CHAPTER - VI

FANTASY IN KIPLING’S MECHANICAL STORIES
Kipling has been admired as the "bard of the engineer and protagonist of the new technology."¹ He has sung the song of the marine - engine and all its machinery, from furnace - bars to screws, in such a way as to convert their clanging beats and throbs into a sublime symphony in accord with the singing of the morning stars. He has, in fact, fulfilled a fine prophecy of Wordsworth's, that when the time should come, if it should ever come, when the discoveries and applications of science shall become "familiarized to men, and shall be ready to put on, as it were, a form of flesh and blood, the Poet will lend his divine spirit to aid the transfiguration, and will welcome the Being thus produced as a dear and genuine inmate of the household of man."² He is the only short story writer who has dealt with such difficult themes as marine engineering, naval tactics, gunnery, wireless and much else. Kipling must have been the principal artisan in the creation of that peculiar modern genre in which we are made to see some comedy or tragedy through the medium of technical vocabulary or professional slang. His stories, says Edmund Wilson, "get their effects, with the energy and accuracy of engines,
by means of words that, hard, short and close fitting, give the impression of ball bearings and cogs.\textsuperscript{3} To read these stories is to feel a little of the thrill of the plushy transcontinental Pullmans and the spick-and-span transatlantic liners that carried people around the world.

Most of the stories is \textit{The Day's Work} and \textit{Traffics and Discoveries} deal with ships, machinery and artefacts. The reason for this was that the 1890's saw a zenith in British naval architecture; the innovations after the coming of the turbine were startling and dramatic, as the poems "Destroyers" and "Cruisers" suggest. The railways too had reached a technical perfection and were run with a high degree of pride in achievement. Motor-cars were a novelty. Kipling was much taken by them, and, though his rhymes about them are trivial, they figure in \textit{Steam Tactics} and in other stories. Wireless was in the experimental stages; the deep sea cables, a romantic miracle of engineering. It was an age of models; working steam-engines, locomotives, launches, were to be bought cheaply, and a shop in Holborn achieved a world wide reputation for the excellence of its products. The tour of a ship's engine-room, where the massive slow speed machinery could easily be seen at work, was a normal practice for liner passengers; the giant compounds had a peculiar majesty, like that of windmills, and Kipling mentions the Lascar who prayed to the low-pressure cylinder. There was, in addition, his own pleasure in the perfection.
of any craftsman's work, its functional suitability to its job; and no one in the Pre-Raphaelite tradition, who had seen John Lockwood Kipling's Morris-like skills, could have thought otherwise.

In all these inventions of science and technology there was an excitement and a romance which was still unspoilt by familiarity or by their applications to warfare. Kipling found in them material which excited him and he felt inspired to write mechanical tales. These tales are as Edward Shanks puts it, "the fairy-stories of a new kind." These are exciting stories in an almost wholly novel vein and written with a quite novel smoothness of execution. They were quite popular in Kipling's times. And, as a matter of fact, the ordinary reader so far from being repelled by technicalities actually has a liking for them as they are described to him with convincing ease and fluency. We all like being told how things work. These stories leave us feeling that now we know more about steam-ships and locomotives than we ever did before. It is true that gaps and slips in Kipling's knowledge have been detected. It remains, however, the wonder that he was able to assimilate and transmit so much complicated knowledge despite occasional lapses of memory.

What makes the stories look like fantasies is the fact that in them ships and machines talk volubly about
their experiences. Eric S. Rabkin has said, "We enter a narrative world with the preconceptions of our armchair world intact, and these preconceptions only change as the narrative reconfigures them. In our world, and in Wonderland, the dead do not speak. Their speaking is unexpected in the sense of 'anti-expected'. When the anti-expected happens, we are in the presence of the fantastic." This is what happens in Kipling's mechanical tales. In most of these tales, the machines are humanised, changed into individuals, each with a distinct character, their interchange being amusing enough in the way that one may find the club chatter, about men's vanities and petty jealousies, amusing. ".007" records the conversation of American locomotives in a round house. In "The Ship that Found Herself", the different parts of a ship are animated and Kipling tells us what a wonderful thing a ship is, the various parts talking, quarrelling, complaining.

In fact, it had always amused Kipling to regard engines as sentient, intelligent beings; as early as 1888, when "Among the Railway Folk" was written, he judged that "Engines are the livest things that man ever made. They glare through their spectacle-plates, they tilt their noses contemptuously." He came across "a sleek white and brindled pariah, a horrible machine, which chews red hot iron bars and spits them out perfect bolts. Its manners are
disgusting and it gobbles over its food. "7 Like engines, even ships had a soul, a life of their own. There is a letter to Henley in which he allowed his fancy to run free:

"The way collisions at sea come about is this... the iron in the mine and under the hammer, and in the plates and engine room, has a sort of blind lust beaten into it, for to meet and I suppose nautically to copulate with other iron and steel being linked into the frame of another ship. All the seven seas over, the ship yearns for its mate, tearing along under moon and cloud, sweating in oily tropic ports; rusting on dock; and so forth. At last comes the bridal night - wind, current and set of the sea aiding, while the eyes of men are held, and steamer meets steamer in a big kiss, and sink down to cool off in the water beds. What I want to get at is the steamer's unconcern about the men who happen to be crawling about her inwards at the time. "8

In the mechanical tales of The Day's Work, he went further and endowed the ships and locomotives with a fuller and richer life.

(I)

"The Ship that Found Herself" describes the maiden voyage of the Dimbula, a cargo steamer of twelve hundred tons, of which her skipper says cautiously, "I'm saying that it takes more than Christenin' to mak'a ship. In the nature of things, Miss Frazier, if you follow me, she's just iron and rivets and plates put into the form of a ship. She has to find herself yet." (D.W., P.86). Then throughout the voyage from Liverpool to New York, the different parts of the ship talk volubly about their new and unhappy
experiences:

"It isn't distressingly calm now", said the extra strong frames - they were called web-frames - in the engine room. "There's an upward thrust that we don't understand, and there's a twist that is very bad for our brackets and diamond plates, and there's a sort of West-North-Westerly pull that follows the twist, which seriously annoys us. We mention this because we happened to cost a good deal of money, and we feel sure that the owner would not approve of our being treated in this frivolous way". "I'm afraid the matter is out of the owner's hands for the present", said the steam, slipping into the condenser. "You are left to your own devices till the weather betters."
(D.W., P.90)

But as the voyage goes on, discoveries begin to be made:

"We have made a most amazing discovery", said the stringers, one after another. "A discovery that entirely changes the situation. We have found, for the first time in the history of ship building, that the inward pull of the deck-beams and the outward thrust of the frames lock us, as it were, more closely in our places, and enable us to endure a strain which is entirely without parallel in the records of marine architecture". (D.W., PP. 96-97).

Then comes the entry into New York harbour:

... a new, big voice said slowly and thickly, as though the owner had just waked up. "It's my conviction that I have made a fool of myself." The steam knew what had happened at once for when a ship finds herself all the talking of the separate pieces ceases and melts into one voice, which is the soul of the ship. "Who are you?" he said, with a laugh. "I am the Dimbula, of course. I've never been anything else except that—and a fool!" (D.W., PP 100 - 101).
Thus throughout the tale, we hear the various parts of the untried ship talking. The surface statement of the tale is that machinery, however well tried its parts may be, needs to be run in working conditions - in this case, bad Atlantic weather - before it works as a whole. The different parts of the "Dimbula" chatter, question and complain, until they discover their functions and adjust their relations with each other, and then their separate babble is replaced by the one voice of the new self-realizing ship. The statement can be referred from the artefact of men to men themselves in any form of association, since success in life must depend on acceptance of function and co-operation of parts. Hence this story contains Kipling's favourite moral themes: co-operation, tolerance, give-and-take, the sharing of ordered responsibility according to station and function are essential for the advancement of society and civilization.

Thus the ship in the story "The Ship that Found Herself" becomes a symbol of an organisation. Kipling tells us through this tale that if an organisation - a state, for instance - is to be worth its place in the world, all the components of that organisation have to perform their separate roles in the best way possible and not to mind if their toes are trodden on, because that is inevitable. That is the moral of innumerable tales in Kipling's work, and a very admirable moral indeed it is. Servants of the state
have to realize that they are the parts of a huge machine, the whole of which depends on the loyalty of each and every part.

Then again in "0.007" we have an exact companion piece to "The Ship that Found Herself". Whereas the main characters of "The Ship that Found Herself" were the parts of the ship itself, the various locomotives are the important characters of "0.007". The Ship "The Dimbula" is a symbol of members of an organisation learning to work together; the locomotive "0.007" is a symbol of an individual learning to take responsibility.

The very opening of "0.007" transports us to the wonderful world of locomotives where we find them conversing and behaving like human beings. The writer remarks, "A locomotive is, next to a marine engine, the most sensitive thing man ever made; and No. .007, besides being sensitive, was new" (D.W., P.190). All the locomotives start taking stock of him. Some, like Poney and others, are quite cooperative in their attitude towards the new-comer while others, like the Mogul, are extremely critical. The Mogul looks down upon .007 and boasts that he alone, of all the locomotives, is able to carry eleven cars up the yard. "Costly - perishable - fragile - immediate - that's me !" he tells his fellow locomotives. (D.W., P. 194).
Other locomotives also talk to each other. From their conversation we learn that they are full of petty jealousies like human beings and like to bring to notice each other's weaknesses. When Poney insults Pittsburgh Consolidation saying he "grunted on the grade", Pittsburgh Consolidation brags about his abilities, saying, "Haulin's one thing, but judgement and discretion's another. You want judgement in my business." (D.W., P. 142). Jerry Commuter talks ill of the Compound, saying : "She's economical (I call it mean) in her coal, but she takes out in repairs". (D.W., P.192). The Mogul also insults the Compound saying : "I don't hold with any make of papier - mache wheel". (D.W. P.192).

Then Poney and New Jersey Commuter talk about Camanche, another locomotive, who had a hot box just beyond the Newtons, Friday. .007 asks Poney what a hot box is. Poney makes fun of .007 for its ignorance of the basic things of the locomotives, saying : "Here's an eight - wheel coupled 'American' don't know what a hot - box is ! Never heard of an emergency stop either, did ye ? Don't know what ye carry jack - screws for? You 're too innocent to be left alone with your own tender. Oh, you - you flat car !" (D.W., P.193). However, the Compound, Jersey Suburban and the Consolidation make the meaning of hot - box clear to him. Thus we find that in the first part of the story, .007 is just like a young boy who is to be initiated into life.
Just as in life one comes across critical as well as cooperative people, similarly .007 comes across different types of locomotives. Some, like the Mogul, are bragging all the time and call him "pea - green swivellin' Coffee - pot " (D.W., P. 194); others are quite helpful and enlighten him on various points.

Like all the young boys, .007 has many hopes and aspirations, regarding his future. He "had cherished a hope that as soon as his trial was done, he would be led forth with songs and shoutings, and attached to a green - and - chocolate vestibuled flyer, under charge of a bold and noble engineer, who would pat him on his back, and weep over him, and call him his Arab Steed. The boys in the shops where he was built used to read wonderful stories of railroad life, and .007 expected things to happen as he had heard." (D.W., P.194). But nothing of this sort happens. .007 starts his first journey without any ceremonies.

Soon the time comes for the trial of .007's strength. He is sent to a place where some accident had occurred. During the journey, .007 experiences for the first time "a crippling, stinging pain". "This, " said he, "is a hot - box. Now I know what it means. I shall go to pieces, I guess. My first road - run, too !" (D.W., P.201). At one point, he experiences a great jerk and stops. "That must be the emergency stop Poney guyed me about," he gasped,
as soon as he could think. "Hot-box, emergency - stop. They both hurt; but now I can talk back in the round house". (D.W., P. 202). Other things also which he had heard from his seniors become clear to him by and by.

On reaching the place of accident, .007 discovers that the boastful Mogul had got derailed there. He had never seen a wreck before, and it frightened him. .007 was hitched on to the wrecked cars of the Mogul and backed away till the knot broke or the cars rolled clear of track. By dawn, thirty or forty men were at work, replacing and ramming down the ties, gauging the rails and spiking them. By daylight all cars that could move had gone on in charge of another loco; the track was freed for traffic; and .007 had hauled the old Mogul over a small pavement of ties, inch by inch, till his flanges hit the rail once more, and he settled down with a clank. But his spirit was broken, and his nerve was gone.

It was a great irony of fate that the mighty Mogul had ultimately to depend on the assistance of the little .007 whom he had ridiculed in the beginning. The Mogul himself feels disappointed:

"If it had bin a sixty foot bridge, an' I could ha' slid off into deep water, an' blown up an' killed both men, same as others have done, I wouldn't ha' cared; but to be ditched by a shote - an' you to help me out - in a corn field - an' an old hayseed in his night gown cursin' me like as if I was a
sick truck - horse!... Oh, it's awful! Don't call me Mogul; I'm a sewin' machine. They 'll guy my sand - box off in the yard." (D.W., P. 204-205).

After this accident, .007 finds his experience vastly enlarged. He learns the lesson of humility. He remarks:

"I'm not going to guy any one as long as I steam - not when they 're new to the business an' anxious to learn. And I'm not going to guy the old Mogul either, though I did find him wreathed around with roastin' ears. 'T was a little bit of a shote - not a hog - just a shote, Poney - no bigger'n a lump of anthracite - I saw it - that made all the mess. Anybody can be ditched, I guess." (D.W., P. 205).

The Purple Emperor feels highly pleased to hear it. "Well that's a good beginning," he remarks. (D.W., P. 205). He declares .007 as a full and accepted Brother of the Amalgamated Brotherhood of Locomotives.

This tale, too, is more than mere conversation of various locomotives. It describes the initiation of a boy or youth into affairs and duties of life; he is told, he is taught, he suffers, and he soon grows into an adult. In fact, there is nothing which Kipling describes with more relish than the process whereby the trade - spirit licks some raw cub into shape. That is the whole theme of one of his full length novels - Captains Courageous. It is allegorically expressed in "The Ship that Found Herself". It is implicit in all the army stories and the sea stories; indeed it may be thought that the author turns aside from the narrative too often to assure us that Mulvaney was
invaluable for "licking the new batch of recruits into shape." Even when we escape into the jungle and the wolf pack, we do not escape the Law. Until he has been disciplined - "put through it", licked into shape - a man, for Kipling, is mere raw material. This doctrine of Kipling has been beautifully described in .007 also. As a side issue, however, is the illustration of how small things, accidents, can upset great matters, little men bring down great ones, as when a little eight pound wild piglet derails a monarch of express train engines, worth "all of a hundred thousand pound."

But this tale is not as successful as "The Ship that Found Herself". It breaks down both because of the excess of technical terms and the unfamiliarity of them. Take for example these lines from ".007":

"I've trouble enough in my own division", said a lean, light suburban loco with very shiny brake - shoes. "My commuters wouldn't rest till they got a parlour car. They 've hitched her back of all, and she hauls worse'n a snowplough. I 'll snap her off some day sure, and then they'll blame every one except their foolselves. They'll be asking me to haul a vestibuled next." [D.W., P-191].

Now in this paragraph, most of the readers do not know what "brake - shoes", "commuters" or "vestibuled" may be. It is no doubt perfectly true that complicated machines have their idiosyncrasies, their personalities even. A bicycle can be as annoying as a horse. For once in a way it may be good
fun to push the fancy a little further and attribute sentient life, but Kipling has overdone the thing.

Some critics, however, have liked neither "The Ship that Found Herself" nor ".007". Stephen Lucius Gwynn accuses Kipling first of an abuse of technical jargon, secondly, of an abuse of symbolism. He feels that there is symbolism or allegory involved in the two Jungle Books, but nobody resents it, for the stories are fundamentally interesting. The presence of Mowgli adds the human link which is required to bring us into sympathy, and the animals talk credibly. Animals must, and do, talk, and it seems natural that they should talk as Kipling makes them talk. But when it comes to engines discoursing on a railway siding, or the different parts of a ship holding converse, credibility ceases, and, as Horace observes, "incredulus odi" - the incredible is a bore.

(II)

Two stories from The Day's Work which we have discussed above are simpler than the next two stories of the same collection, which we are going to discuss in this section of the chapter. ".007" was simply a story about a new railway engine which was treated like a new boy at school until it learnt to fit into the system of the American railroads; "The Ship that Found Herself" was about
a ship that sails on her maiden voyage as a collection of girders, plates, rivets, engines and tubes, each speaking with its own voice. But by the time she had crossed the Atlantic, the ship spoke with one voice and the parts had learnt that with a little give and take - they must subordinate themselves to the whole. These two stories exemplify two themes - "engines and screws" and "parts and whole" and their emphasis within the part-and-whole theme is on discipline. But "The Devil and the Deep Sea" and "Bread upon Waters", other mechanical stories of The Day's Work, are different from these stories; these stories combine the "technicalities" theme with "revenge" theme.

In "Bread upon the Waters" we meet the engineer McPhee, a man of great integrity, and of supreme loyalty to the ships' engines that he serves (as he might put it), and who has been stupidly dismissed by a new and not very upright board of directors of the firm Holdock, Steiner and Chase that employed him, and whose interests he had too much at heart. His next employer is old McRimmon, who hates the firm of Holdock, Steiner and Chase, especially Steiner. They discover that Mc-Phee's old ship, the 'Grotkau' is to be put to sea with a crack in the propeller shaft that is almost certain to break in any sea. So Bell, the captain of McPhee's new ship is ordered to dog the 'Grotkau' on her way across the Atlantic to await her almost certain breakdown, and get the reward for towing her in. They are
lucky beyond their expectations, for the crew of Grotkau desert her, and Messrs Holdock and Co. have to pay a vast sum of money for salvage. McRimmon gives McPhee a handsome rake-off. It is a story full of entertaining side-details, and not exactly a revenge story, for the actors who bring the dishonest shipowners to book do not themselves engineer the result; they merely seize an opportunity. It is a revenge story in that it preaches the same sort of moral.

This tale also abounds in technical details. But these details don't distract the readers' attention from the main story. Stephen Lucius Gwynn has rightly remarked: "Nobody would object to his technicalities when they are used so admirably as in the story 'Bread upon waters', a capital yarn with that touch of something more in it that puts Mr Kipling miles above so excellent a spinner of yarns as Mr. Jacobs."¹⁰

"The Devil and the Deep Sea" is another ship story with revenge theme, like "Bread upon waters" which has been discussed above. Hunger and humiliation are the motives that lead the pearl poachers to sink the ship they have recovered and repaired with such enormous and frenzied labour where she will break the back of the gunboat that arrested them. This tale clanks on its way with such a riot of bedevilled machinery that the casual reader may be forgiven for failing to notice what course is laid. The
machinery is necessary to the narrative, though it gets badly out of hand; the cataract of technicalities is meant to impress upon the reader the magnitude of the crew's effort and of the overruling resentment to which they sacrifice their achievement. The Chief Engineer, who has re-established his proper pride by the wild ingeniousness of his professional performance and words to run the ship to Singapore and show her to his brethren in the craft, is borne down by the others. "They had not yet recovered their self respect". At the end, when the hubbub has died down, we see in the mouth of the world - abandoned harbour, that is the turning point of a pearling sea patrol, "a little proa rocking in the warm rain... whose crew watched with hungry eyes the smoke of a gunboat on the horizon." (D.W., P.156). The meat they hunger for is revenge, and they are about to be fed.

The twenty - two men is the proa are an extreme type and the product of extreme conditions. Except for the Chief Engineer, they constitute an undifferentiated human block, propelled by savage resentment into savage action. It is impossible to tell whether this tale was just devised to exhibit the force of revengeful hatred, or whether that emotion was injected into its astounding scenes as the motive most suitable to account for them. In either case, the significance for the study of Kipling's work is much the
same. The injury the crew have received, like the injuries that incite the Pathan, the Malay and the Sikh brothers, is of the kind that pierces to the quick of personal existence and affects the terms on which men have pleasure in living with themselves. That they are toughs and law-breakers, without, in the first instance, a shadow of right on their side, makes no difference to this; nor are we asked to sympathise or admire—except in the original sense of the word.

This story, like the three stories discussed above, also abounds in technical details. Charles Carrington believes: "'The Devil and the Deep Sea' appears to have been written out of sheer delight in the technology of marine engineering." Engines and screws are more prominent in "The Devil and the Deep Sea" than in "Bread upon Waters," as is clear from the paragraph quoted below:

"The forward engine had no more work to do. Its released piston—rod, therefore, drove up fiercely, with nothing to check it, and started most of the nuts of the cylinder—cover. It came down again, the full weight of the steam behind it, and the foot of the disconnected connecting—rod, useless as the leg of a man with a sprained ankle, flung out to the right and struck the starboard, or right hand, cast iron supporting—column of the forward engine, cracking it clean through about six inches above the base, and wedging the upper portion outwards three inches towards the ship's side. There the connecting rod jammed. Meantime, the after engine, being as yet unembarrassed, went on with its work, and in so doing brought round at its next revolution the crank of the forward engine, which smote the already jammed connecting—rod, bending it and therewith the piston—rod cross head—the big cross piece that slides up and
Thus we find that in "The Devil and the Deep Sea", technicalities really overpower the readers. It is no doubt an admirable thing that Kipling should have plotted out exactly what would happen in the engine-room if a five-inch shell fractured forward crank; but the description is worse than Hebrew to the average readers. This, however, Kipling knows well enough, and he takes his chance; but the readers feel bewildered at the subsequent picture of repairing given in the story. They cannot understand what is being done, but they can feel the feverish activity and the sense of amazing resourcefulness.

Kipling's rapture over modern technology, however, does not make him lose interest in human-beings; the man behind the machine is more important than the machine. Among the men behind the machine, Kipling is particularly full of praise for the engineer. W.L. Renwick has rightly remarked that Kipling has made the English more aware of the engineer, just as Smollett made the English aware of the English seaman, Trollope of the Cleric, Maria Edgeworth of the Irish and Walter Scott of the Scottish peasant. 12 "The Bridge-Builders", another story from The Day's Work, revolves around the engineer, Findlayson, who deserves our admiration for the spirit of dedication with which he is doing his work. Findlayson had worked very hard for years
through official red tape, the delays caused by the war, the cholera, the small pox, and other handicaps. "For three years he had endured heat and cold, disappointment, discomfort, danger and disease, with responsibility almost too heavy for one pair of shoulders; and day by day, through that time, the Great Kashi Bridge over the Ganges had grown under his charge." [D.W., P.31]. The Bridge, in a way, was the result of the initiative, calculations and devoted work of two men - Findlayson and Hitchcock - unless one counted Peroo, as Peroo certainly counted himself. Peroo was a skilful Lascar from Bulsar, who had travelled all over the world and gained wide experience, and who spoke wonderful English mixed with lingo of Portuguese origin. He was a genuine Hindu, deeply involved in the mysterious workings of the Hindu divinities. He asked Findlayson: "Our bridge is all but done. What think you Mother Gunga will say when the rail runs over?" [D.W., P.38]. Peroo had performed "poojah" in the big temple by the river for the God within, and he was the trusted lieutenant of Findlayson and Hitchcock.

Peroo’s apparently casual remark about what Mother Gunga will think of the bridge being built across her sets into motion the bewildering forces of her swift currents. Telegrams are received warning the engineers of the rising floods of the Ganges and heavy rains, and Findlayson has only fifteen hours to save as much material as possible from
the rising fury of the river. Findlayson thinks that he must save the bridge at any cost:

"He went over it is his head, plate by plate, span by span, brick by brick, pier by pier, remembering, comparing, estimating, and recalculating. lest there should be any mistake; and through the long hours and through the flights of formulae that danced and wheeled before him a cold fear would come to pinch his heart. His side of the sum was beyond question; but what man knew Mother Gunga's arithmetic." [D.W., P.44].

There arises a doubt in the mind of Findlayson whether three of the spans, still unfinished, will stand the strain and he fears that if the stone-boats go adrift, the girders will be damaged. So with his army of workmen he spends an agonised night doing what he can do to strengthen the weak places. All this is described with force and telling detail of which Kipling was a master.

Findlayson's identification with the bridge is complete. When his servant asks him to come for dinner, he remarks "The bridge is mine; I cannot leave it." (D.W., P. 45) The bridge, however, stands the strain and all is well. It may be that Kipling thought it wasn't enough. Findlayson, who has been too anxious and too fully occupied to bother about eating anything is persuaded by his lascar aide to swallow some opium pills. Then news comes that a wire has snapped and the stone-boats are set loose. Findlayson and the lascar rush down to the bank and get into one of the stone boats in the hope of preventing them from doing irreparable injury. The pair are swept down the river
and landed half drowned on an island. Exhausted and doped, they fall asleep, and have a dream.

With this dream, we swing from the plane of physical reality to the plane of fantasy. On that mysterious island, Findlayson and Peroo see an assembly of Gods, in animal shapes - Ganesh the elephant, Hanuman the ape and finally Krishna himself. The blunt-nosed Mugger (Crocodile) of the Ganges complains that the waters of the Ganges are polluted and she is defiled. But the elephant answers the Ganga's charge that the bridge defiled her waters, by saying that it is but the shifting of a little dirt. "Let the dirt dig in the dirt if it pleases the dirt." (D.W., P.52). Gunga prays for a vengeance on the bridge-builders and Kali supports her claim. But Krishna tells her: "They (the human beings) come all to thee at last. What need to slay them now? Have pity, mother, for a little - and it is only for a little." (D.W., P.56). Hanuman also speaks in favour of the bridge builders and remarks: "For my own part, it pleases me well to watch these men, remembering that I also built no small bridge in the world's youth.... They toil as my armies toiled in Lanka, and they believe that their toil endures." (D.W., P.51-52). Final judgement, however, is pronounced by Indra, the Supreme God: "Ye know the Riddle of the Gods. When Brahm ceases to dream, the Heavens and the Hells and Earth
disappear. Be content. Brahm dreams still. The dreams come and go, and the nature of the dream changes, but still Brahm dreams." (D.W., P.59). He adds, "Get thee to thy huts again, beloved, and make sport for the young things, for still Brahm dreams. Go, my children, Brahm dreams — and till He wakes the Gods die not." (D.W., P.59). Brahma created the universe in ecstasy and it rose out of his divine imagination. Indra says the divine dream continues and regeneration will follow decay and that the complaint of the Ganges regarding the bridge is like making disproportionate fuss over a little, transitory, dirt in a vast expanse. The mutable is silhouetted against the immutable, the transitory against the eternal. The material vastness of the bridge is thus reduced to infinitesimal smallness and the Hindu Pantheon is shown indirectly setting its seal on the project of the great bridge over the Ganga.

"The Bridge Builders", like the four mechanical tales of _The Day's work_ discussed earlier, is a story crammed with technicalities. Findlayson's work was:

"One mile and three quarters in length; a lattice girder bridge, trussed with the Findlayson truss, standing on seven - and - twenty brick piers. Each one of those piers was twenty - four feet in diameter, capped with red Agra stone and sunk eighty feet below the shifting sand of the Ganges' bed." (D.W., P.31).

In fact, Kipling's passionate desire for concrete information makes his whole work a store - house of curious
and sometimes very interesting facts; but with the desire to know all about everything goes a desire to call everything by its right name, and this has bred a craving for strange words. Now a story which turns upon a triumph of modern engineering gives great scope to this bent of mind, and the consequence is that the first three or four pages of "The Bridge - Builders" are sprinkled with words like "Spile-pier", "borrow-pit." "trusses" and "revetments."

These terms appear to convey the atmosphere which Kipling wants to attain, and certainly the picture of the bridge rises distinct enough. But to many readers it seems disagreeable pedantry, and indisposes them to follow with proper attention what comes after.

But the peculiar bent of Kipling's mind, while it gives him the keenest interest in the bridge as a bridge, makes him also see it not merely as a bridge, but also as a symbol of something else. The spanning of the Ganges is not merely an engineering achievement; it stands for a type of losing battle which the old Gods of the East fight against the new forces. Moreover, "The Bridge - Builders" can also be read as Kipling's rich tribute to those men who, on little pay, with small chance of recognition, gave their youth, their strength, their health to do to the best of their ability the job it was their business to do. Lastly "The Bridge - Builders" can be read as Kipling's prophecy...
that British Raj was going to last for fifty years only. Kipling wrote this story in the last years of the nineteenth century, when his countrymen were sure that Indian Empire would last for another thousand years. But as M.M. Kaye puts it, "Kipling had a personal, private, crystal ball in his head which, occasionally, gave him glimpses of the future." So Kipling makes Findlayson and his Indian colleague Peroo symbolise the companionship and trust that so often existed between the British and Indians in the days of the British rule, and without which the Raj could not have lasted a year. It illustrates, too, their mutual dedication to the work on which both were engaged, and which they toiled at not so much for money as for the approval of their fellow workers, their equals. The talk of the Gods foreshadows the end, which was to come exactly fifty years later. Half a century! — that is a long, long time out of the life of a man,"... but as we who know reckon, it is today." Now that day too is past and gone. But it is amazing how Kipling could predict the end of the British Empire after fifty years with such an extraordinary foresight in the story "The Bridge Builders."

(III)

"Wireless", another mechanical tale, occurs in Traffics and Discoveries. Kipling has written something about the origin of this story:

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"In 1899, when Mrs. Kipling and I were living at the Elms, Rottingdean, our friend Mr. H.H. McClure wrote asking if he could bring Marconi to see us. They graciously accepted my invitation to lunch at one o'clock. I got Marconi to talk about wireless, and at the end of an hour I felt that I knew as much about wireless as it was possible for a layman to learn. During the talk, I consciously or unconsciously was gathering much material for my story "Wireless" in which I carried the Idea of etheric vibrations into the possibilities of thought transference."14

Thus "Wireless" was generated by the excitement of finding in the new development of wireless telegraphy parallels to his conception of the mysterious nature of inspiration.

The tale opens in a druggist's shop at the rear of which an early wireless experiment is being conducted. A receiving set has been tuned so as to vibrate exactly to the wave length of a signal originating at a great distance, a signal which races around the earth in search of an instrument capable of giving it a voice. Meanwhile, at the front of the shop, another kind of wireless experiment is in progress. Young Mr. Shaynor, a tubercular pharmacist's assistant, is huddled for warmth near the stove as freezing gusts howl in from the sea. He has just returned from a walk with his sweet heart, Fanny Brand, and wracked with the pain which the icy winds have brought, he has accepted the offer of a soothing drink, concocted by the narrator from the miscellaneous syrups and elixirs. Now, drugged by the medicine and temporarily released from his own personality, he becomes himself a kind of receiving set, a set tuned, by
the accident of his life and this particular evening, to the supernatural wavelength of the Keatsian Daemon, and he begins to set down, painfully and with a number of distortions, lines from "The Eve of St. Agnes". When Shaynor awakens, it is determined that he has never read any Keats, and so the narrator is able to formulate a theory of artistic inspiration which sees the poet as a kind of receiving set that can be tuned by varying experiences to varying "wavelengths", and inspiration itself as the radio waves searching for an instrument that will, with its own energy, amplify the weak broadcast signal. Since "like causes must get like effects", Shaynor, some of whose experiences have been similar to Keats, is able to write poetry something like Keats's.

This story offers a "powerful insight into Kipling's harsh aesthetic. " It remains Kipling's clear statement of what is required for a man to become sensitive to the Daemon of inspiration. During the course of the story we are repeatedly made aware of the fact that Shaynor is in pain. He suffers, and suffers greatly, the pangs of illness, of freezing cold and, not least significant of all the violent pangs of love. And it is the intensity of his pain which, more than anything else, raises him to the energy level at which it is capable of amplifying the signals of the Daemon. It is significant that while
Shaynor's verses are something like Keats's, they are not identical with them - are, in fact, less precise and sometimes rather vulgar. This is because Shaynor is a coarser man than the poet, a man of less heightened sensibility who lives at a considerably lower level of consciousness. Thus, if Keats wrote poetry more exquisitely beautiful than Shaynor's, it is because - Kipling implies - he was capable of more exquisite suffering. Beauty is a direct function of pain.

Secondly, this story tells us that Kipling's theory of art was "classic" and "impersonal". He believed in inspiration - the Daemon - but he thought of it as something coming from outside, not generated by the conflicts within. In his story "Wireless" he works out as a sort of sustained metaphor the likeness between wireless telegraphy (then a novelty) and the temporary invasion by Keats's genius of the soul of a consumptive chemist's assistant. This story, hence, is a majestic and notable attempt to explain the mystery of creation, and Kipling has chosen a metaphor that hardly anyone would dismiss as unworthy. Creation of a work is always a mystery that different poets and critics have tried to explain in their own ways. Stravinsky said that he was merely the "vessel" through which his music passed; Elgar spoke of "plucking music from the air."¹⁶ Kipling like these artists and unlike the Romantics, believed that inspiration comes from without. In Something of Myself also
he wrote that his "Daemon" was all the time holding his hand and making him write; he was a mere instrument in the hands of his Daemon like the receiver of the Wireless System.

"With the Night Mail", another mechanical tale of Kipling, is ahead of its time in more than the obvious sense with its enthusiastic delineation of a non-existent technology. W.W. Robson calls it a "futuristic fantasy" because it presents a vision of the future. It is cast in the form of a journalist's account of an Atlantic crossing, by air, in the year 2000 A.D. Never before had Kipling done such technical writing as in this story, for which he invented thousands of words of shop talk put in the mouth of his McAndrew of the future, and filled up pages with answers to imaginary correspondents and advertisements for machines not yet invented.

This story also shows Kipling's prophetic imagination at its best. His astonishing forecast of the contrivances, the utilities, and the safety precautions that airborne commerce would bring into being are really remarkable. Radio communication was new in 1904. Although a few ships were fitted with wireless telegraphy, there was no radio-telephony, no hint or suggestion of public broadcasting; but Kipling's air liner moved through a world-wide network of radio services, supplying weather forecasts and allotting safety levels and landing priorities. It was not
mean feat to predict "flying control", seven years before Bleriot flew the channel. His airship is engined with gas turbines and is navigated on light - beams which pierce the clouds. When, in 1919, the air-ship R-34 crossed the Atlantic, the crew took with them one book, Kipling's Actions and Reactions to compare their experience with airship story "With the Night Mail", in it. The volume was finally presented to him autographed by everyone on board. This shows the nature and extent of the fame Kipling enjoyed in his life time.

This story is different from the mechanicial tales which have been discussed above; Kipling has not written it to convey some universal truth or share his knowledge of the world of technology. He seems to have written this story for fun and he seems to rejoice in the romance that the airliner brings up. Kipling seems to enjoy his realistic inventiveness; he pictures for our delight the planes of the future. Nor does Kipling here delight only in drawing the characters and devising machinery; he envisages what the world would look like from "up there". We are transported half a mile above the dappled level of Atlantic clouds, and occasionally get a glimpse of things seen, as when "Tim slides open the aft colloid and reveals the curve of the world - the ocean's deepest purple - edged with fuming and intolerable gold". (A&R, P.140).
Kipling followed this story three years later, in 1907, with another attempt to pierce the future, "As Easy as ABC" in which broadcasting is described and an international company of technicians, the "Aerial Board of Control", gradually takes over the administration of the world, the old national states becoming eroded by the force of the new technology. Kipling had always been fascinated by radio experiments since on his cruise with the Channel Fleet in 1909, and in 1903 had written what many consider his most brilliant inventive story "Wireless" in which time as well as the aether is penetrated, and thrilling contact made with a past century. In fact, "As Easy as ABC" can be enjoyed as one of the finest stories of the future ever written. It is dated A.D. 2065, and is a historical episode in a world that has passed through the most profound and complete of social revolutions. Politics has ceased in such a world. No human being takes any interest in government, for all things run smoothly and in perfect order under a small and unobtrusive Aerial Board of Control, which leaves absolute privacy and security to the individual. "Transportation is Civilization. Democracy is Disease" (D.O.C., P.42). In such a world, crowds and the people are the one source of evil, and a sporadic outbreak of now absolute and medieval democratic agitation in Chicago arouses a storm of agoraphobia, and brings about the events to be narrated. Kipling does not describe, but makes the reader's
imagination vividly realize the wonders of aerial navigation, the ground-circuits, and the destructive sound vibrations and withering rays of light, which are the defences and the artillery of the future. He moves among these sensations as if they were the commonplace of existence, as if mankind had been used to them for generations.

But "As Easy as ABC" is more than a mere futuristic fantasy. It can be read as Kipling's major attack on democracy. If we go through the story, we find that "Utopia" that Kipling has created reflects not only Kipling's preference for superb transportation, but also his aversion for democracy. In the story, the Aerial Board of Control (A.B.C.) is informed that two great crimes are being committed in Chicago—namely crowd-making and Invasion of Privacy. The town has cut itself off from aerial communication, thus compelling the intervention of the A.B.C. which—and this is the only government the world admits—is responsible for traffic "and all that implies". The Board consists of four members; an English man (De Forest), an Italian (Pirolo), a Russian, and a Japanese, all of which might be considered a forecast, written in 1912, of the United Nations, except that it is effective, having no outside committees. The Board has at its disposal an aerial fleet, armed with temporarily blinding lights, and a devastating noise which "touched the raw fibre of the
brain" , and which exists for " what used to be known as war. " (D.O.C., P.30).

Up to this time Illinois had been thoroughly civilized state, ahorning crowds, careful not to invade privacy, and, with an average length of life of a hundred years, recognising birth - control. Moreover, in common with the rest of this planet, as Pirolo reassures himself and his colleagues, Chicago " has had her dose of popular government. She suffers from inherited agoraphobia. She has no - ah- use for crowds " (D.O.C., P. 31).

When the Board lands in Chicago, De Forest asks the Mayor, " What was your silly trouble anyway ? " " Too much dam' Democracy," the Mayor answers (D.O.C. P.41); and a little later his Medical Officer chimes in : "Transporation is civilisation. Democracy is Disease", (D.O.C. P. 42). They told the Board that a group of people, whom they had come to call " the serviles", living in hotels and apartments because it saved them the trouble of looking after houses, had " got to talking ... telling men and women how to manage their own affairs. (You can't teach a Servile not to finger his neighbour's soul). That's invasion of privacy, of course, but in Chicago, we'll suffer anything rather than make crowds " (D.O.C. P.42). And later :
"Would you believe me, they went on to talk of what they called 'popular government'? They did! They wanted us to go back to the old voodoo - business of voting with papers and wooden boxes, and word - drunk people, and printed formulas and news - sheets! They said they practised it among themselves about what they'd eat in their flats and hotels. Yes, Sir! Then they finished... by talking about 'the people.'" (D.O.C. P. 44).

This so incensed the quiet, happy inhabitants of Chicago, used to living their lives in their own way, that they actually made crowds, though when they noticed this they were filled with horror, and shrank away when they found they were touching each other. They even threatened to murder the Serviles, the women being foremost in this. Thus the officials of Chicago called upon the A.B.C. to help them protect the Serviles, or carry them away.

The latter solution was found to be the practical one. But what to do with the Serviles when they were got back to England? Why, obviously, lend them to the manager of the most successfully entertaining variety show, where to the immense delight of the audience, they would be exhibited as an untouched primitive community, going through all the old rigmarole of voting, counting noses, making crosses on bits of paper and stuffing these into boxes. Moreover they would talk for hours about how to "raise the Planet to loftier levels". All this the Board arranged by wireless while on their way back, describing the Serviles to the delighted manager panting for an original comic turn.
During the talk on the way back, the members of the Board "all marvelled how the Serviles had contrived to extract and secrete so much bitter poison and unrest out of the good life God gives us "on this by now normally "tolerant, humorous, lazy little Planet." (D.O.C., P.56). For Kipling, as for Gide, "Politics is the organisation of hatreds". And as a gloss upon this, also as an illustration of the baleful effect of abstract ideas, there is a curious snippet of conversation between the Serviles and Pirolo:

"But can't you understand", said Pirolo pathetically to a shrieking woman, "that if we'd left you in Chicago you'd have been killed?" "No, we should n't. You were bound to save us from being murdered." "Then we should have had to kill a lot of other people." "That doesn't matter. We were preaching the Truth." (D.O.C., P.56).

Truth must prevail, though man's limited heavens fall. Thus "As Easy as ABC" remains a powerful statement, made by Kipling, against Democracy.

"Sea Constables" belongs to that category of Kipling's mechanical tales in which technical details overshadow the main story. It is written in Kipling's most irritating style, virtually all in a dialogue crammed with technicalities and leaving obscure what exactly took place. He did not have the story printed in book form until 1926, which perhaps suggests that he had his own doubts about it. The construction of this story is as complex as the
vocabulary. Four men, all naval officers, talking together over a good dinner, reconstruct in snatches of dialogue, their relentless pursuit of a neutral skipper whom they know to be supplying German submarines. With good consciences and good digestions, they recount their parts in hounding him to death.

The main figure, however, in this story is the Middle-aged Maddingham who has spent a harassing time dogging the ship of a neutral who is trying to deliver oil to German submarines somewhere in the Irish sea; the other two temporary sailors have also had dealings with this neutral, young Winchmore in the North Sea, and Portson in the English Channel. At length, after dangerous and wearisome clinging to the "Newt," a season broken by a court of Inquiry where Maddingham has to answer charges of lack of tact and endangering foreign political relations - this is where Tegg comes in - the "Newt" gives up, goes to the port in Ireland, and sells his oil to the Admiralty. Maddingham goes to see him. The Neutral tells him that he is "all in", and will die unless Maddingham runs him across to England so that he can see his doctor in town. Maddingham says that this is out of question, since his boat is "a man - of - war commission". When told that he was as good as condemning him to death by saying that he had "surrendered", Maddingham says:
"There wasn't any question of surrender. If he'd been a wounded belligerant, I might have taken him aboard, though I certainly shouldn't have gone a yard out of my course to land him anywhere: but as it was he was a neutral — altogether outside the game....

"I was perfectly polite. I said to him: Try to be reasonable, Sir. If you had got rid of your oil where it was wanted, you'd have condemned lots of people to death just as surely as if you'd drown'd 'em" (D&C. P.47).

The "Newt" died the next day.

It has been complained that "Sea Constables" is a brutal story. Maddingham should have taken the man across to England; it would no doubt have been "sporting" of him. But, as he said, his boat was in Admiralty Commission: why should he risk it, or waste its time, in doing so? Besides Maddingham was tired to death. Thus in "Sea Constables", Kipling expressed his anger against the neutrals, who, regardless of the lives of other people, extracted profit from the war. Ethically, "Sea Constables" may look to be a deplorable tale, but war is a deplorable business, and Kipling was never the man to paint it in pretty colours. Perhaps because of its obscurity, the critics have never condemned this story as roundly as "Mary Postgate" in which Kipling gives rein to similar anger against people who could do such things as the German Airman had done.

Last story to be discussed in this chapter is "The Eye of Allah" which deals with "a forerunner of microscope"
that turns up in the thirteenth century English monastery and is destroyed on purpose as too likely to attract charges of diabolism. Like other stories of the last phase, this story is also composed with layer upon layer of meaning, close packed like the skin of an onion. The central figure in the story is John of Burgos, who is an illuminator of manuscripts. The scene is an English monastery - Benedictine, and we are in the thirteenth century, when there were still large tracts of Spain held by the Moors. John is at work on his Great Luke, which will be his masterpiece. When the story opens, John is about to leave once more for Spain, and the specialists in the various departments of the monastery ask him to get them drugs for the hospital and colours for the scriptorium. As he takes his leave, we learn, in hints half spoken that it was not only to see that "Jewish girl," nor only for colours and drugs that he went. He wanted devils - for Luke has many scenes of devils dispossessed and John was sick of church devils, who are only "apes and goats and poultry conjoined." (D. & C., P. 368).

He was back, twenty months later, with much of what he had been asked to bring. He takes a present to the Abbot's lady, whose sickness nothing seems to cure. He tells her that she who had been his model had died in his arms, and the child with her. Later, the Abbot - who is
more of a doctor than a monk and had learned wisdom from the Saracens as a prisoner in Cairo after a Crusade - says to John, as they store in new drugs: "... for pain of the soul there is, outside God's Grace, but one drug; and that is a man's craft, learning, or other helpful motion of his own mind." (D&C., P.372).

It was late in the summer that John was asked to dinner by the Abbot to meet some learned doctors of medicine and to show them some pages from Great Luke. There is one noted physician from Italy, Roger of Salerno, and a Friar from Oxford, Roger Bacon. Their talk is mostly of medicine and of the obstacles to any true advance which the church puts in their way. The Infirmarian of the monastery has come to wonder whether "certain small animals which the eye cannot follow may not enter the body by the nose and mouth, and set up grave diseases." (D&C., P.379). But neither reason nor experiments are permitted; the test for everything is to be found in the scriptures. They are on the edge of a wrangle when the Abbot tactfully asks John of Burgos to show them his devils. "The Magdalene was drawn in palest, almost transparent, grisaille, against a raging, swaying background of woman-faced devils, each broke to and by her special sin, and each, one could see, frenziedly straining against the Power that compelled her." (D&C., P.383).
Whatever was there in picture surprises the doctors. One of them argues that these shapes or beings could only have been seen under the influence of drugs. But the Infirmarian of the monastery remembers that John had once shown him a snow-flake through a crystal that made things seem larger. Could it be that he had actually seen such shapes as these? John admits it and shows them a simple microscope, like a compass for drawing circles, with a lens on one arm, screw to adjust the distance, and a mirror to reflect light on the object. All he needs is a drop of rain water from the roof. So they go on to the leads and he shows them a new world in a drop of water. Roger of Salerno and Roger Bacon cry out at the possibilities of research, experiment and discovery; such creatures as they see in the water must rage in the blood too. The Infirmarian falls on his knees to thank God that his dream of little creatures was not a presumptuous sin but the truth. But the Abbot—though he was more of a doctor than a monk and though his own lady was dying of cancer—tells them how men will see it; John, they will say, comes back from the Moors and shows "a hell of devils contending in the compass of one drop of water. Magic past clearance! You can hear the faggots crackle!" (D&C., P.393). He declares: "This birth, my sons, is untimely. It will be but the mother of more death, more torture, more division and greater darkness in this dark age." (D&C., P.394). He
takes the device from John and destroys it.

This story, like other fantasies of Kipling, can be interpreted in a number of ways. First of all, it can be enjoyed as a story about what happens to a group of people in a medieval monastery. Secondly, it can be read as a story about a premature discovery (the microscope); Kipling had touched on the theme of discovery made before the world was ready for it earlier also in the story "Marklake Witches." Thirdly, through this story Kipling confronts four persons, the artist, the scientist, the philosopher and the church dignitary who represent four aspects of civilization, with an emblem of the new science—the microscope. To each of them, the microscope stands for a different thing. To the Infirmarian, Thomas, it shows that the "little animals" are God's handiwork, and frees him from his evil dreams which he now recognises as of God. To John, the artist, it reveals the source of "devils" with which he has decorated the borders of his manuscript. To the doctor and the scientist it is the key to knowledge. The Abbot, representing the authority of the Church, breaks it with the hilt of his dagger. Thus, the story beautifully describes the age-long struggle between orthodox faith and scientific enlightenment. Lastly it expounds Kipling's doctrine of work and craftsmanship, which is also the anodyne for loss.
The mechanical tales discussed above show how deeply Kipling was interested in the inventions and discoveries which were then transforming civilization. He was fascinated by machines and this fascination inspired him to write stories about machines. He indulged in technical details for their own sake, not to show off, but for the fun of it. He was like an expert pianist rejoicing in the brilliant ease of his execution, who chooses a piece not because of its music-value, but because it gives him an opportunity to exercise his special gift. He was the first short story writer who wrote stories about engines, ships, microscopes, bridges, airliners and so many other inventions. It was such a new practice that it must have left the literary critics gaping. But Kipling's own public was to be found among the makers of the world as it was at the turn of the century. They found no difficulty in his vocabulary, no unfamiliarity in his subject matter. The generation that bridged the Forth, built the Uganda Railway, dammed the Nile, laid the Pacific Cable, irrigated the Punjab, sent radio messages across the Atlantic, crushed the ore of the Golden Mile at the Klondyke, tunnelled through the Rockies, revealed the last secrets of the earth's surface, and learned to fly had at last found its own laureate and welcomed him. "What an interesting illustration Kipling affords of the poetic imagination working under difficulties," wrote Norton to a friend," There is little
to nourish or quicken the spiritual side of his nature, but he had done a better work for his time than any other man in treating, through the poetic imagination, the material conditions which surround us all."18

Since Kipling continued writing such mechanical tales till the last phase of his literary career, it shows that they must have been received and read with enthusiasm and interest by the readers of his time. Modern readers, however, for whom the inventions of steam - engines or ships, wireless or microscope have become things of the past, do not find these stories to be very interesting. Second reason for their being less popular may be that they abound in technical details. The readers of these mechanical tales get perplexed when they go through them. These tales would have been more readable if their author had been less meticulous. "0.007" is a story about a locomotive; "The Ship that Found Herself" is a story about an ocean tramp. We would have to be respectively an engine - driver and a ship builder to read and enjoy them with complete understanding. The ordinary reader hardly knows (or cares to know) what a garboard strake or a bridge stringer, a high pressure cyclinder or a webframe is. These tales, no doubt, show another side of Kipling's versatile talent. But the object of fiction (from the reader's point of view, from which the author's may often be very different) is entertainment; and as such, their value is small.

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7. Ibid.


10. Ibid., P.215.


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