

The Coming Orthodontic Information Age

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Today, information is the coin of the realm. Information is power, and it is control. It is even possible to manipulate people and events by withholding information. Clearly, information is critical to real progress.

Today's computers are nothing more than a way to manage, store, retrieve, and make available information. If information is the coin of the realm, we should be exceedingly rich today. Never before have we had the potential to access so much information so easily.

What prevents this magnificent concept from reaching full capacity for all of the information in the orthodontic literature? We are the users and we want access to all of the orthodontic information. Let me offer a very provincial and limited example—I want to know about canine impaction. Everything available in the literature is potentially available over the Internet. How do I get it?

In the case of *The Angle Orthodontist*, we are now online. We began this service last year, and all articles in all issues since the beginning of 2000 are available online. This means you can go to the Internet anywhere in the world and instantly have available everything we have published about canine impaction since 2000. This service has been free thus far and accessible to anyone with an Internet connection.

What an idea, and what a boon for information retrieval! Most of our sister orthodontic journals are, or soon will be, online also. On first blush, you may say what a bonanza! Now I can look at all of our journals right in my office whenever an unusual problem or question arises. That is how we would like it to work.

The practical problem is that, whereas movement from one journal to the next in the digital library should be only a click away, someone also has to pay for the digital library. Electronic publishers want to earn revenue in posting digital journals. To compound the problem, even when you have purchased access to multiple electronic journals, you still do not have linkages between the journals. You must click out of one site and click into another to view articles in 2 journals. Movement between journals is sharply limited. Both usage fees and the absence of linkages impede movement between journals.

Let us consider an alternative scenario. For instance, assume in our example that I searched *The Angle Orthodontist* web page's key words section, and under canine impaction I found Ericson's recent article that said, "... the number of diagnosed resorbed incisors was doubled with conventional tomography compared to intraoral films."¹ Maybe I want to know what reference 1 said. Today, I click on reference 1 and it brings me to Ericson's bibliography, where I discover that reference 1 is in the *American Journal*

of Orthodontics and Dentofacial Orthopedics (AJODO). Now, in order to read the referenced article, I need to know how to access the AJODO online service by finding their web site, and I need to have access to it. And so it is for all journals in all fields. The potential of the electronic library is staggering, but the realization of this potential is in conflict with the pragmatic world where publishers limit access because of the need to earn revenue.

There is a potential for breaking this intellectual catch 22. We, the users, would like freedom to jump electronically from one journal to the next when searching for information. What if, when I click on reference 1 in the above example, the computer would carry me on a link directly to the article referenced at the AJODO site where I could read it?

Linking is obviously good for users. As I read the article, there is a strong likelihood I will find other related references in the AJODO. However, if I want to read additional AJODO articles, the software will not let me access articles beyond the first link until I pay a fee, subscribe, or whatever qualifications the publisher wishes to make. Still, I did get to read the article I went there for, and I am better able to manage the problem. Additionally, I now know where to find additional information.

Linking is good for the publisher, too. The publisher's web site has just had a visit from a user of the digital library. Imagine what the publisher would have to pay to get a marketing firm to identify such a potential block of customers? Many visitors to the publisher's site will choose to buy future access, providing they find it friendly and useful. It is a major carrot to encourage the publisher to allow some limited free access to their site. It is also a beginning toward free access to a total digital library. Additionally, the publisher could add an e-mail message back to the visitor offering a subscription service, as so many other commercial sites on the Net now do.

It can be a win-win situation. We get convenient and greater access to sites of information we need. The publisher gets free marketing and the potential for building a greater subscription base. All of this for the price of a 1 time minor software modification.

Orthodontics can take the first step and begin to build the model of what the digital library can become. When you renew your subscription to your orthodontic journals, let your publisher know you want your subscription to include linkage with other journals. Send them a copy of this editorial. Subscribers are the lifeblood of the publishers. Let them know that you, your patients, and your practice all need to enjoy more of the awesome powers of the Internet. Then we will all be richer in the coins of our realm.