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VARIETIES

There are many ways to deliver OA: personal web sites, blogs, wikis, databases, ebooks, videos, audios, webcasts, discussion forums, RSS feeds, and P2P networks.[1] Unless creative thinking stops now, there will be many more to come.

However, two delivery vehicles dominate the current discussion: journals and repositories.

OA journals are like non-OA journals except that they're OA. Making good on that exception requires a new funding model, but nearly everything else about the journal could be held constant, if we wanted to hold it constant. Some OA journals are very traditional except that they're OA, while others deliberately push the evolution of journals as a category. (Some toll-access journals also push that evolution, if we don't count stopping short of OA.)

Like conventional, toll-access journals, some OA journals are first-rate and some are bottom feeders. Like

conventional journals, some OA journals are high in prestige and some are unknown, and some of the unknowns are high in quality and some are low. Some are on solid financial footing and some are struggling. Also like conventional journals, most are honest and some are scams.

As early as 2004, Thomson Scientific found that "in each of the broad subject areas studied there was at least one OA title that ranked at or near the top of its field" in citation impact. The number of high-quality, high-impact OA journals has only grown since.[2]

Unlike toll-access journals, however, most OA journals are new. It's hard to generalize about OA journals beyond saying that they have all the advantages of being OA and all the disadvantages of being new.[3] To be more precise: A disappointing number of OA journals don't have all the advantages of being OA because they retain needless permission barriers. (See section 3.3 on gratis and libre OA.) At the same time, a heartening number of OA journals no longer suffer from the disadvantages of being new.

Like conventional journal publishers, some OA journal publishers are for-profit and some are nonprofit. Like conventional publishers, there are a few large OA publishers and a long tail of small ones, although the largest OA publishers are small compared to the largest conventional publishers. Unlike conventional publishers, the profitable for-profit OA publishers have moderate rather than obscene profit margins.

OA journals and repositories differ in their relationship to peer review. OA journals perform their own peer review, just like conventional journals. Repositories generally don't perform peer review, although they host and disseminate articles peer-reviewed elsewhere. As a result, gold and green OA differ in their support costs and in the roles they can play in the scholarly communications universe.

OA repositories are online collections or databases of articles. Unlike OA journals, OA repositories have no counterpart in the traditional landscape of scholarly communication. That makes them woefully easy to overlook or misunderstand.

By default, new deposits in OA repositories are OA. But most repositories today support *dark deposits*, which can be switched to OA at a later date. Most OA repositories were launched to host peer-reviewed research articles and their preprints. But often they include other sorts of content as well, such as theses and dissertations, datasets, courseware, and digitized copies of works from the special collections of the hosting institution's library. For scholars, repositories are better at making work OA than personal web sites because repositories provide persistent URLs, take steps for long-term preservation, and don't disappear when the author changes jobs or dies.

3.1 Green and Gold OA[1]

Gold and green OA differ in at least two fundamental respects.

First, OA journals and repositories differ in their relationship to peer review. OA journals perform their own peer review, just like conventional journals. Repositories generally don't perform peer review, although they host

Terminology

The OA movement uses the term *gold OA* for OA delivered by journals, regardless of the journal's business model, and *green OA* for OA delivered by repositories. *Self-archiving* is the practice of depositing one's own work in an OA repository. All three of these terms were coined by Stevan Harnad.

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Second, OA journals obtain the rights or permissions they need directly from the rightsholders, while repositories ask depositors to obtain the needed rights or permissions on their own. Even when the depositors are the authors themselves, they may already have transferred key rights to publishers. As a result, OA journals can generate permission for reuse at will, and OA repositories generally cannot. Hence, most libre OA is gold OA, even if it's not yet the case that most gold OA is libre OA. (See more in section 3.3 on gratis and libre OA.)

Gold and green OA require different steps from authors. To make new articles gold OA, authors simply submit their manuscripts to OA journals, as they would to conventional journals. To make articles green OA, authors simply deposit their manuscripts in an OA repository.

Most importantly, the green/gold distinction matters because if authors can't make their work OA one way, they can make it OA the other way. One of the most persistent and damaging misunderstandings is that all OA is gold OA. Authors who can't find a high-quality, high-prestige OA journal in their field, or whose submissions are rejected from first-rate OA journals, often conclude that they must give up on OA or publish in a second-rate journal. But that's hasty. If they publish in the best toll-access journal that will accept their work, then—more often than not—they may turn around and deposit the peer-reviewed manuscript in an OA repository. Most toll-access publishers and toll-access journals give blanket permission for green OA, many others will give permission on request, and the numbers approach 100 percent when authors are subject to green OA mandates from their funding agencies or universities. (More in chapters 4 on OA policies and 10 on making your own work OA.)[4]

One of the early victories of the OA movement was to get a majority of toll-access publishers and journals to give blanket permission for author-initiated green OA. But this victory remains one of the best-kept secrets of scholarly

publishing, and widespread ignorance of it is the single most harmful consequence of green OA's invisibility. Overlooking this victory reduces the volume of OA and creates the false impression that a trade-off between prestige and OA is common when in fact it is rare. Forgetting that green OA is compatible with conventional publishing also feeds the false impression that policies requiring green OA actually require gold OA and thereby limit the freedom of authors to submit work to the journals of their choice. (More in chapter 4 on policies.)

Most publishing scholars will choose prestige over OA if they have to choose. The good news is that they rarely have to choose. The bad news is that few of them know that they rarely have to choose. Few realize that most toll-access journals permit author-initiated green OA, despite determined efforts to explain and publicize this early victory for green OA.

There are two reasons why OA is compatible with prestigious publication, a gold reason and a green one. The gold reason is that a growing number of OA journals have already earned high levels of prestige, and others are steadily earning it. If there are no prestigious OA journals in your field today, you could wait (things are changing fast), you could help out (by submitting your best work), or you could move on to green. The green reason why OA is compatible with prestige is that most toll-access journals, including the prestigious, already allow OA archiving. As

noted, this "most" can become "all" with the aid of an effective OA policy. (See chapter 4 on policies.)

The most useful OA repositories comply with the Open Archives Initiative (OAI) Protocol for Metadata Harvesting (PMH), which makes separate repositories play well together. In the jargon, OAI compliance makes repositories *interoperable*, allowing the worldwide network of individual repositories to behave like a single grand virtual repository that can be searched all at once. It means that users can find a work in an OAI-compliant repository without knowing which repositories exist, where they are located, or what they contain. (OA and OAI are separate but overlapping initiatives.)[5]

Most of the major academic and nonacademic search engines crawl OA journals and OA repositories. For example, Google, Bing, and Yahoo all do this and do it from self-interest. These search engines now provide another method (beyond OAI-based interoperability) for searching across the whole network of repositories without knowing what exists where. A common misunderstanding sees OA repositories as walled gardens that make work hard to find by requiring readers to make separate visits to separate repositories to run separate searches. The reverse is true in two senses: OA repositories make work easier to find, and toll-access collections are the ones more likely to be walled gardens, either invisible to search engines or requiring separate visits and separate searches.

Disciplinary repositories (also called *subject* repositories) try to capture all the research in a given field, while *institutional* repositories try to capture all the research from a given institution. Because both kinds tend to be OAI-compliant and interoperable, the differences matter very little for readers. Readers who want to browse a repository for serendipity are more likely to find useful content in a disciplinary repository in the right field than in an institutional repository. But most scholars find repository content by keyword searches, not by browsing, and through cross-archive searches, not through local single-repository searches.[6]

However, the differences between disciplinary and institutional repositories matter more for authors. On the one hand, institutions are in a better position than disciplines to offer incentives and assistance for deposit, and to adopt policies to ensure deposit. A growing number of universities do just that. On the other hand, scholars who regularly read research in a large disciplinary repository, such as arXiv for physics or PubMed Central for medicine, readily grasp the rationale for depositing their work in OA repositories and need less nudging to do so themselves. (More in chapter 4 on policies.)[7]

Because most publishers and journals already give blanket permission for green OA, the burden is on authors to take advantage of it. In the absence of an institutional policy to encourage or require deposits, the spontaneous

rate of deposit is about 15 percent. Institutions requiring deposit can push the rate toward 100 percent over a few years.[8]

The reason the spontaneous rate is lower than the nudged, assisted, and mandated rate is rarely opposition to OA itself. Almost always it's unfamiliarity with green OA (belief that all OA is gold OA), misunderstanding of green OA (belief that it violates copyright, bypasses peer review, or forecloses the possibility of publishing in a venerable journal), and fear that it is time-consuming. In this sense, author unfamiliarity and misunderstanding are greater obstacles to OA than actual opposition, whether from authors or publishers.[9]

The remedies are already spreading worldwide: launching more OA journals and repositories, educating researchers about their gold and green OA options, and adopting intelligent policies to encourage gold OA and require green OA. (More in chapter 4 on OA policies.)

3.2 Green and Gold as Complementary[10]

Some friends of OA focus their energy on green OA and some focus on gold OA. Some support both kinds about equally and have merely specialized. But some give one a higher strategic priority than the other. I'll argue that green and gold OA are complementary and synergistic. We

should pursue them simultaneously, much as an organism must develop its nervous system and digestive system simultaneously.

Fortunately, this synergy is served even by differences of opinion about its existence. The fact that some activists give green OA a higher priority than gold, and some the reverse, creates a natural division of labor ensuring that good people are working hard on each front.

Green OA has some advantages over gold OA. It makes faster progress, since it doesn't require the launch of new peer-reviewed journals or the conversion of old ones. For the same reason, it's less expensive than gold OA and can scale up quickly and inexpensively to meet demand, while the bulk of the money needed to scale up OA journals is still tied up in subscriptions to toll-access journals.

Green OA can be mandated without infringing academic freedom, but gold OA cannot. (More precisely, gold OA can't be mandated without infringing academic freedom until virtually all peer-reviewed journals are OA, which isn't on the horizon.) A green OA policy at a university can cover the institution's entire research output, regardless of where authors choose to publish, while a gold OA policy can only cover the new articles that faculty are willing to submit to OA journals.

Green OA is compatible with toll-access publication. Sometimes this is because toll-access publishers hold the needed rights and decide to allow it, and sometimes

because authors retain the needed rights. Well-drafted OA policies can ensure that authors always retain the needed rights and spare them the need to negotiate with publishers. (See chapters 4 on policies and 6 on copyright.)

When the best journals in a field are toll-access—often the case today even if changing—green OA allows authors to have their cake and eat it too. Authors good enough to publish in the best journals may do so and still make their work OA, without waiting for high-prestige OA journals to emerge in their fields. When promotion and tenure committees create strong incentives to publish in venerable toll-access journals—often the case today even if changing—green OA allows authors to make their work OA without bucking institutional incentives or relinquishing institutional rewards.

Green OA works for preprints as well as postprints, while gold OA only works for postprints. For the same reason, green OA works for other kinds of work that peer-reviewed journals generally don't publish, such as datasets, source code, theses and dissertations, and digitized copies of work previously available only in another medium such as print, microfiche, or film.

On the other side, gold OA has some advantages over green OA. Gold OA articles needn't labor under restrictions imposed by toll-access publishers fearful of OA. Hence, gold OA is always immediate, while green OA is sometimes embargoed or delayed. Similarly, gold OA can

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always be libre, even if it doesn't take sufficient advantage of this opportunity, while green OA seldom even has the opportunity. (See chapter 4 on policies.)

Gold OA provides OA to the published version, while green OA is often limited to the final version of the author's peer-reviewed manuscript, without copy editing or final pagination. Making the OA edition the same as the published edition reduces the confusion caused by the circulation of multiple versions.

Gold OA performs its own peer review, without depending on toll-access journals to perform it. Hence support for gold OA supports the survival of peer review itself in case toll-access journals can no longer provide it.

Finally, green OA may be a manageable expense, but gold OA can be self-sustaining, even profitable.

Librarians traditionally distinguish four functions performed by scholarly journals: Registration (time stamp), certification (peer review), awareness (distribution), and archiving (preservation). We know that green and gold OA are complementary as soon as we recognize that green is better than gold for registration (its time stamps are faster) and preservation, and that gold OA is better than green OA for certification (peer review).

Some see green OA mainly as a tool to force a transition to gold OA. The idea is that rising levels of green OA will trigger the cancellation of conventional journals and pressure them to convert to gold OA. The growing volume

of green OA might have this effect. Some publishers fear that it will, and some OA activists hope that it will. But it might not have this effect at all. One piece of evidence is that green OA hasn't triggered journal cancellations in physics, where levels of green OA approach 100 percent and have been high and growing for nearly two decades. (More in chapter 8 on casualties.) Even if it did have this effect, however, it wouldn't follow that it is the best strategy for advancing gold OA. There are good prospects for a peaceful revolution based on publisher consent and self-interest. (More in chapter 7 on economics.)

Most importantly, however, we'll still want green OA in a world where all peer-reviewed journals are OA. For example, we'll want green OA for preprints and for the earliest possible time-stamp to establish the author's priority. We'll want green OA for datasets, theses and dissertations, and other research genres not published in journals. We'll want green OA for the security of having multiple OA copies in multiple independent locations. (Even today, the best OA journals not only distribute their articles from their own web sites but also deposit copies in independent OA repositories.) At least until the very last conventional journal converts to OA, we'll need green OA so that research institutions can mandate OA without limiting the freedom of authors to submit to the journals of their choice. We'll even want OA repositories as the distribution mechanism for many OA journals themselves.

A worldwide network of OA repositories would support one desirable evolution of what we now call journals. It would allow us to decouple peer review from distribution. Peer review could be performed by freestanding editorial boards and distribution by the network of repositories. Decoupling would remove the perverse incentive for peer-review providers to raise access barriers or impede distribution. It would also remove their perverse incentive to demand exclusive rights over research they didn't fund, perform, write up, or buy from the authors.[11]

On the other side, we'll still want gold OA in a world where all new articles are green OA. High-volume green OA may not have caused toll-access journal cancellations yet, even in fields where green OA approaches 100 percent. But we can't say that it will never do so, and we can't say that every field will behave like physics in this respect. If peer-reviewed toll-access journals are not sustainable (see section 2.1), then the survival of peer review will depend on a shift to peer-reviewed OA journals.

It won't matter whether toll-access journals are endangered by rising levels of green OA, by their own hyperinflationary price increases, or by their failure to scale with the rapid growth of new research. If any combination of these causes puts peer-reviewed toll-access journals in jeopardy, then peer review will depend on OA journals, which are not endangered by any of those causes. (In chapter 8 on casualties, we'll see evidence that toll-access journal price

increases cause many more cancellations than green OA does.)

Finally, if all new articles are green OA, we'll still want the advantages that are easier for gold OA than for green OA to provide: freedom from permission barriers, freedom from delays or embargoes, and freedom from ever-rising drains on library budgets.

Neither green nor gold OA will suffice, long-term or short-term. That's a reason to pursue both.

3.3 Gratis and Libre OA[12]

Sometimes we must speak unambiguously about two subspecies of OA. One removes price barriers alone and the other removes price barriers and at least some permission barriers. The former is *gratis OA* and the latter *libre OA*.

To sharpen their definitions, we need a quick detour into fair use. In the United States, fair use is an exception to copyright law allowing users to reproduce copyrighted work "for purposes such as criticism, comment, news reporting, teaching . . . , scholarship, or research" (to quote the U.S. copyright statute).[13]

Fair use has four characteristics that matter to us here. First, the permission for fair use is granted by law and needn't be sought from the copyright holder. Or equivalently, the statute assures us that no permission is needed

because fair use "is not an infringement of copyright." Second, the permission is limited and doesn't cover all the uses that scholars might want to make. To exceed fair use, users must obtain permission from the copyright holder. Third, most countries have some equivalent of fair use, though they differ significantly in what they allow and disallow. Finally, fair use is vague. There are clear cases of fair use (quoting a short snippet in a review) and clear cases of exceeding fair use (reprinting a full-text book), but the boundary between the two is fuzzy and contestable.

Gratis OA is free of charge but not more free than that. Users must still seek permission to exceed fair use. Gratis OA removes price barriers but not permission barriers.

Libre OA is free of charge and also free of some copyright and licensing restrictions. Users have permission to exceed fair use, at least in certain ways. Because there are many ways to exceed fair use, there are many degrees or kinds of libre OA. Libre OA removes price barriers and at least some permission barriers.

Fortunately, we don't always need these terms. Indeed, in most of this book I use "OA" without qualification. The generic term causes no trouble until we need to talk about differences between gratis and libre OA, just as "carbohydrate" causes no trouble until we need to talk about differences between simple and complex carbohydrates.

I'm borrowing the gratis/libre language from the world of software, where it expresses the same distinction. If the

terms sound odd in English, it's because English doesn't have more domesticated terms for this distinction. Their oddity in English may even be an advantage, since the terms don't carry extra baggage, as "open" and "free" do, which therefore helps us avoid ambiguity.[14]

First note that the gratis/libre distinction is not the same as the green/gold distinction. The gratis/libre distinction is about user rights or freedoms, while the green/gold distinction is about venues or vehicles. Gratis/libre answers the question, *how open is it?* Green/gold answers the question, *how is it delivered?*[15]

Green OA can be gratis or libre but is usually gratis. Gold OA can be gratis or libre, but is also usually gratis. However, it's easier for gold OA to be libre than for green OA to be libre, which is why the campaign to go beyond gratis OA to libre OA focuses more on journals than repositories.

If users encounter a full-text work online without charge, then they know it's gratis OA. They don't have to be told, even if they'd like to be told—for example, so that they don't have to wonder whether they're reading an illicit copy. But users can't figure out whether a work is libre OA unless the provider (author or publisher) tells them. This is the purpose of a *license*, which is simply a statement from the copyright holder explaining what users may and may not do with a given work.

Works under "all-rights-reserved" copyrights don't need licenses, because "all rights reserved" means that

without special permission users may do nothing that exceeds fair use.

The default around the world today is that new works are copyrighted from birth (no registration required), that the copyright initially belongs to the author (but is transferrable by contract), and that the rights holder reserves all rights. Authors who want to provide libre OA must affirmatively waive some of their rights and use a license to tell users they've done so. For convenience, let's say that an *open license* is one allowing some degree of libre OA.

Although the word "copyright" is singular, it covers a plurality of rights, and authors may waive some and retain others. They may do so in any combination that suits their needs. That's why there are many nonequivalent open licenses and nonequivalent types of libre OA. What's important here is that waiving some rights in order to provide libre OA does not require waiving all rights or waiving copyright altogether. On the contrary, open licenses presuppose copyright, since they express permissions from the copyright holder. Moreover, the rights not waived are fully enforceable. In the clear and sensible language of Creative Commons, open licenses create "some-rights-reserved" copyrights rather than "all-rights-reserved" copyrights.

The open licenses from Creative Commons (CC) are the best-known and most widely used. But there are other open licenses, and authors and publishers can always write

their own. To illustrate the range of libre OA, however, it's convenient to look at the CC licenses.[16]

The maximal degree of libre OA belongs to works in the public domain. Either these works were never under copyright or their copyrights have expired. Works in the public domain may be used in any way whatsoever without violating copyright law. That's why it's lawful to translate or reprint Shakespeare without hunting down his heirs for permission. Creative Commons offers CC0 (CC-Zero) for copyright holders who want to assign their work to the public domain.[17]

The CC Attribution license (CC-BY) describes the least restrictive sort of libre OA after the public domain. It allows any use, provided the user attributes the work to the original author. This is the license recommended by the Open Access Scholarly Publishers Association (OASPA) and the SPARC Europe Seal of Approval program for OA journals.[18] I support this recommendation, use CC-BY for my blog and newsletter, and request CC-BY whenever I publish in a journal.

CC supports several other open licenses as well, including CC-BY-NC, which requires attribution and blocks commercial use, and CC-BY-ND, which requires attribution and allows commercial use but blocks derivative works. These licenses are not equivalent to one another, but they all permit uses beyond fair use and therefore they all represent different flavors of libre OA.

While you can write your own open licenses or use those created by others, the advantage of CC licenses is that they are ready-made, lawyer-drafted, enforceable, understood by a large and growing number of users, and available in a large and growing number of legal jurisdictions. Moreover, each comes in three versions: human-readable for nonlawyers, lawyer-readable for lawyers and judges, and machine-readable for search engines and other visiting software. They're extremely convenient and their convenience has revolutionized libre OA.

The best way to refer to a specific flavor of libre OA is by referring to a specific open license. We'll never have unambiguous, widely understood technical terms for every useful variation on the theme. But we already have clearly named licenses for all the major variations on the theme, and we can add new ones for more subtle variations any time we want.

A work without an open license stands or appears to stand under an all-rights-reserved copyright. If the rights holder privately welcomes uses beyond fair use, or has decided not to sue for certain kinds of infringement, ordinary users have no way to know that and are forced to choose the least of three evils: the delay of asking permission, the risk of proceeding without it, and the harm of erring on the side of nonuse. These are not only obstacles to research; they are obstacles that libre OA was designed to remove.

The BBB definition calls for both gratis and libre OA. However, most of the notable OA success stories are gratis and not libre. I mean this in two senses: gratis success stories are more numerous than libre success stories, so far, and most gratis success stories are notable. Even if they stop short of libre OA, they are hard-won victories and major advances.

Some observers look at the prominent gratis OA success stories and conclude that the OA movement focuses on gratis OA and neglects libre. Others look at the public definitions and conclude that OA focuses on libre OA and disparages gratis. Both assessments are one-sided and unfair.

One hard fact is that gratis OA is often attainable in circumstances when libre OA is not attainable. For example, a major victory of the OA movement has been to persuade the majority of toll-access publishers and toll-access journals to allow green gratis OA. We're very far from the same position for green libre OA. Similarly, most of the strong OA policies at funding agencies and universities require green gratis OA. A few require green libre OA, and green libre OA is growing for other reasons. But if these funders and universities had waited until they could muster the votes for a green libre policy, most of them would still be waiting. (See section 4.3 on the historical timing of OA policies.)

A second hard fact is that even gratis OA policies can face serious political obstacles. They may be easier

to adopt than libre policies, but in most cases they're far from easy. The OA policy at the U.S. National Institutes of Health was first proposed by Congress in 2004, adopted as a mere request or encouragement in 2005, and strengthened into a requirement in 2008. Every step along the way was strenuously opposed by an aggressive and well-funded publishing lobby. Yet even now the policy provides only gratis OA, not libre OA. Similarly, the gratis OA policies at funders and universities were only adopted after years of patiently educating decision-makers and answering their objections and misunderstandings. Reaching the point of adoption, and especially unanimous votes for adoption, is a cause for celebration, even if the policies only provide gratis, not libre OA.[19]

The Directory of Open Access Journals is the most authoritative catalog of OA journals and the only one limiting itself to peer-reviewed journals. But only 20 percent of titles in the DOAJ use CC licenses, and fewer than 11 percent use the recommended CC-BY license. Viewed the other way around, about 80 percent of peer-reviewed OA journals don't use any kind of CC license. Some of these might use non-CC licenses with a similar legal effect, but these exceptions are rare. Simply put, most OA journals are not using open licenses. Most operate under all-rights-reserved copyrights and leave their users with no more freedom than they already had under fair use. Most are not offering libre OA. Even those wanting to block commercial use,

for example, tend to use an all-rights-reserved copyright rather than an open license that blocks commercial use, such as CC-BY-NC, but allows libre OA in other respects.[20]

I've argued that it's unfair to criticize the OA movement for disparaging gratis OA (merely on the ground that its public statements call for libre) or neglecting libre OA (merely on the ground that most of its success stories are gratis). But two related criticisms would be more just. First, demanding libre or nothing where libre is currently unattainable makes the perfect the enemy of the good. Fortunately, this tactical mistake is rare. Second, settling for gratis where libre is attainable makes the good a substitute for the better. Unfortunately, this tactical mistake is common, as we see from the majority of OA journals that stop at gratis when they could easily offer libre.

Let's be more specific about the desirability of libre OA. Why should we bother, especially when we may already have attained gratis OA? The answer is that we need libre OA to spare users the delay and expense of seeking permission whenever they want to exceed fair use. And there are good scholarly reasons to exceed fair use. For example:

- to quote long excerpts
- to distribute full-text copies to students or colleagues
- to burn copies on CDs for bandwidth-poor parts of the world

- to distribute semantically-tagged or otherwise enhanced (i.e., modified) versions
- to migrate texts to new formats or media to keep them readable as technologies change
- to create and archive copies for long-term preservation
- to include works in a database or mashup
- to make an audio recording of a text
- to translate a text into another language
- to copy a text for indexing, text-mining, or other kinds of processing

In some jurisdictions, some of these uses may actually fall under fair use, even if most do not. Courts have settled some of the boundaries of fair use but by no means all of them, and in any case users can't be expected to know all the relevant court rulings. Uncertainty about these boundaries, and increasingly severe penalties for copyright infringement, make users fear liability and act cautiously. It makes them decide that they can't use something they'd like to use, or that they must delay their research in order to seek permission.

Libre OA under open licenses solves all these problems. Even when a desirable use is already allowed by fair use, a clear open license removes all doubt. When a desirable

use does exceed fair use, a clear open license removes the restriction and offers libre OA.

When you can offer libre OA, don't leave users with no more freedom than fair use. Don't leave them uncertain about what they may and may not do. Don't make conscientious users choose between the delay of seeking permission and the risk of proceeding without it. Don't increase the pressure to make users less conscientious. Don't make them pay for permission. Don't make them err on the side of nonuse. Make your work as usable and useful as it can possibly be.[21]