WILDLIFE ART AND ILLUSTRATION: DRAWING IN INK - SOME EXPERIMENTS IN AUROVILLE, INDIA

M. Eric Ramanujam 1 & S. Joss Brooks 2

1,2 Pitchandikulam Bioresource Centre / Pitchandikulam Forest Consultants, Auroville, Tamil Nadu 605101, India
1 ericramanujamowl@yahoo.com (corresponding author), 2 joss@auroville.org.in

Abstract: The various styles employed by some artists at the Pitchandikulam studio in Auroville International Township are discussed and some works analysed and commented upon. The basic history and applications of pen and ink drawing and black and white illustration are touched upon and the various schools of thought mentioned and discussed - from it simply being technically accurate and easily printed, to the conundrums with which it is beset.

Keywords: Art, Black and white, conundrums, creativity, drawing, illustration, imagery, pen and ink, realism, reproduction.

The illustrations in this article are by Eric Ramanujam except when other illustrators are mentioned.
Wildlife art and illustration: drawing in ink

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Monochrome imagery on parchment can be traced back to ancient Egypt where, for example in the hieroglyphic scripts, scribes used reed pens from the Sea Rush *Juncas maritimus* as long ago as 3,000BC (Fischer 2003). In fact monochrome imagery could be older than the beginning of writing—hieroglyphs are considered to be the earliest known form of writing and imagery played a fundamental role in their development (Stevenson & Simpson 1998) and animal motifs were intrinsic to them. Reed pens were used until the end of the Middle Ages, around the 7th century, when they were replaced by quills. Quill pens existed until papyrus was replaced as a writing surface by animal skins, vellum and parchment. These smoother surfaces allowed fine rendering and, accordingly, soft metal nibs of gold, bronze, and more commonly, silver came into being. By the time of the early Renaissance metalpoint was a favourite monochrome medium of Leonardo da Vinci, Durer, Michealangelo and Raphael. Later Rembrandt, Cezanne, Degas, Goya, Toulouse-Lautrec and Picasso too experimented with pen and ink. In fact the beginnings of realistic wildlife ink drawing can be attributed to a period when two of the ‘old masters’ turned their hands to realistic portraiture of wild animal subjects. Albrecht Durer (1471–1528) showed a keen sense of observation with his water colour rendering of a young hare but he also experimented with ink as can be seen from his drawing of an Indian Rhinoceros *Rhinoceros unicornis*. Although his drawing was not an accurate representation, the study itself and the woodcut reproduction that followed, became very popular in Europe and it has been said that “probably no animal picture has exerted such a profound influence on the arts” (Clarke 1986) so much so that it even inspired Salvador Dalí’s 1956 sculpture *Rhinoceronte vestido con puntillas* (Rhinoceros dressed in lace). An all time favourite is the drawing of a reclining Barbary Lion *Panthera leo leo* by the master draftsman of his time, Rembrandt Harmenszoon van Rijn (1606–1669), whose pen and wash rendering, now in the Louvre, is a masterpiece—not only for its sense of poise, proportion and exactitude, but more so for its spontaneity, speed of execution and abject simplicity. In fact, it is these two artists who can be credited with introducing the concept of drawing wild animals in ink into the maelstrom of the art world at a time when painters, sculptors and draftsmen were striving to define the essence of realism.

Drawing in black ink on a white base is perhaps the easiest and cheapest method of illustration for reproduction in the print media to this day and is probably why Durer’s Rhinoceros study was so widely circulated and influenced so many people at the time—sheer mass replicability, circulation and appeal. For many centuries thereafter, before multicolour printing/reproduction was possible, drawing in pen and ink was the only recourse for the science-based author/publisher. By the end of the 16th century naturalists and philosophers were questioning the way the world could be understood—a new age of science and discovery was unfolding and this required the dissemination of information which in turn needed imagery. Naturalists accompanied all major scientific expeditions, and were themselves often accompanied by artists who made accurate drawings in the field or from specimens collected from the lands they visited. These explorer-naturalists and artists, which included such illustrious names like Joseph Banks, Alexander von Humboldt, Charles Darwin and Alfred Russel Wallace, depended upon draftsmen and painters to illustrate their publications (e.g., Darwin 1839, 1851–1854; Wallace 1869, 1876). Today, with the vast improvement in print technology, even more options are available in terms of both the stylus as well as the drawing surfaces and these have made ink renderings even more precise and easily reproduced. In India, one simply has to peruse the publications of the Fauna of British India series (e.g., Day 1889; Pocock 1939, 1941) in order to comprehend the effectiveness of the medium. This is not only relevant to wildlife biology/taxonomy, but also to botany and human anatomy. In fact, pen and ink drawings have been used widely to represent botanical and human anatomical subjects long before wildlife studies and there is strong proof that another of the greatest Renaissance artists, Leonordo da Vinci (1452–1519), was adept at not only drawing human figures but also botanical subjects in ink <http://www.wikipaintings.org/en/leornado-da-vinci/stof-bethlehem-and-other-plants>. In the veterinary sphere too, animal anatomy has been systematically and thoroughly rendered in ink (e.g., Goody 1997, 2006) and these studies can be rivaled only by comparable illustrations of human anatomy. In actual fact, *Gray’s Anatomy* (1858) brought not only the author but also the illustrator, Henry Vandyke Carter enduring fame and his work has remained the most widely perused black and white imagery in ink for over a century and a half. This goes to show that whatever the objective may be, and wherever scientific / biological / medical disciplines are involved, and despite the vast technical advances in photography, when clear detail is necessary there is no better medium than black and white (B & W) pen and ink illustration - especially when producing publications aimed at a mass audience.
Popular literature too made use of illustrations in ink and many illustrators of repute were involved in works of seminal importance—to name a few, Lois and Louis Darling in *Silent Spring* (Carson 1962), Charles W. Schwartz in *A Sand Country Almanac* (Leopold 1949), Rachel S. Horne in *Wild Heritage* (Carrighar 1965) and Christopher Reynolds himself in *Creatures of the Bay* (Reynolds 1975)—and there has been one contemporary artist, Ralph Thompson, who has refined Rembrandt’s mix of ink and wash technique and his output has been very prolific, engaging and hugely popular (e.g., Durrell 1954, 1958, 1964; Anonymous 1970b; Thompson 2006). Publishers of popular reference books, though they relied primarily on colour photography, commissioned a number of wildlife artists of repute (Barry Driscoll, Harry Titcombe, Charles Pickard, Norman Weaver and Lesley Marshall to name a few) to execute ink drawings, especially when technical details were concerned, and some of them are considered milestones and continue to be reader friendly even in this age of coffee table books, colour spreads and close up/macro photography. Examples are, Reader’s Digest’s *Living World of Animals* (Anonymous 1970a) and the Time-Life Books’ nature library series (e.g., Anonymous 1965, 1980, 1984, 1985). Even magazines have made use of B & W pen and ink drawings and these have contributed to their popularity, for example *la hulotte* (Anonymous 1995).

Black and white drawings have for long been considered to be the preliminary studies for the finished work—a methodology followed by most of the ‘old masters’. This view is widely held even today and B & W drawing is, in certain circles, considered to be the poor brother of painting and not an end in itself. Even Gary Hodges was turned down by many art and book publishers in the 1980s because “black and white doesn’t sell” (<http://www.wildscapemag.co.uk>). This mindset has hindered the progress of B & W as an art form in its own right, but it is encouraging to note that many contemporary artists like Teresa (Terry) Ann Jackson, Mike Childress, Sam Lane, Joanne Sedgebeer, Sarah Brown, Becci Crowe, Jim Hall and Andrew Simson, to name a few, are progressing in their chosen media (whether it be ink, wash, graphite or crayon) and making a mark for themselves. It is even more encouraging to note that Hodges’ own success story (<http://en.wikipedia.org/wiki/Gary_Hodges>) has inspired a whole generation of wildlife artists to ‘stick to their ground’ and take B & W drawing to the next level and get it the recognition and reputation it deserves.

Pitchandikulam, in Auroville International Township, has experimented with a variety of media (Ramanujam & Brooks 2011), most of which were designed for outdoor public spaces and primarily meant to enhance landscape architecture. However, a few craftsmen have consciously veered towards a more studio-based/scientific approach. One medium, among others, being experimented with is ink drawing and some of the concepts, methods and applications are discussed below.

**Genres of B & W pen and ink illustration**

**Simple naturalistic illustration (Image 1):** The fundamental aim here is to simply be as accurate as possible and not get criticized for superficial inaccuracies by specialists—an all too common phenomenon since wildlife illustration aims to bridge the gap between two empirical worlds that have completely different philosophies (art fundamentally strives to be decorative while science stresses accuracy). The source of a drawing can be any sort of imagery, not necessarily just a photograph or internet image. But it does not simply involve copying / translating one medium to the next but has to take into consideration a variety of different images—and therein lies the risk of the concept getting complicated. For example, the foundations for the design of the King Cobra was a combination of quite a few photographs, internet images and an earlier drawing by John Norris Wood (Anonymous 1970). But
nobody would actually identify the source / sources as the final output does not resemble any single image—
the challenge was to give the drawing a ‘twist’ (pun unintended).

**Taxonomic/Technical illustration (Images 2–4):** Here the onus is on exactitude and quite a degree of technical knowledge is required—either by the artist himself or by the supervisor/technical adviser. In the drawings of the carapace and plastron of the Pond Terrapin every scale had to be represented faithfully which necessitated accuracy in rendering both the morphology and depth in detail (and please note that in nature nothing is absolutely symmetrical). In Fig. 4 of a captive specimen, even the abnormalities (for example, the scales on the thickened forelimbs that could not be withdrawn into the shell), had to be represented in detail.

**Portraiture (Images 5–7):** Contrary to the previous images which just tended to be correct visual representations and could simply be viewed as museum representation, the onus here is to not only capture a ‘living style’ of a close up as in the case of the Indian
Monitor, but also endeavor to depict various moods and actions. For example, the drawing of the Indian Chameleon shows the species in its characteristic locomotive mode as well as capturing an insect and a close up of its threat display (with eyes facing in different directions). Another challenge is to bring out expression, especially of the eyes, when such charismatic creatures like owls are the subjects.

**Naturalistic surroundings (Images 8 & 9):** Simply
depicting animals by themselves is limiting to an extent and artists have always endeavored to show animals in their natural environs. Helmut Diller has had a strong influence on wildlife art, especially his ability to depict environments in a detailed yet minimalistic sense without detracting from the centerpiece. This type of imagery inspired the rendition of the Star Tortoise which is depicted in its natural dry land habitat with a backdrop of *Cissus quadriangularis* which is one of its basic foods. Natural surroundings may simply be part of the composition or could take up the entire drawing space depending upon the need and concept of the design. In the drawing of the four common species of geckos of the Coromandel Coast it was necessary to show a brick wall as the background and also the two strata (viz. wall and
Action (Image 10): Guy Coheleach can probably be credited with introducing a strong sense of ‘action’ to wildlife studies and this has influenced almost every medium of wildlife art since the early 1970s—including pen and ink. This representation of the Asiatic Cheetah in pursuit of a female Blackbuck was actually a two-image combination—that is, the animals were drawn separately and the final composition achieved by combining them both together. As one can see, especially in this instance, the medium is not actually suited to the concept as ink, being very specifically a precise medium, cannot actually accommodate the ‘blur’ of action and the final product can only be termed an approximation of reality. Other illustrators too have attempted to bridge the gap—for example, the time lapse drawing by George Founds representing a Barn Owl _Tyto alba_ catching a murid rodent in the dark (Anonymous 1972)—but these have a sense of stiltedness and unnaturalness that cannot be avoided when detail is the onus of the composition.

Cameos/Sketches (Image 11): Having said that pen and ink is not the ideal medium to depict action, we are confronted with a conundrum—an example being Michael Ayrton’s drawing “Mijbil in a glass tank” of a Smooth-coated Otter _Lutrogale perspicillata_ chasing fish underwater (Maxwell 1960). This and other exceptions to the rule were possible because the artists were spontaneous in their observation/perspective/interpretation, did not bother about detail, and concentrated on movement to bring out the fluid grace and other aspects of the action. Such drawings may lack detail but they fulfill a fundamental need that time-consuming, studio based drawing cannot express. The same book has sketches by Sir Peter Scott and the author himself who shows a keen eye for simplicity of line and a basic feel for movement—and one is always reminded of Ralph Thompson’s drawing of a young Mediterranean Tortoise _Testudo graeca_ in the process of hatching out of an egg (Durrell 1964). The drawings by Ayrton and Thompson influenced the rendering of an Indian Eagle Owl in the process of capturing its prey.

**APPLICATIONS OF B & W PEN AND INK ILLUSTRATION**

Illustrations for books and journal articles (Images 12 & 13): As mentioned earlier, the most fundamental use of B & W pen and ink drawings is for illustrative purposes in the print media, especially in books. Pitchandikulam too has experimented with the application and the results were found to be more than satisfactory. In addition to commissions for popular literature (Wrey 2012), it has also undertaken to illustrate journal articles,
including some in this one as well as a ‘sister publication’ (Ramanujam 2007, 2010).

Bookmarks and post cards (Images 14 & 15): Pitchandikulam has taken every opportunity to publicise the plight of the threatened tropical dry evergreen forest, the indigenous forest type that is limited to the coastal areas of the Coromandel. Among the various media involved, are bookmarks and postcards which also carry informative text (in both Tamil and English because its sphere of activity is rural Tamil Nadu) and a biodiversity conservation message.

Biodiversity based poster (Image 16): Identification of human-impacted life forms was found to be crucial to conservation education in the region—especially where little-understood creatures were the focus of attention. This poster of the “Common Snakes of Tamil Nadu” put up in nearly every school in this region, and enhanced by the efforts of the environment education departments of Auroville, has had far-reaching effects and has contributed a lot towards snakes being acknowledged and tolerated as biological control agents—at least
among the generation of educated adults and youngsters.

**Ecologically oriented posters (Image 17):** As discussed earlier, the genre of poster art produced by Pitchandikulam is a combination of research and classroom poster illustration (Ramanujam & Brooks 2011). This drawing of the fauna of the tropical dry evergreen forest is augmented with informative text - again in both the native language and English, since it should be user-friendly to rural audiences.

**Confluent posters (Image 18):** This is one genre that is unique to the style produced here—viz., one poster continuing on to another and thereby producing a visually striking combination of continuous images. This example is actually a set of three posters depicting a typical wetland along the Coromandel Coast from freshwater, through estuarine (brackish water) habitats to the point of confluence with the Bay of Bengal (and this could actually progress into the marine realm in the near future). A wide variety of different creatures are depicted (over 150 species) and the overriding graphic representation is the ‘web of life’ with predation playing a prominent role.

However much one would like to believe in the medium of pen and ink as a true art form, one has to confront the reality that ink is a precise medium of reproduction and, even within the genre of B & W illustration/art, it is a hardcore representation relying on clarity of line. Though pointillism and hatching/cross hatching can give a sense of depth and shade, they cannot actually replicate the delicacy, subtleties and sensitivities of graphite and wash and great care has to be taken not to fudge the divide between ‘preciseness’ and ‘likeness’. In this sense, B & W ink illustration could be termed to be the most exacting form of science based drawings. Also, science based ink drawings have yet to come to terms with ‘creativity’. ‘Creativity’ is a term...
of significance concerning the ‘arts’ and much bandied about by artists and art critics. Among the various genres of animal-inspired drawings—for example, those of Sci Scott and Jon Tremaine whose conceptualizations border on stylization and abstraction—there seems to be a fundamental yearning to express oneself since there is a vast availability of inspiring imagery concerning the natural world and nearly everyone can express oneself in a personal way. But can these interpretations be classed as wildlife art? The answer seems to be a resounding ‘no’ as a fundamental goal of any science-based image is to precisely capture naturalistic proportion, form and detail. To the artistic community this may sound limiting and lacking in ‘creativity’ - but what exactly is ‘creativity’? Is it a contortion of natural features? Is it a misrepresentation of proportion? Or is it simply a way to shock the audience? To take refuge in Larry Provence’s theology: “Art always manages to put together objects in perspectives that bring fascination. Authors take us places we have never been ….. Science has arranged its findings in a progressive way, finding upon finding, discovery upon discovery, application upon application, knowledge upon knowledge ….. Who has discovered a new shape … a new sound … a new colour …. Do people really create? ............ Only God can create, Man just rearranges” (Provence 1983). And we could add ‘contort’ and ‘misrepresent’ to round off the sermon.

But in the end we are again confronted with another conundrum: is not Ernst Heinrich Haeckel’s work (1974) a true work of creative art? Has it not crossed the fine divide between reality and the abstract? In this regard, could we contemplate how the popular adage “art and science” came into being? Could it not be because our predecessors saw some worth in combining imagery with science? One has only to conjure early memories of one’s school days to realize why science cannot exist without imagery, and vice versa, the need for simple monochrome diagrammatic representations to enhance our understanding of organisms. Whatever the reason may be, there is an innate compulsion encoded in our genes to represent our thoughts and feelings visually - which is not surprising since for thousands of years the human experience of the world was charted using animal signs (Berger 1980) and even today wildlife

![Image 15. Postcards depicting wildlife of the tropical dry evergreen forest. Illustrated using technical pen (Rotring .20 and .30).](image)
Image 16. Poster on the Common Snakes of Tamil Nadu. Illustrated using technical pen (Rotring .20).
Image 17. Poster on Wildlife of the Tropical Dry Evergreen Forest. Illustrated using technical pen (Rotring .20 and .30).
Image 18: Confluent poster (set of three) on Wetlands. Illustrated using technical pen (Rotring .20 and .30).
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imagery continues to generate an appreciation for the natural world, and advance the concern of the public for conservation in general and the conservation of wildlife in particular.

REFERENCES