not employees of the University in which they are enrolled, the ownership of any intellectual property rights in subject-matter they create belongs to them, rather than the University. However, it is possible that, as with outside contractors, this position may be varied by agreement between the parties, for example, by express provision to this effect in the statutes and regulations that form part of the contractual arrangement between students and the University. It should be noted that it would not be possible for such a statutory provision to vest the ownership of such rights automatically in the University (this can only occur in the case of employees). Rather, such a provision would have to require students to assign such rights once the subject matter comes into existence. This would be an enforceable right possessed by the University, but it would be possible to waive this in appropriate cases, for example, where the University has no real interest in the exploitation of the subject matter in question.

4. Issues for consideration

It will be seen from the above that, without changes in the existing law, universities can only affect the ownership of intellectual property rights where students and outside contractors are concerned through express agreement to that effect. On the other hand, the University's rights with respect to the creations of its employees are considerable and could even be expanded in the area of academic copyright. What are the issues that should be taken into account when deciding policy on these matters? Several suggest themselves immediately:

- 1 In a period when University funding is being carefully monitored and restricted by government, universities need to ensure that they exploit to the fullest extent the property rights that they have. These obviously include intellectual property rights and indicate the need for the University to have at its disposal highly skilled officers who can undertake the commercial exploitation of these rights.
- 2 It is both equitable and practically necessary that some share in the proceeds of the exploitation of these rights reverts to the individual creator or creators. The question of equity arises because the subject-matter would not have come into existence without the creative efforts of that person and such ingenuity is worthy of reward. The question of practical necessity arises because of the low salaries that many of these individuals are paid by the University in comparison with their equivalents in private industry. Some incentive is required to retain these people within the University and a share in the proceeds of what they have done is a very easy way to provide this. Universities have long recognised the wisdom of this approach in the case of patents: the challenge is to strike an appropriate balance between the legitimate interests of the University and the private interests of the employee in relation to intellectual property rights generally.
- 3 It is necessary to question whether the distinction that has traditionally been drawn between copyright and other intellectual property rights should be maintained. As stated above, it seems anomalous, particularly today, as many categories of copyright subject matter can be extremely valuable.

5 Some possible solutions

In the light of the above, the following changes to University policies governing intellectual property rights might be considered as starting points for further discussion.

5.1 For reasons that are set out in 5.5, a distinction should be retained between copyright and other intellectual property rights. However, whereas most Universities to date have only dealt expressly with patents, there should now be a general policy that the same approach applies to all forms of intellectual property (other than copyright). This would include designs, circuit layouts, plant variety rights, confidential information and trade secrets, and trade marks, as well as patents.

5.2 For intellectual property rights other than copyright, the general position that the University owns the rights in any protectable subject-matter made by its employees pursuant to the course of their employment should remain. It is probably unnecessary to state this in statutory form, as the general law of intellectual property would give rise to this result in any event. However, as the statutes or regulations of a University usually form part of the terms of employment of its employees, it is as well for this to be stated clearly in advance. As there seems to be no reason to distinguish between the position of academic and non-academic employees, both could be dealt with in the same statute or regulation.

5.3 Specific provision should be made for students so that their position with respect to the ownership of intellectual property rights is known at the outset of their contract with the University. The appropriate approach would be to require the student to assign the rights in the subject matter once it comes into existence, subject to the power of the University to waive this obligation in appropriate cases or classes of cases, for example, where the subject matter is of minimal value.

5.4 There should be a clear legislative statement concerning the right of University employees and students to an identifiable share in any remuneration obtained by the University from the exploitation of the intellectual property right in question. It is suggested that a minimum percentage share of net income should be prescribed (say 30%) but that this might be increased at the discretion of the University.

5.5 A different approach is appropriate in the case of copyright material. The exploitation of much of this is of no real importance to the University whilst the cost of administration of such rights may well outweigh the possible financial return and impose unacceptable burdens on the relevant University officers. In such cases, it would be preferable for the University simply to abandon its rights in favour of the employee (as is probably the case at present - see para 3.1 above) subject to the retention of any necessary licences permitting the University to make such use of the material that is necessary for its own purposes.

5.6 However, it would also be appropriate for universities to identify those categories of subject-matter in which they do have a real commercial interest, and to deal with these in the same way as it does with the intellectual property rights in other subject matter made by University employees. That is, the rights in these kinds of copyright material should be retained by the University, subject to the right of the employee to a share in the net remuneration that is derived from the exploitation of that material by the University. Categories of subject-matter that might be dealt with in this way include computer programs, data bases and films.

5.7 Similar provision to those proposed in 5.5 and 5.6 should apply to the copyright in material made by students in the course of receiving instruction or pursuing their studies within the University.

5.8 In all cases where the universities retain copyright in material made by employees or students, they should ensure that the authorship of that material is duly acknowledged. Such acknowledgement is consistent with the right of attribution that is recognised internationally in the *Berne Convention for the Protection of Literary and Artistic Works* to which Australia is a party.

If adopted, these changes might strike a fairer balance between the rights and interests of universities and their staff and students than is presently the case.