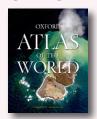
other images on each plate. This kind of attention to detail is a large part of the reason that this atlas is such a pleasure to read. Despite the abundance of information on each plate, the layout allows the eye to move easily across the page, and it never feels cluttered or busy.

The nature of the layout is such that some of the historic maps and photographs are reproduced at a rather small scale. One gets a good overview of the image, but can't always look closely at details. Though the reader might like to look more closely at some of these images, that is not really the purpose of this book, and the images are used appropriately to illustrate the points being made. Besides, the atlas includes an extensive list of sources at the end, so

that if one really wanted to track down a particular map or image, one could do so.

Overall, the *Historical Atlas of Maine* is an excellent work, providing a graceful historic tour of Maine. The liberal use of historical maps gives the book an authentic historic flavor, which enhances the reader's experience of this trip into Maine history. The atlas's format of plates on various topics makes it easy to flip through and find topics of interest, and the combination of historical maps and documents with modern mapping to illustrate some of the points being made is quite masterful. This book is well constructed and well conceived, both informative and engaging. It would be a fine addition to the collection of anyone who has an interest in Maine history.

OXFORD ATLAS OF THE WORLD, TWENTY-FIRST EDITION



Oxford University Press USA, 2014.

448 pages. \$89.95, hardcover.

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Review by: Mark Denil

How does one review a general reference tome like the Oxford Atlas of the World? A thematic atlas has a declared focus addressing an identified need, and one can evaluate its successes and failures in serving that need. A general reference atlas, by contrast, must support a wide range of ad-hoc consultations, so there is no sharply defined need against which one can measure it. One might compare statistics with other atlases (reporting map counts in much the same way dictionaries tout word counts); one could comment on map clarity (a highly subjective measure at the best of times, and one really only definable in the light of a defined map need; something that in this case we know we don't have defined); or one might examine the explicit and implicit assumptions and arguments framing the presentation (why are some opinions given as fact and other facts ignored as opinion?). This review will attempt to touch on all these approaches, and if it occasionally seems that the reviewer gags on a gnat while swallowing a camel and ignoring an elephant, just remember that, above all, a general reference atlas is supposed to be accommodating.

Promotional material for the Oxford Atlas of the World might strike the reader as a tad bombastic. Take a statement like: "Providing the finest global coverage available, the Atlas of the World is not only the best-selling volume of its size and price, but also the benchmark by which all other atlases are measured." Whether true or not, this leaves unexamined what is meant by "available," how strictly one is defining the limits of "size and price," and what value an "Oxford Atlas" unit of measure might have. Being "the only atlas to be updated annually" is easier to see as a strength in these days of potentially constantly updated online map resources, but how does the update schedule help purchasers of this Twenty-First edition after October 2015, when the Twenty-Second is due to be released?

Publisher's blurbs and inevitable outdated-ness aside, we have before us the current (at writing) Oxford Atlas of the World. It is a solid volume of respectable size and weight, 14¾ by 11¼ inches and 7½ pounds (by my bathroom scale). It is not the largest atlas available, by either page size or count, but it both pulls its weight and fits on a bookshelf. Nicely bound in heavy, smooth, semi-gloss boards, it sports a DigitalGlobe image of the new island that recently appeared and joined itself to Nishinoshima in the Volcano Island group. The general presentation exudes gravitas, and the photo boasts currency: the two touchstones of the ethos of an atlas.

Inside, the atlas is divided into several sections:

Table of Contents Gazetteer of Nations

Foreword World Geography

User Guide World Cities
World Statistics World Maps

The Future of the Geographical Glossary
Oceans and Seas
Index to World Maps

Images of Earth

In addition, symbol keys and map extent indices can be found on the endpapers: information pertaining to World maps in the front and to European maps in the back.

The "Foreword" lays out some basic conventions followed throughout the atlas. For example, we learn that the names used are "in conventional English form and are those that are in common usage. They are the forms used by publications such as *Newsweek*, and the *Washington Post*, and by the BBC and the Foreign Office." Now, I've not done more than glance at *Newsweek* or the *Post* since sometime in the Ford administration, but keyword searches of their respective websites do not show "Hawai'i" being the standard spelling in either of these publications. Still, this tells us we needn't expect names like Peiping or Zaïre.

Among the "User Guide" material is a map sequence key: a small world map with a sinuous red arrow showing the order in which the maps appear. This is a very handy affordance that makes explicit what in most atlases must be tediously pieced together mentally.

The "Table of Contents" is a two-page spread of all the contents, including all the maps and all the insets, with mention of each map's representative fraction. The listing of insets is especially nice to see. In both this section and the next, the headings (section names and continents in the "Table of Contents;" country/city names and column heads in "World Statistics") are set off from the list bybeing not only boldface and larger type, but also in a dark blue lettering that makes the headings stand out clearly but quite subtly from the list.

"World Statistics" has one page each for lists of countries (alphabetically) and cities (alphabetically by country). The country list details area (in square kilometers & miles), population, capitol cities, and income, while the city list gives populations.

The section titled "The Future of the Oceans and Seas" is a bit of a grab bag of short descriptions of various marine issues supported by maps and photos. This four-page section is divided in half into "Overview" and "Issues" subsections, and each has a short list of page references to the "World Geography" section. The pages are made up as tessellated mosaics of small blocks of text addressing each theme, but it is not clear why some blocks sit on colored boxes and some do not. There are colored heading bars backing the title for each theme with the color fading left to right: some bars are orange and some are blue. The blue-headed themes have light blue boxes behind their text blocks, and some of the themes headed with orange have orange boxes, but other orange-headed themes have no color behind the body text. It is very busy looking, and seems to have been done for no other reason than decoration. The same sort of layout graces the "World Geography" section, but the subtle titling in the "Table of Contents" and "World Statistics" sections would have worked better and been less garish.

It is almost obligatory these days for an atlas to include a selection of satellite images. In the *Oxford Atlas of the World*, these are of cities. For the most part the images are well chosen; they serve to convey the geographic character of the city layout, situation, and environs. Of the seventeen images, ten are Landsat, six are RapidEye, and one is GeoEye. All were sourced through NPA Satellite Mapping, who also provided the composite "cloud-free" image views used for the section title page spreads.

The "Gazetteer of Nations," filling 31 three-column pages, displays flags, a thumbnail location map, a selection of hard and statistical facts, and a short blurb about each country. The blurbs usually include a geographic/climatic description and a short, potted history, although some countries (particularly the smaller Caribbean islands) have very abbreviated write-ups.

The 40 pages of the "World Geography" section provide short, two-page introductions to some salient issues in physical, social, economic, and biodiversity geography. Supported with charts, maps, photos, and texts, the discussions are necessarily brief, but seem reasonably succinct. Each spread has a general discussion, set in a clear, serifed face with reasonable stroke contrasts, while other texts are in either a smaller-sized sans-serif or an even yet smaller condensed sans-serif. One gets the impression the type size and style (normal or condensed) was chosen

more for copy-fitting than for purposes of a coherent textural hierarchy.

The graphs seem mostly well designed, but there is an inconsistent use of unnecessary drop shadows on the graph bars: some have shadows and some don't. A very few, like the Gender Parity Index graph on page 109, have things that look like shadows, but upon close examination we see that what looked like shadows are actually bars for the same data categories for a different year!

This section is the atlas's main collection of thematic mapping. Matters of Cosmological, Physical, Meteorological, Floral, Faunal, Human, and Economic Geography are touched upon, briefly, but for the most part clearly and usefully. However, the two six-inch diameter hemispherical star charts, authored by Wil Tirion, are disappointingly small.

This section also contains, as would be expected, a large number of small-scale rectangular world maps. At least, the graphic boxes around the maps are rectangular, but one notices that most of the maps themselves are not. They are, in fact, on some pseudo-cylindrical projection (that looks like Eckert IV), but the maps have no line indicating the limb: there is just plain white or blue space that fills in the whole rectangle. The weird illusion is compounded by the absence of most graticule lines: there is only the Prime Meridian and the Equator. These two straight lines intersect (of course) orthogonally, slightly off center to the west, and do very little except reinforce the mistaken impression that the projection itself is rectangular (which it quite obviously is not). When I say obviously, I mean of course to you or me: to a general reader it will just be misleading. The inclusion of these maps is indicative of a rather shocking and cavalier disregard by the atlas's publishers for both their users' interpretation and for their own reputation.

The next section is that of "World Cities." Seventy cities are covered in thirty-one pages, some with both regional and city center maps. There are generally four maps to a page, with an occasional double-wide or -tall map. The maps are identified on a header bar; blue for most maps and yellow for city details. The land colors of light brown for built-up areas, light yellow for less dense areas, and green for vegetated lands works well, as do the red-cased dropout main roads and the double line blue highways with blue outlined interchanges. Less consistently happy is the way that city detail map extents are shown on city regional maps by means of a white (drop out) background; the detail extents can be hard to pick out on some of the smaller-scale maps.

"World Cities" is followed by "World Maps," which constitutes the great bulk of the atlas and is divided into seven sub-sections: The World, Europe, Asia, Africa, Australia and Oceania, North America, and South America. These 190 pages of maps (including the seven sub-section double page title images), are arguably the main reason the atlas exists, and it is on these maps that the atlas will stand or fall. The extents of the individual maps seem reasonably well chosen, with many maps enjoying strategic excursions beyond strictly rectangular neatlines to supply important context. The selection of included insets is soundly logical as well.

The "World Maps / The World" sub-section opens with a pair of two-page world maps (physical and political) on a Winkel III projection. Across the spread underneath the physical map is a 40° north latitude around-the-world transect profile, with additional mountain peaks not on the line itself shadowed in; a very nice feature. That page space beneath the political map is filled with eight Azimuthal Equidistant maps centered on various cities with distance circles at 5,000-kilometer intervals. This is also quite interesting and engaging. One notes that this projection is called Azimuthal on this page, but is referred to as Zenithial where it appears elsewhere in the atlas.

The polar maps, each a single page, are disappointingly small. In the south, the many ice shelves are well labeled, as are the Antarctic stations, which are picked out with red points. The shallowest level of the bathymetry in the Arctic Ocean is a bit hard to distinguish from the Greenland ice cap and Ellesmere glaciers, due mostly to the blue form-shading on the ice caps.

The sub-section wraps up with a one-page map of the Atlantic, and a page of major Atlantic islands, plus one page for Greenland (with Iceland and Svalbard) and a page for Iceland by itself. This is good coverage for Iceland; in most atlases since Ortelius, it has had to make do with an inset at best.

Islands, on the whole, do pretty well in the Oxford Atlas of the World. The two pages of Mediterranean islands, for example, show most of the major islands at 1:800,000,

excepting Crete and Cyprus at 1:1 million and Malta/Gozo at 1:400,000.

A "Geographical Glossary" follows the last map. Geographical terms and abbreviations in thirteen languages found on the maps are identified and defined in English. The glossary is followed by a 109-page "Index to World Maps," listing "the names of all principal places and features shown on the World and City Maps." Each entry lists the name, country or region, geographical coordinates, atlas page, and Cartesian map location coordinates for that feature, plus symbols indicating confluences (for rivers), administrative rank, and legal status where appropriate. This is a most useful resource sorely lacking in too many atlases.

It would be a formidable task to comprehensively compare the 21st edition of the Oxford Atlas of the World to atlases from other publishers and/or mapping houses. Atlases appropriate for one audience may be less useful or usable by another, so even identifying appropriate pairings would require analysis beyond the scope of this review. The atlas business has always been one with fierce competition and thin financial margins, leading publishers to establish and stick with house practices and to find innovative ways to assemble and reassemble the same basic components into a range of atlases targeted at niche audiences. For example, Octopus Publishing Company, which owns Philip's, the mapping house responsible for the maps in this atlas, themselves publish a range of atlases under the Philip's name. These include: Philip's World Atlas (£15; 96 world map pages, "recommended for students [and] general home reference"), Philip's Atlas of the World (£75; 193 world map pages, which sounds a lot like the Oxford Atlas of the World), Philip's The Royal Geographical Society Atlas of the World (£100; 277 world map pages, "Positioned at the top of the Philip's world atlas range"), and the lavish Philip's Universal Atlas of the World (£150; 290 world map pages, "Positioned at the very top of the Philip's world atlas range"). One wonders what gem would be positioned, after the top and very top, at the very tippy-top of the range.

I would have liked to compare the cartography in a Philip's-branded atlas with the maps in this Oxford product, but was unable to locate one for perusal. I do, however, happen to own eight other Oxford atlases of various sorts, ranging in vintage from 1951 to 1973, so we can compare this new edition to some of its older siblings.

Over the time period of the samples, the Oxford University Press atlases used maps "Prepared by the Cartographic Division of the Clarendon Press" (Clarendon being the name used for academic publications of the Press), and the strong family resemblance amongst these maps is echoed in the maps from Philip's. Taking the two-page map of Southern Europe from the Twenty-first edition of the Oxford Atlas as an example, and the similar Mediterranean map from both the 1951 Oxford Atlas and the 1951 (1958 reprint) American Oxford Atlas for comparison, we can observe both broad similarities and minor but significant differences.

The maps in the two older atlases are substantially identical, save that the hypsometric colors in the American Oxford Atlas are noticeably more saturated, and, by comparison, more garish than its sister aimed at a British audience. In the newer atlas, the colors are also quite saturated, but are supplemented by a black overprint hill shade that varies the color value. As well, the hypsometric class breaks are shifted upwards on the new map, with additional high elevation classes, giving better definition to the high ground. The bathymetric classes are also multiplied; from two to nine, which seems rather a lot. It is unclear just why so much detail of the depths is wanted, and, with the hues running very quickly to dark and purplish blues, there seems to be an awful lot of ink on the page.

The projection note on the new map is ridiculously brief: simply "Conical with two standard parallels." The notes on the older maps manage to tell us we are looking at a "Conical Orthomorphic Projection, Origin 42° N., Standard parallels 35° and 49°, Scale reduction 0.7%" before directing us to a scale errors note on page 7. Someone seems to have a low opinion of our ability to understand such matters, which is somewhat annoying.

The annotation text on the new map is considerably larger than had been used in the 1950s, as is obvious when comparing some labels appearing on both maps. The characters in the country name TURKEY, for example, are 4mm tall on this new map and only 3mm on the old. Other capital letter comparisons (new/old) are the city Bucharest (3mm/2mm), the region Cyrenaica (2.5mm/1.5), and the city Tubruq (Tobruk) (2mm/1mm). The old maps, in fact, abound with very clear annotations with characters 1mm tall; the new map has only a very few minor names in crowded places as small as 1.35mm, and as a result has lost a very large number of place and feature names. The new

map is, in fact, quite crowded with type: it forms a heavy overprint of black ink that is only partially relieved by the liberal use of a serifed typeface with dramatic stroke variation. The older maps are subsequently much more open and clear than the new version, but the heavy text on the new map is likely in part dictated by the heavy ink of the saturated bathymetry/hypsometry and the black hill shading overprint on land. The annotation on new map, however, seems much in line with current contemporary commercial cartographic practice. Clearly, as with all map making, one is always trading off on something; choosing an atlas is largely recognizing and judging the trade-offs.

In a final comparison, we should look at the way national borders are depicted in the 1950s editions and in 2015. In both the line is a combination of a less-than 1mm wide red line with a black dot-dash overprint. In the 1950s the black line was about 0.25mm, and in 2015 it is about 0.5mm wide. In the 1950s, the two components were not particularly well registered, and the alignment of the red with border rivers was similarly casual. In 2015 the line component registration was much better (except where the red part runs over red roads of exactly the same color, which causes an appearance of a problem), but the much higher saturation on the red line makes it hard to differentiate the line components. I needed a magnifying glass to confirm that there are two components in that line, and a linen tester to see the parts clearly. The new map also uses the same symbol for boundaries on land and at sea, where the old map used a much finer (half-width) dashed red line with no overprint to divide, say, the Greek Dodecanese from the Turkish mainland. The heavy 2015 border symbolization, though, is in line with the overall heavy-handed symbolization the newer map employs everywhere.

One of most annoying aspects of this atlas lies in the endpaper map keys. Both the key base maps (the World in the front and Europe in the back) are on rectangular,

cylindrical projections, and the map extent rectangles (for maps in the atlas) are all orthogonal rectangles. It just so happens, however, that there are *no* cylindrical maps amongst the maps listed on the keys: the extents shown on the key simply do not match the extents of the maps in the atlas! Did the publishers think no one would notice? Do the publishers care if anyone notices?

As mentioned earlier, selecting an atlas is largely a choice amongst trade-offs. This Oxford Atlas of the World offers a selection of maps with useful and coherent extents, with reasonably good (if somewhat exuberant) hill-shaded hypsometry and large annotation with an easily understood multi-dimensional hierarchy. Other atlases differ in details, the significance of which is up to the purchaser to decide. Both the Times Atlas of the World, and the National Geographic Atlas of the World have maps with roughly the same extents and scales (albeit for more money and on pages considerably larger than the Oxford Atlas of the World), but the Times uses a subtle, but often difficult to visualize, hypsometry with no hill shading, while the National Geographic uses hill shading alone, with no elevation color (but it does have honking dark and wide national boundary vignettes). The Gazetteer in the Times atlas, like the Oxford, lists geographic coordinates for each entry, but the National Geographic makes do with alphanumeric page coordinates.

No one should pick an atlas based on a review (or on any number of reviews); there are just too many factors to consider and the factors are too individually specific. The Twenty-First edition of the *Oxford Atlas of the World* is a reasonably good, reasonably sized atlas that has a reasonably good chance of fulfilling the reasonable needs of most users. It is not without shortcomings, some of which are discussed here, but how seriously these shortcomings affect its usability is for you to decide.