Introduction

Comparison of three engravings, the original from 1619, the others successive copies of it, the latest from 1770, reveals the deceptive transformations that pictorial representations are susceptible to, and shows how important it is to get back to a primary source. Because so much can be lost, altered or added in copies. Comparison of these engravings illustrates how very rich in information a primary source can be. How even unsuspected information in it can be highlighted by comparison with copies, and how much for many different reasons can be lost in the copying. But also, how much can be added in information about the copiers and their audiences, in other words, how derivations bear the stamp of their times.

Any pictorial representation has a dynamic relationship with its social environment through time. As an image it influences the perceptions, beliefs and thus actions of its audiences and in turn they can influence it, transforming it in copying it, by editing it, subtracting from it by cutting parts of what is depicted out, or otherwise altering or adding to it. An original picture can be treated synchronically to tease out the influences of the contemporary milieu, and or pursued diachronically through time as a copied image, changing as the changing environment interacts with the internal possibilities for transformation it has.

The first engraving

As well as very aptly illustrating these and other processes in the production and transmission of knowledge, how records are made and often badly kept, the original engraving of 1619 is in itself an absolutely amazingly important document.

The European sailing ship in the engravings was the first Dutch ship to sail into the Pacific Ocean from the east, from around South America, from the opposite direction they were politically meant to, that is, around Africa and through the Indian Ocean. It was under Willem Schouten and Isaac Le Maire, who had earlier made their way eastward around Africa to the edge of the Pacific and who had been with the Moluccan fleet when it defeated the Portuguese. They set up the Goldseekers Company and the Australia Company, and set out from England in May 1615 to sail westward around South America into the Pacific Ocean to find the Terra Australis. They actually sailed south of the straights named by Magellan in 1519, following the route of
Drake who circumnavigated the globe in 1577-80. They sailed right around Cape Horn, named after the ship they accidentally burnt there, the Hoorn. It was named after its home port just north of Amsterdam. The ship in the engravings is the survivor, the Eendracht.

After sailing an amazing one-sixth of the circumference of the Earth from the bottom of South America without sighting any land, on May 9th, 1616, they saw a tongiaki, a Tongan catamaran, just north of Niuatoputapu, Tonga. They fired warning shots to stop them. When the Pacific islanders did not stop, they shot some and that stopped them. Though not for that, in October 1616 they were imprisoned in Dutch Batavia, Java, and sent back to Holland. Le Maire died on the voyage, for which his father sued and won. The engraving of this first encounter of Tongans with Europeans was published in 1619, in Schouten's journal of the voyage.


Competing technologies

Very significantly for them then, it was a picture of competing technologies. It is one of the first pictures of European contact with the superior or at least equal sailing technology of the Pacific, big catamarans. “The rig of the vessels is so excellent and they go so well under sail that there are few ships in Holland that could overhaul them.” They impressed Schouten (Dalrymple, 1770). European sailing ships were on the cutting edge of Europe’s technological thrust at the whole world. In the twenty first century it is hard for us to realize how crucial the art and science of sailing was to the expansion and consolidation of European power, from the Portuguese in the beginning of the fifteenth century until steamships at the end of the nineteenth century. No single part of our present technology has the importance they had. Sailing ships were the equivalent of all our land, sea, air and space ships: our submarines, tanks, trucks, cars, airplanes, helicopters, space shuttles, satellites, space probes. Nuclear weapons are the equivalent of the destructive power they carried, guns. They were crucially important, and here on the other side of the world the Europeans encountered people with sailing machines par excellence, multi-hulls which could sail faster than their own larger ships. Therefore there is attention to detail in the representation of the ship from the other side of the world.

The sketcher of the scene has carefully reproduced the event, the action scene, from memory. The importance of sailing knowledge would have dictated a sketch of the tongiaki on the spot. They had time later, after this first pursuit. If, as is very likely, a sketch was made on the spot, pressures influencing the drawing would be important to consider for reconstruction of this craft, such as how attentive the artist was to detail, and any factors that could influence his perceptions. Conditioning of outlook can show in ethnographic records like this as the shaping of the mage to the drawer’s preconceptions. However, in this engraving, based on the original sketch, the rendition of the tongiaki is as scientific as the artist could make it, we can assume. Because boat construction was extremely important and because the craft was so completely different, assumptions of similarity would not have suggested themselves, whereas, they probably would have, if the craft had been a more familiar type.

Also, the apparent simplicity of the faces is because an image of the south Pacific island people had not developed yet to influence the artist. Documentation, illustration and invention are present in varying degrees in these kinds of pictures, as noted by Bernard Smith in his Art as Information (1979). Ethnographically we are interested in the documentation, but the other aspects are like reverse anthropology. Writing, of course, also has this boomerang value.

Tragic truth

Most significantly, here in one its first graphic depictions in the Pacific Islands, European exploration is depicted, with the honesty of true art, as what it could be; invasion, attack, conquest of pacific people. Look at some of the victims of European exploration, or expansion.

What is most significant about them is that half of them are missing. The basic principles
underpinning repression, including imperialism, are violence and deception. The violence of the superior gun in the picture must have at the same time horrified and yet excited the audience, as technological superiority. However the children and women who were victims are deceptively not included in the graphic record. Well, men still do fire on unarmed women and children. The sailors on the Schouten and Le Maire voyage did it, too. The journal admitted it in the written record, but not in the graphic record.

We can assume that the conscience of Schouten would not have wanted to admit the whole awful truth of the incident. That would not have found favor with the intellectual climate of the audience. The picture only half lies, in that women and children who were in the tragedy are not in the graphic record.

**Mixed sex crews**

Very significantly, in this graphic record of first encounter, the Tongans are moving faster than the European ship, looking well organized and comfortable out of sight of land. But, an important way in which the non-Europeans were coping well with the environment, the big social difference which is written in the journal, but not in the visual representation, is the cozy family relationship on the Tongan craft, compared to the solitary sex, all male, social arrangement on the European vessel.

Why was the family arrangement not portrayed, despite being interesting for viewers from a scientific, moral and artistic point of view? The consideration already mentioned is the audience's moral qualms about attacks on women and children. Is it also possible that the image of an alternative, cozy social arrangement of both sexes on board ships would have threatened the established exclusively male institution of seamanship which continues to this day in most cultures? The families around the hearth on board might have stirred the hearts and aspirations of people too much. That is, faithful recording of the technology was useful to the classes of Europe who were learning how to dominate the globe by navigation, but images of social alternatives were not. They could have inspired utopian visions of an alternative to the status quo. Whatever the reasons for not being engraved into the public domain, there definitely is something so important missing that it could said to be deliberately missing, that is, consciously omitted.

**Truth in graphic records**

“A graphic record is the symbolic representation of some real event in the real world. It is the end product of a series of pressures. A graphic record therefore is an expression of some concept, and there is always more than one way to express a concept. Because of this it must not be understood as an illustration of truth. Neither is it truthful.” (Maitland, J. 1973) However, the truthfulness, in every sense, of this engraving is important; particularly morally and ethnographically. In some senses, it is a symbolic representation, but representation as re-presentation, putting again before the senses the reality of the event to the eyes of the viewer.
If the people on board had had a camera like our astronauts would if they met aliens, they could have photographed the scene. Then, accidentally or purposely, the women and children might have been photographed. Where and when we point a camera limits what is recorded, but does not make it a symbolic representation. To photograph the scene from the engraving's bird's-eye perspective would have required a helicopter. But the mind of the drawer enables the hand to try to record it like it was. The mind of the artist can be creative, truthful and other things at this point in the process of representation, whereas the mind of the photographer cannot. The documentary photographer cannot interfere in the composition of reality within the frame. The photographer can frame reality, but not compose it. Photos can be cut and arranged, but not as easily as an artist can create scenes. Making pictures by hand permits freedom of what to include inside the frame, recreating a representation in the sense that photography does not create a seeming reality, but instead copies reality. The artist can chose what to put inside the frame and how to organize it. However, if it is named after an event, a picture can be judged to be truthful, no matter how abstract, in the sense that Picasso's famous Guernica painting about the Spanish Civil War and Max Ernst's paintings of fascists are truthful. The 1619 engraving and the second engraving are truthful in the deepest meaning of the word.

**Scientific documentation**

Now, look carefully at the first engraving of 1619. There is also a lot of scientific documentation in it. Look at the regular swell drawn behind the tongiaki all the way to the horizon. Think how the wind indicated by the ship's sails and pendants would have formed the swell as ocean voyagers like these know by experience. The author has sailed on yachts from Australia to Indonesia, and Brazil to the Caribbean to Europe.

As the journal tells us, from the 24th of May the wind had been coming from the east, so we can actually get our bearings in this picture. We also know from the journal that the Dutch explorers had been sailing west by south, and that the sail which they had first feared might be a Spanish bark came from the south sailing north, in front of them. We can see from the recordings and read in the text how the Tongans had almost escaped unscathed, but unfortunately eight or ten oarsmen, who are able to travel faster over a short distance, had outmaneuvered them. We can see from the engraving and read in the journal how the Tongans were outmaneuvered. We want to speculate about the set of the sail, because any clue is valuable in the reconstruction of this type of vessel, which by the time of Captain Cook and later documenters was being eclipsed by a Fijian reversible catamaran design.

Even from a preliminary inspection, it must be acknowledged that there is more than first meets the eye in the original engraving. But, how incredibly much there is can be better appreciated by comparing it with its copy and a later copy of that copy. In the seventeenth and eighteenth centuries the normal practice was to copy published engravings. Because of that practice which produced not only secondary copies, but copies of copies, provenancing is trying to find out who did it, who copied who. Copying can produce good copies or bad copies, in varying
senses, including the accidentally or deliberately distorted

The second engraving

So, consider the second engraving, reproduced in Polynesian Seafaring (Dodd, 1972). We can tell that two is a copy of one, not vice versa, just by the shading on the luff, the unattached edge of the tongiaki’s sail. Notice the very slight S curve of the luff in one. From the S curve and the shading of the sail we can tell that the sail is not full of wind, that it is still billowing a little. Perhaps they have just come around, maneuvered into that move by the Dutch. In any case, there is information in the curve and shading. Now look at two. Without the S curve the shading is inexplicable. In fact if you look ahead to the third engraving you will see that the shading has been corrected. If the engraver of three had seen one, he would have kept the unusual shading, because he would have understood its significance. From this we can claim that two was copied from one, or a copy of it, and that in turn three was copied from two, or a copy of it.

The transformations from one to two are caused by the engraver’s lack of nautical knowledge or interest in sailing technology, combined with the artist’s desire to make a good picture, plus the general tendency to assimilate anything unknown to something known. It has become merely illustrative of the text, not independently documentary, like the first engraving.

So, because he did not understand the information about the wind in the original engraving,
the positions and settings of the sails of the boats would have seemed odd to the copying artist. We can imagine him thinking that even though the original picture is more balanced with the tongiaki in the center, it would more obviously tell a story, if the rowboat was moved from its confusing position, so that it is obvious that the rowboat came from the ship in the background, even without reading the text. Maybe the artist only put the rowboat where he put it for pictorial compositional considerations. He probably thought the way the sails were drawn in the European ship were clumsy, unless he had sailing knowledge, or he might have judged it unimportant for his audience. So he tidied up the picture. For whatever reasons, his copy is a very conventional image of a sailing ship, with its lower middle sail rolled up, not what a chasing boat would normally do, to reveal the lovely lace like rigging to be enjoyed. By enlarging the ship he gave himself more scope for details he knew the audience could appreciate.

Most significantly, as well as depicting a direct line of pursuit from sailing boat to rowboat to tongiaki, the musket's line of fire is now more direct in the copy than the original. So, the copy is actually more violent, more indicting of the Europeans. They are firing at the Tongans, not trying to warn them to stop. The first engraving conveys the message of a warning shot in front of the bows, and the most hopeful interpretation of the person in the water would the same as what can be read in the journal, that they deliberately jumped into the sea. On the other hand, the copy also truthfully, but more accusingly, shows the shots that were fired into the people, after the warning shots. In any case, it is hard to imagine what the Tongans could have made of the behavior that the Europeans considered warning shots.

Also, the sky has been clouded over in the copy; acclimatized, assimilated to the prevailing image of skies in Europe. This is a common telltale sign of a secondary engraving, a copy done in Europe, where the clearness of the southern skies was not known. Of course, the copier otherwise very faithfully reproduces what he can, which is only what he perceives and makes sense of in the picture. So the rowboat and the ocean swell are faithfully reproduced, despite the sea pattern now not suiting the sailing ship.

The hulls and water patterns

Less noticeably, but important for reconstruction of the tongiaki, it has been changed. Let us catalog the changes wrought, from the bottom up. Notice how the hulls have become more assimilated to European covered ones in the first copy, and even more in the last copy. Art for art's sake, just poetic license to make something more esthetically pleasing is always at work at this level of copying. For example, there is the universal technique of abstraction for effect, such as by simplification and contrast, illustrated in the hull development. A very good example of art creating an artificial problem can be seen by comparing the middle sections of the hulls. The universal temptation to enlarge and multiply has been at work on the three indistinct round objects where the wash strakes join the hull in the original. In the copy there are eight much bigger, more problematic objects. In the third engraving they increase to thirteen.

Look at the well recorded wake pattern between the two hulls at the stern in one and two, but
not in three. That pattern is very distinctive of multihulls, as experienced by the author. It is
definitely documentary, not illustrative, as the text does not mention it. It is further proof of how
carefully the catamaran was observed and recorded. In fact, the water pattern all around the craft
is carefully reproduced. However, in the third engraving all that kind of information is lost.

Cock motif

If you thought the cock motif on the sail in two or three was original documentation, you
might imagine you were looking at genuine documentation of Tongan art, abstraction in 17th
century Tongan sail emblems. But actually, the original design of the cock is more realistic than
the later more abstract derivative renditions of it.

What is attached to the forked end of the boom, suspended in space to puzzle us, in two and
three? It is an artificial problem. From the original you might guess they are wind indicators.
However, they have changed shape to become problematic as they are drawn in two, and more
dramatically in three, were they have more importance in the artistic, graphic composition. In
three, the eye is drawn to them because they end up above the horizon, where the background is
clearer, and because there is less in the picture to hold your attention. Now they could be weights
to swing the boom around, as my Tongan classmate had thought before seeing the original. He
told me that was an interpretation in Tonga. If so, it could be an example of how popular
explanations can be based on inaccurate copying.

Changes in the Tongans’ physical appearances in the second engraving

What has happened to the physical appearance, faces, hairstyles and physiques, of the
Tongans in the original when they appear in the second engraving? People are sought out in a
picture to identify with, stimulating the viewer’s imagination, holding their attention longer, as the
artist wants. That artifice of arresting detail, and perhaps the belief that he was thereby making
the figures more realistic, has made the first copier man the tongiaki with a crew with stock-in-
trade, recognizable faces. They are like persona from European art of the time. This is definitely
a case of comparison of the copies being better than just study of the original. Because, the
relative featureless of the newly encountered people in the original might in light of the copies be
appreciated as perhaps the actual explorers’ check on the engraver’s artistic creativeness, which
was not restrained in the copies.

The influences on whoever did the first sketch need to be understood. Then, the influences
on whoever engraved it. Then, the influences on whoever copied it. The graphic image, the
representation interacts through time with its environment. Documentation is lost, replaced by
invention.
The third engraving

Now, consider the third, the 1770 engraving. Remember that, without the more original pictures, we would not know how much the picture we see has been changed, how much less it represents reality, how historically false it has become, how much less documentary and how much more invented it has become. The historically, ethically, scientifically distorted image in our third copy is nevertheless a dynamic, powerful, esthetically pleasing and exciting image to look at. Despite all the falsity, all the deception, does it not somehow strangely seem more realistic, more believable, more convincing, and more scientific and more ethnographic than the superficially more childish images of the more original engravings? How, why does it deceive us like that?

Invented ethnographic image

The answer could be that an ethnographic image had already been invented by the time, 1770, that the engraving was made. It is an image, a perception of the other, that we still have, and that
is what makes the falsified, invented copy so convincing, so seemingly ‘realistic’. The human victims that we can empathize with of the earlier engravings have become the radically different enigmatic other meeting our gaze across the unbridgeable gap between us. They sail past on a new ‘scientific’ horizon, ethnographic in a distorted sense, as if frozen in an eternal anthropological present, denying the historicity that any representation necessarily has.

The engraver in 1770 knew that his audience would no longer be satisfied with other peoples depicted as Europeans, like in the in-between engraving. However, the engraver in 1770 had not actually been on a voyage and seen Polynesians, nor most likely any other non-Europeans, for that matter. The actual documentary evidence, such as the original 1619 engravings and engravings from Tasman’s voyages and any another eyewitness representations, none of which we know if he saw, could not have provided enough information to guide him. So, where do the strangely familiar Tongans in his picture come from? Now, some of them are observing us, as we observe them. That makes looking at the image even more exciting. Their gaze is even menacing. Look carefully with a magnifying glass! Is not the stern most figure very cleverly drawn so that the shading around his eye almost suggests an eye patch, albeit ambiguously, suggesting malevolence, even piracy? Do you not in fact already know them? Can you not recognize them and their hairstyles? They come from popular depictions at the time of American Indians.

Between the time of the first engraving in 1619 and the third in 1770 the Caribbean and eastern North America were colonized by the Dutch, French and English. Amerindians were appropriated as images by Western art during this time. But the newly encountered peoples were not strange enough to break the conventions of art, and were assimilated, at least in French and English art, through an iconography (Todd, 1972). Artists and scientists in early America saw and recorded the flora and fauna clearly enough, but they could not focus as objectively on the people. Consequently, painters and engravers fitted these new humans into established conventions which they knew would appeal to their audience’s tastes; tastes they knew well and had to cater for. Myth and reality were inseparable in the European imagination of the peoples they had never encountered before.

**Changed cultural environment**

It seems that much had changed in the cultural environment surrounding the picture. It has also been proposed (Bernard-Smith, 1969) that the expanding Europeans’ encounter with the very different light of the tropics was the impetus for the triumph of Empiricism in the attention to our vision per se over the neo-classicist emphasis on form derived from sculpture. The rise of Romanticism and eventually Impressionism and other modern explorations into visual perception might be due to this European encounter with tropical sun and sea. The intense quality of the light of the sky and sea of coral atolls and volcanic islands, and always the visually exciting sea, challenged the scientist-artists to explore their perception and representation of it. The encounter encouraged them to move in an exciting new direction away from the eternal verities of the classical forms, rejected as essentially an attempt to reproduce classical sculpture graphically.
Thus, Hodges, who accompanied Captain Cook, foreshadowed impressionism in the way he tried to capture the great difference in light. Certainly, better and better artists accompanied explorations. So, pictures from Cook’s voyages, starting in 1768, are much more sophisticated than the pictures from Tasman’s explorations, for example.

In the 1770 copy the treatment of the light already seems more impressionistic, and the 1619 original is more classically sculptural, especially the sea and smoke. It would be ironic if the supposed new attention to empiricism in art influenced this engraving. Because it would be superimposed on false representation of the sea and sky; an empirically motivated representation of a European sky in the Pacific, and good observation of the play of light on the sea, with no perception of the wave pattern significance.

**The whitewash in the third engraving**

The most significant change in the human depiction in 1770 is not in the perceptions of the facial features or bodies of the people. The most significant change is that the moral dilemma presented in the earlier depictions has been edited out. Our conscience has been conveniently cleared of a reminder that exploration could be seen as invasion, could be linked to, and might be blamed for imperialism. The first two engravings illustrate in classical fashion the horrors of war. At least, the artists have created works of art in the sense that they elicit very strong emotions and a deep understanding of human folly, like any representation of war in art, not propaganda.

But, what has happened to engraving three? The easy-to-identify-with, defenseless victims of the original and earlier copy have been denied any actual past or future victim status. The roles reversed, if anything other than scientific looking, they have become threateningly strong. Now, our elicited emotions are more like fear or wonder, at least in no way morally engaged. Look at the figure silhouetted at the bow. What on earth is he doing? We know in one and two. However, in the third engraving it is artificially mysterious. It is like a symbolic gesture of imperialistic, repressive mystification at work on the human significance of the representation of reality.

This is the second important lie we have uncovered. The original representation lied by not reporting the women and children. The 1770 copy lies much, much more by not even recording the regrettable attack. When Tongans were first encountered by Europeans, they were not just sailing past, untouched, within their own world, as this later image would have us believe. No, unfortunately, they were pursued, attacked and some killed. In 1619 this was graphically reported, except for the important detail that women and children were on board the attacked vessel.

How much the Europeans should be judged for what they did is up to each of us. But at least that decision is possible from looking at the first two engravings. We can see the whole dilemma of development versus conflict, freedom versus domination. In judging the attackers, do not forget the fear that the Schouten and Lemaire voyagers had of falling into enemy hands. They were in Spanish claimed territory. At first sight, they feared the vessel was Spanish.
realized it was not, but, for all they knew at first, it could have reported them to the Spanish. Also, when they set off in the rowboat to stop them, they would not have intended to shoot them. That came as a final, lethal solution. The original shows the tradition of a warning shot. Our next copier faithfully recorded all the important historical facts, though he missed lots of scientific information in the original. He even made the Europeans more culpable, shooting easier-to-identify-with Tongans in the back.

In contrast, the 1770 engraving has omitted the whole historical incident. It has cut out the context. It engravés in history a lie. But, is this the scientific hope or ideology of Captain Cook’s era? In the period of Cook’s voyages, newly encountered people were meant to be treated like in this politically corrected engraving. We should not attack them. We are free to go about our own business, and obviously they too, as in the engraving, so long as they do not attack us. That was what Cook mostly managed to do.

Seen in its worst light, this engraving epitomizes the great whitewash of imperialism, It engravés it in history. Seen in its best light, it illustrates the squeamishness about physically conquering the new peoples that had by then developed in Europeans. From 1500 the Spanish just conquered people such as the Aztecs and Incas, unselfconsciously recording the killings. Early in the next century comes the Schouten and Lemaire encounter. This is not conquest, but the guilt is there. Then, toward the end of the century after that comes the age of Cook’s voyages and the third engraving with no guilt in it. It has no hint of conquest in it, just exploration, and ethnography. The real past, the diachronic element, has been edited out. The natives seem timeless, purely synchronic. They are untouched natives, sailing by.

Conclusion

I have traced the broad outlines of the interaction of a pictorial representation with its social and cultural environment through time. I have shown how documentary value can be lost as illustrative and inventive aspects take over. Most significantly, the transformation of the 1619 original into the 1770 edited copy graphically shows repression and imperialism’s two basic principles: force and falsity, the sword and the untruth, guns and lies. That is, it shows that the moral dilemma of using force can be ignored, if the use of force is ignored or denied. In its place, a convenient image of scientific encounter can be projected. Thus, in the transformation from the first to the third engraving can be seen the invention of a mystifying ideology, the white man’s burden of discovery, so to speak. This seems to have replaced the earlier, simpler ideology of the Spanish conquistadors: that exploration was conquest.

Secondly, it shows how a suitable image of the newly encountered people such as Tongans was assembled in Europe to suit the European expansionary world view. I link this to the rise of a mystifying imperialist ideology of the white man’s burden of science, to replace the more honest earlier ideology, that simple conquest was acceptable.

Thirdly, it shows how documentary, scientific detail can be omitted by the copier, if he does not recognize it. It might also show the development of empiricism in relation to visuals, but in
this case very ironically, because the whole event, the appearance of the people, the craft itself, and even the sky and sea are all distorted from the original. This all reinforces how crucial primary sources are, but also how much bad copies can teach us.

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