

## Volunteered *National Geographic* Information?

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In 1888, as the Age of Discovery drew to a close, the National Geographic Society was founded to “increase and diffuse geographic knowledge.” Now, at the dawn of the Age of Connectivity, that nineteenth-century vision vibrates with new promise. It has suddenly become possible, even likely, that the assumptions behind the Society’s mission statement—“Increase” at the top, by the elite; “diffusion” from the elite downward to the rest of us—might be overturned. Now, perhaps, a vast, global community can collectively aggregate geographic information that, if managed skillfully, can result in a far more horizontal, even omni-directional, increase and diffusion of geographic information and—if we’re lucky—knowledge.

It has taken us at National Geographic, like others, a dozen or so years to gain confidence in our ability to use new media for mission and business benefit. The much newer phenomenon of mass collaboration will require a similar period of adjustment, because it carries with it implications that none of us can really imagine. Although we’ve been invited to this meeting as “*specialists*,” none of us are *authorities* since the phenomenon is so new. I look forward to a lively discussion about the confusing array of challenges and opportunities that we face as we struggle to become authorities.

Surely one of our primary challenges is to figure out how to turn cool but unfocused activities, communities, and functionalities into engines for understanding. I can think of two possible approaches: One is to nurture and guide volunteer communities toward generating useful, rather than random, aggregations of information. A current example: Cornell Lab of Ornithology’s exemplary citizen science programs, which tap the ardor of the amateur birder (I know—I’m one) to accumulate data of real scientific value.

Another, potentially richer, approach is to find ways to mine unrefined volumes of user-contributed information to extract things of value. For instance, if one could convince many hundreds of thousands of people, in return for some sort of guaranteed anonymity, to continually share their real-time location information, analyzing their collective movements would reveal all sorts of astounding patterns (maybe). My hunch is that National Geographic will be active in the first category, not the second: we don’t have the technical brainpower to create these geodata-mining tools.

An additional challenge, especially for us at National Geographic, is to reconcile the apparent contradiction between high-quality, editorially vetted content, including authoritative cartography, photographs, video, audio, and text, and the randomness and dubious authority of user-generated content. Can we embrace large, messy audiences and still uphold the quality on which our brand depends? I’m not sure, but I’m confident we can—if we’re adroit at adapting our editorial skills to a completely new context. How do we bring our editorial expertise to bear against this frustratingly, excitingly diffuse new source of geographic knowledge?

In my group, NG Maps, we think about geographic information in two buckets: *spatially enabled content* and *cartography*.

In terms of the first bucket, National Geographic has for several years moved haltingly toward georeferencing its content. The rallying cry has been that an organization that’s all about *place* must place-enable its own content, especially as mobile and GPS markets

grow. Now, finally, we're on the verge: we've created our own Web-based platform for managing geo-enabled content. It's called Meta Lens, and we're focusing that lens first on ourselves, using often inadequate metadata to extract general location information, and doing the rest by brute force. We're also striving to GPS-enable our field specialists—researchers, photojournalists, and the like—in order to ensure that future content is geo-enabled the instant it's created.

Cartography is a bucket that's more uniquely ours. We've been making maps for 93 years, and have accumulated a great deal of high-quality cartographic content. But the transition from the hand-drawn atlas plates of the 1950s and 1960s to seamless, digital, fully web- and mobile-enabled cartographic content isn't quite fully complete. Once it is—and it will be in a handful of months—we'll have a resource that is far less detailed than the ubiquitous street maps of Navteq and Tele Atlas, but that will have significant value, we think, due to its global coverage, editorial authority, and distinctiveness of design. Part of that resource will be a digital gazetteer that promises to be a key link between points, lines, and polygons on maps to place-based multimedia content. That integrated mix of cartography and multimedia content will be, we think, of significant value.

We also think that volunteered geographic information will be an important part of our own picture. We'll benefit from (and perhaps be overwhelmed by) suggested updates and enhancements to our cartographic data—although we don't envision users *directly* updating that data. We see great promise in turning our Meta Lens tool outward toward volunteer consumer communities, and doing it in a way that adds some value above and beyond the casual geotagging of individual snapshots. We think there's value, and a comfortable place for our brand, in enabling users to tell stories about places by uploading groups of images strung together into narratives. And we suspect that many people out there will want to feel they're rubbing elbows with National Geographic's renowned photographers by submitting to us their own place-based photos.

We plan early on to seek volunteered geographic information from two key audiences: K-12 and conservation. We've worked hard since our centennial in 1988 to excite schoolchildren about geography. What better way to do just that than by offering exciting web-based geographic technology and enables students to share their own place-based content?

In the conservation realm, National Geographic has partnered with NatureServe to build LandScope America, with the goal of increasing the scope and effectiveness of land conservation in the United States. The site, launching in late 2008 (a preview is live at [www.landscapeamerica.org](http://www.landscapeamerica.org)), will aggregate large amounts of conservation-related map data and location-based content, and answer questions about biodiversity, ecosystem services, development threats, and conservation priorities. Essential to its long-term success is the recruitment of a community of land trusts and conservation organizations as voluntary contributors of geographic information.

Throughout the 20<sup>th</sup> Century, National Geographic brought the world to generations of readers. Now, the world comes crashing into the homes of its readers through multiple media pipelines. A key to the future success and relevancy of National Geographic is its ability to recruit its global audience as active participants in ensuring that its 19<sup>th</sup> Century mission remains vibrant in the 21<sup>st</sup> Century.

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