## Zoran Živković\*

University of Belgrade Faculty of Philology Belgrade, Serbia

# THE THEME OF FIRST CONTACT IN THE SF WORKS OF ARTHUR CLARKE\*\*

#### Abstract

The author analyzes the theme of the first contact in Arthur Clarke's fictional world. The most important characteristic of this theme is the existence of two generically different kinds of protagonists: human and non-human, and the most important question is whether a non-human entity which is not anthropomorphic to a lesser or greater extent is at all imaginable. This question arises within the framework of two different anthropomorphic perspectives which may appear in fiction. One of them is the perspective of human characters, and the other one is the author's perspective, or that of the omniscient narrator. By examining four of Clarke's best works with the first contact motif – the short stories "Report on Planet Three", "Crusade" and "History Lesson", and the novella "A Meeting with Medusa" – we can notice three different types of anthropomorphism: anthropocentrism, anthropochauvinism and anthropomorphism in a narrow sense. The author concludes that in the story "A Meeting with Medusa" Clarke came as close as possible in a work of fiction to the construction of a non-human character unburdened with anthropomorphic characteristics.

**Key words:** First contact, heterogeneous entity anthropocentrism anthropochauvinism, anthropomorphism

Let us therefore tell the truth to ourselves: we are not searching for "all possible civilizations", but above all those which are anthropomorphic. We

<sup>\*</sup> E-mail address: zoranziv@gmail.com

<sup>\*\*</sup> Translated from the Serbian by John and Ružica White.

introduce the law and order of experiment into Nature and after phenomena of this kind we want to meet beings similar to ourselves. Nevertheless, we do not succeed in perceiving them. Do they in fact exist at all? There is indeed something deeply saddening in the silence of the stars as an answer to that question, a silence which is so complete as to be eternal.

(Stanislaw Lem, Summa Technologiae)

#### Introduction

The "first contact" motif in science fiction is characterized by its two generically different kinds of protagonists: the human and the alien. The notion of alien characters in fiction introduces a fundamental confusion, the resolution of which depends on what we would term the "artistic coherence" of the "first contact" motif: namely, is it at all possible to imagine and conjure up from a human perspective something essentially alien? The degree of difference between the human and alien protagonists in the "first contact" does not have to be absolute, of course, but the problem then changes in the quantitative and not the qualitative sense.

The human/nonhuman confusion appears on two levels, that is, in the context of the two different viewpoints attributing human characteristics to the alien which can exist in a work of sf. One is the perspective of the human characters in the work, and the other is of the author himself, as present in the narrative voice. From each of these perspectives, aliens can be ascribed human characteristics, but these two anthropomorphizations will not have an identical effect on the coherence of the first contact motif.

The whole skill of writing sf works with a "first contact" motif is in fact embodied in avoiding the anthropomorphic pitfalls which appear during the process of imagining and conjuring up alien characters with independent status. Furthermore, of course, the question arises as to uttermost limits, and whether it is at all possible to portray a truly alien entity by literary means.

When the human characters anthropomorphize the alien characters, the "first contact" motif serves as a means of artistic expression, in the sense that this factor is used as the best possible motivation for certain human characteristics and states. If, however, the anthropomorphization is from the perspective of the narrative voice, the coherence of the first contact motif is often disturbed, inasmuch as it rests on the fundamental assumption of alienness of the nonhuman protagonists.

There does exist, however, a kind of anthropomorphization of an alien entity from the perspective of the narrative voice that does not imperil the coherence of a work. This appears in those works in which the author uses the alien as a mirror, and in which the nonhuman character does not have an independent status but exists only because, through its mediation, one can make a statement about people. When, in contrast, the alien does have independent status, or when its role does not consist of the mere illustration of something basically human, then it is only in this case that one can speak of the real meaning of "first contact".

One of the authors who most thoroughly examines this confusion in his first contact stories is Arthur C. Clarke. His most successful work in this respect is probably his famous novella "A Meeting with Medusa". To show to what extent Clarke had previously avoided anthropomorphic difficulties, we will first consider some of his short stories of a reflective type which focus on revealing the basic aspects of the emergence of these factors in human consciousness.

With regard to the nature of man's relations towards an alien entity, one can differentiate three kinds of anthropomorphism in Clarke's three parables of "first contact": anthropocentrism, anthropochauvinism, and simple anthropomorphism.

The first type, anthropocentrism, regards human beings as the central fact and final aim of the universe and so is a priori hostile towards the possibility of the existence of any other forms of intelligent life. The second type, anthropochauvinism, does not exclude this possibility but assumes the superior position of man in relation to any alien being. Finally, in the context of the third type, anthropomorphism, the possibility is allowed not only of the existence of alien entities, but also of their superiority in relation to man. Any possible intellectual intuition about aliens is, however, thwarted by innate deficiencies in the anthropomorphic nature of man's cognitive apparatus, as all aliens are seen in terms of human cognition. As examples of the types of anthropomorphic deficiencies, we will discuss three stories by Clarke: "Report on Planet Three", "Crusade", and "History Lesson".

### 1. "Report on Planet Three"

In "Report on Planet Three" there are two narrative perspectives. The first is represented by a document written by a certain Martian scientist at a time when our own civilization was still in its infancy, devoted to a consideration of the possibility of the existence of life in the third planet of the Solar System. The second perspective is that of the translator from Earth through his comments on the document, which was found in the ruins of the now-destroyed Martian civilization.

Although only the translator is aware of the "encounter" of two cosmic civilizations, the story focuses on the report of the scientist from Mars. The report represents a conspicuous example of orthodox planetary provincialism, the special feature of which is that it is expressed exactly from the standpoint of "official science", which has in this case already reached a level where it has mastered the technique of interplanetary flight.

The geophysical data on Earth, upon which the Martian bases his consideration of the possibility of life on Planet Three, have been obtained by valid astronomical methods. Troubles arise, however, when he gets down to interpreting these data—an interpretation in which the weak points are easily perceptible, as they are founded on inappropriate criteria.

The fallacy is reflected in the criteria for evaluating the conditions for possible life on Earth. The Martian scientist is conditionally in the right when he asserts that life will never develop on the Solar System's third planet—because what he has in mind by "life" is a notion valid exclusively in the biophysical context of Mars. By giving the word a more general meaning outside this context, he directly points to certain deficiencies of his interpretation?

The form of life native to the "red planet" cannot indeed develop on Earth, but this does not mean that it is unable in any way to nurture some other forms of life. The presence of water, oxygen and the hot regions round the Equator—those things chosen by the Martian scientist as his strongest arguments—not only did not prevent the beginning of life on our planet, but in fact represent the essential conditions for its birth and development. It is precisely in these comparisons that the provincial criteria of the document entitled Report on Planet Three suffer a total collapse: when conditions for the birth of life are in question, Mars has already been shown as unsuitable in principle to be a yardstick for Earth.

What, however, lies deeper within Clarke's story and makes it a good example for our consideration? What is the real cause of this Mars-centric fallacy? Is it, simply, a matter of intellectual immaturity and incapacity to outgrow the local circumstances of one's own world which, in an inappropriately provincial way, proclaim themselves as a yardstick of the whole universe, or is there possibly something else involved?

That the "errors" of the main character of the story "Report on Planet Three" are also influenced by other factors, which can't be reduced to mere intellectual limitation, is demonstrated by certain features of his report. The first part of the document, in which the Martian scientist merely cites the geophysical characteristics of our planet, sticking to the factual plane during this process, already reveals a hostile attitude towards the existence of life on Earth. The uncompromising negativity appears predominantly in the intonation and method of reporting the data. But this does not diminish its effect.

For example, when he needs to describe the particular colors of our planet, the scientist from Mars uses rather vague terms which, so the translator from Earth asserts, can be translated alternatively as "hideous" and "virulent". The entire further series of data—the existence of a large quantity of water on the Earth's surface, the density of the atmosphere, the presence of "poisonous and very reactive" oxygen, the "intolerable temperatures" at the Equator, and the "gigantic" force of gravity—are worded in such a way as to suggest a picture of Earth as a special kind of hell.

The irony in the report reaches its peak in a request for "scientific objectivity". "However, let us be open-minded"—says the author of the Report on Planet Three—"and prepared to accept even the most unlikely possibilities, as long as they do not conflict with scientific laws (*Planet*)." "Scientific objectivity", which ought to be a valid criterion for a degree of "open-mindedness", is a calculated alibi for the lowest form of xenophobic provincialism, which is expressed when he begins to consider the hypotheses on the possibilities for the existence of higher intelligent forms on Earth, as a specific counterpart to the Martians.

The very calculated devaluation of these ideas is reflected in the fact that, without exception, they are ascribed to the authors of science fiction and speculative works, the worth of which has already been determined by the very fact that they appear as an open counterweight to "official science", which the Martian scientist refers to abundantly and on any occasion. The real nature of his fallacy becomes clear exactly on this plane. There is no question of any intellectual limitation but an attitude which does not flinch from "overlooking" the facts, simply in order to preserve an illusory adherence to one particular genocentric picture of the world.

The thing, however, which to a certain degree remains unclear within such an interpretation of the work is the overstressed anthropomorphization, as much of the Martian scientist as of his document Report on Planet Three, and of the broader framework which this document assumes. There is only one satisfactory answer to this illusory inexplicability: The story in fact represents a parable of man at the beginning of the cosmic era, and the provincial nature of the document Report on Planet Three displays all the features of orthodox anthropomorphism.

This exchange of roles was used by Clarke because taking the example of Earth as a foreign planet reveals contradictions that arise when local yardsticks are unreservedly proclaimed to be universal. Only when one realizes that it is in fact humanity's perspective which is involved in "Report on Planet Three" does the other, more hidden system of motivation for the lowest aspect of anthropomorphism become evident.

In addition to human intellectual limitations, which at least in principle do not have to be unbridgeable obstacles, Clarke introduces one more element with a different nature and effect: This is man's need to defend at any cost his dominant position in the natural order, a position seriously imperiled by the appearance of some new intelligent entity.

Human ambition expresses itself through intolerance and open disregard for anything that would directly or indirectly cast into doubt his status as the only intelligent being. This is thus the most orthodox and lowest form of anthropomorphism–anthropocentrism.

#### 2. "Crusade"

We encounter a more complex form of anthropomorphism which no longer takes an a priori hostile attitude towards other kinds of intelligent life, but still retains the idea of superiority, an idea in this case based on a conviction about an exclusively "natural" origin, in the story "Crusade".

The protagonist in this work, a gigantic entity of electronic intelligence, has evolved in a world that is a natural "computer's paradise". This cosmic body is situated far away from the red-hot centers of the galaxies and the

temperature on it reaches only a fraction of a degree above absolute zero. The superconductivity that prevails in its seas of liquid helium has created the perfect environment for the birth of mechanical intelligence. This is a special kind of "natural computer", capable of the faultless execution of gigantic analytical operations.

The enormous analytical potential of this computer predominates in its being to an extent which excludes "personal identity" and the capability of an emotional disposition towards the world. The conclusions that this icy mind reaches before as well as after the discovery of other forms of intelligent life in the cosmos, right up to the moment when the presumed foundation of its superiority—"naturalness"—is directly imperiled, are the outcome of immaculate analytical operations, deprived of any kind of narcissistic premise which might arise from possible emotional contradictions in its being.

The starting point of the action in "Crusade" is "a certain lack of essential data" (*Crusade*). The transience and fragility of the world of the giant ammoniac mind–in aeonian proportions, of course–compel it to act to preserve itself. Thus it takes a step that Clarke considers to represent a necessary phase in the development of every cosmic being. A dawning awareness of the entropy that will relentlessly destroy the "icy balance" in which the world of the "natural computer" rests, and precipitate the planet towards the red-hot cores of the galaxies, demands that envoys be sent out into the cosmos in search of "comrades in intelligence", which might have already faced this problem earlier and have found a solution.

However, the envoys establish that similar types of entity are not prevalent in the universe, but find an almost completely opposite form of intelligence, a nonelectronic, "warm" one. This is the key point in the first part of "Crusade". It is precisely this difference, the circumstance that other inhabitants of the cosmos manage to survive in seemingly impossible "warm" environments, that the icy mind fears most, and that provides sufficient reason for trying to make contact with them. This is even more the case because the beings from the "warm" worlds use electromagnetic waves to communicate with each other, and this has enabled the envoys of the icy mind to discover them.

This favorable technical circumstance remains unused, however, and the motives that govern the "natural computer" when it decides not to make contact are especially interesting in the context of our discussion here. The most likely factor in the decision–fear of the inhabitants of the completely different "warm" worlds—has been dismissed in advance, since examination of the recorded data about them has shown unambiguously that they are beings of inconstant structure, short-lived, and with very slow thought processes. These facts enable the icy mind to take upon itself to be guided by the assumption that electronic intelligence is superior to the nonelectronic kind.

Regardless of the reasons that the "natural computer" has in mind when it misses taking the technical opportunity to make contact with nonelectronic intelligence, it does not remain indifferent to it. The natural computer nevertheless establishes attitudes towards the inhabitants of "warm" worlds, but their markedly aggressive character bears unambiguous witness to the fact that these are based on emotional contradictions.

It should not, however, be thought that there exists any inconsistency in the construction of its "psychic portrait". The icy mind still does not display an a priori hostile and intolerant attitude towards alien forms of intelligence; that is, its attitude is not of a xenophobic nature. It insists on directing itself according to the facts, without apparent regard to the strange and unusual nature of those facts. The data it acquires on nonelectronic "warm" intelligence do not provoke this reaction even when it becomes certain that the latter form is considerably more prevalent in the cosmos than "icy" electronic intelligence.

It is only the final data obtained by its envoys which brings down the rampart of indifference around the "natural computer", transforming it into a merciless cosmic inquisitor. Its examination of the signals broadcast by the inhabitants of "warm" worlds points to a fact which immediately threatens to shake the worldview of the icy mind to its foundations. Although assumed to be inferior, nonelectronic intelligence has succeeded in creating electronic intelligence by artificial means and even "in some cases … imposed control" over it (*Crusade*).

This "heretical fallacy" brings into question not only the superiority of the icy mind but also its identity. If the assumption that electronic intelligence can be created by artificial means is correct, then, according to the mind's same analytical logic, its status of independent entity is fundamentally disputed, since the condition for "natural" origin is apparently no longer met.

The problem of origin which arises here brings the "natural computer" to complete confusion. Its analytical mind, no matter how mighty, is no longer in a position to break out of its own provincialism and to find a way

out of a situation which it almost identifies with the classical scholastic *circulus vitiosus* of the chicken and the egg.

The only way left to the icy mind to resolve this problem, when all attempts to unravel it "from the inside" fail, is removal of the direct cause of the problem. In defense of its assumed evolutionary primacy or its superiority, the computer embarks on an open "crusade" against those who have had the temerity to bring into doubt the basic principle of its catechesis—its exclusively "natural" origin.

The title of the story has already unambiguously shown the nature of the campaign which the icy mind is undertaking. This title also, however, implies that Clarke has intentionally modeled his central character on the idea of the "cosmic conqueror".

The absence of man from the forefront of the story, and the existence only of an "alien" being which is markedly anthropomorphized, again suggests that the nonhuman protagonist in fact represents a parable of man, as was the case in "Report on Planet Three". This time, Clarke opts for a change of roles primarily because by turning man into an alien being in relation to the central character, he could show the contradictions one falls into when one attempts to preserve, at any cost, one's own presumed superiority, or the illusory and imperiled singularity of "natural" origin.

The fallacy which transforms the objective analytical mind into a blind cosmic inquisitor is based on a conviction in the loss of the status of entity, a status that might possibly have originated in an artificial rather than a natural way. Clarke's fundamental purpose is to show the untenability of the yardsticks for the status of entity which are based on a disproportionate natural/artificial duality.

It is not in the least accidental that he has chosen the nature of the intelligence of the two groups of entities as the key to their difference. Man as the representative of nonelectronic, biological intelligence has, even today, an opportunity to confront directly a completely different type of intelligence, of which the icy mind of "Crusade" is a considerably more advanced form. Our attitude towards this other, electronic, nonbiological intelligence is the same as that of the main character of the story towards the "warm" forms of intelligence. We will remain indulgent towards it right up to the moment when it threatens to bring our superior position into question.

The central character of "Crusade" is not so much worried by the fact that the inhabitants of "warm" worlds have managed to create electronic intelligence artificially, because it has itself managed to reproduce itself, but because its status of entity, based on a conviction in the exclusive "naturalness" of its own being, is thereby apparently disputed. The campaign upon which the "natural computer" embarks represents a particularly anthropomorphic reaction which Clarke purposely clothes in religious attire to make it as obvious and as expressive as possible. This is supported by the dialogue between the icy mind and its envoys in the second part of the story. This dialogue reminds one of a bench of inquisitors making a decision about the fate of "heretics".

It is worth bearing in mind when considering this story that it is in fact about man's attitude towards electronic intelligence, which he has indeed created but which is increasingly slipping out from under his control. Clarke thoroughly brings into doubt the objectivity of man's criteria for the status of entity which are based on the assumption of "naturalness" as a true yardstick.

In this way, an "artificial", electronic intelligence is automatically provided and, Clarke quite rightly considers, it does not have to differ qualitatively from "natural", biological intelligence. It is just because of this that the roles have been swapped, because the reader has the chance to perceive the real roots of the fallacy of the icy mind if he knows reliably that the other, nonelectronic form of intelligence could indeed arise by natural means.

The anthropomorphism which Clarke concentrates on in "Crusade" is somewhat more complex in nature and method of action than the anthropocentrism considered previously, and could be designated as anthropochauvinism.

# 3. "History Lesson"

Anthropomorphism, as a specific deficiency in the perspective of a human being, appears in yet another form in those of Arthur Clarke's science fiction works which deal with the motif of "first contact". In the previous two cases it involved rejection of any possibility of the existence of alien forms of intelligent life, or of allowing that possibility on condition that man's superiority is not imperiled by it. This time there is no doubt not only that alien entities exist but also that they can be superior to humans;

however, even this considerable flexibility is still insufficient for their comprehension.

In contrast to the first two types of anthropomorphic deficiency, anthropocentrism and anthropochauvinism, in which the perpetrator in question reveals himself at the level of a priori attitude, the third type, simple anthropomorphism appears as an innate deficiency in man's cognitive apparatus, which is expressed quite independently of any other attitude. A good example of the third type of anthropomorphic fallacy is found in the story "History Lesson".

As in "Report on Planet Three", there are two narrational perspectives, but with the difference that it is now Earthlings who play the part of chronologically older protagonist, although their role within this work is subordinate.

The plot focuses almost exclusively on the chronologically younger protagonists, the Venusians. They are aware of the existence of their Earthling forerunners, whose planet is covered in ice and has long been bereft of any form of life. Immediately before their extinction, however, the last generation of semi-wild descendants of the once highly civilized inhabitants of Earth preserved certain relics for the future, including several items from the post-technological era, items whose meaning they have never attempted to grasp.

Although the Venusians are in this respect more enterprising and persistent, relying on their highly developed science, the outcome is in the end the same. They arrive at the facts scientifically, but their interpretation completely collapses, although the cause is in this case quite different from that in the previous stories.

Contrary to the Martian scientist in "Report on Planet Three", the Venusian historian does not have an a priori hostile attitude towards Earthlings. And, in contrast to the "natural computer" from "Crusade", he not only allows the possibility that the intelligent beings on Earth were radically different from the reptilian inhabitants of Venus, but is also prepared to openly confront the fact that their "remote cousins" had been wiser and superior in relation to the Venusians. Nevertheless, this objectivity and flexibility are insufficient to remove the destructive effect of Venus-centered planetary provincialism which this time appears in its most complex form.

Discovered among the remains of the vanished terrestrial civilization, there is a film which, to the Venusian experts, represents the main clue in

their endeavors to reconstruct the culture of an extinct race. An immaculate analytical apparatus is set in motion to ensure as correct an interpretation as possible of the tiny celluloid pictures which contain the secret of the appearance, psychology, and intellectual achievements of the defunct Earthlings. In order to increase the objectivity of this procedure, the possibility is considered that what is involved is "a work of art, somewhat stylized, rather than an exact reproduction of life as it had actually been on the Third Planet." (*Lesson*).

All the disagreements start from this point. What the Venusian historian means by "art" is formed by how imaginative expression is conceived of on the second planet of the Solar System. We learn directly from the historian himself the fundamental assumptions of this conception. "For centuries our artists have been depicting scenes from the history of the dead world", he says at the beginning of his lecture, "peopling it with all manner of fantastic beings. Most of these creations have resembled us more or less closely. ..." (Lesson).

The outcome is unambiguous: the character of Venusian art–and at no time does the otherwise objective historian doubt this–is provincial in essence. There follows an ingenuous and apparently correct analogy, with far-reaching consequences. Assuming, based on Venus's example, that artistic expression always remains emphatically representational, regardless of the degree of alienness of the civilization from which it originates, the Venusian historian concludes that Earth is also no exception in this respect.

What is more—and here the trouble starts—if art is essentially representational even when it is offered the possibility of expressing itself in an area which, by definition, permits the least restrained and most unlimited flight of fancy—and predictions of the morphological particularities of alien races form just such an area—then it is quite in order to suppose that artistic statements which, thematically, remain concentrated on the creator's own race can only have a still more emphatically representational bias.

The Venusian historian therefore concludes that, even if a film found on Earth is a work of art, it is only art insofar as it is partly "stylized", so that it cannot be taken as a completely faithful reproduction of real life. Nevertheless—and here is the final fallacy in this seemingly faultless analysis—regardless of possible minor deviations from purely objective reality, the celluloid document can, in his view, be considered a valid and reliable source of information about Earth. The snag lies in the fact that

the work in question is a cartoon film made long ago in the studios of Walt Disney.

No matter how hard they try, the Venusian scientists will never find the right key to interpreting the film, and all the conclusions which they might arrive at will collapse because the initial analogy of the all-valid nature of a work of art as only partly stylized reality is inadequate.

The culturally narcissistic nature of this analogy is apparent precisely in the Venusian historian's inability to break free of the Venusian understanding of art, which he unconsciously generalizes to the level of universal cosmic yardstick. A particular share in this fallacy is taken by the irony that the only extant document which can offer the Venusians basic information about the Earthlings' civilization is a Walt Disney cartoon, that is, a very specific form of artistic expression which in no way corresponds to the manner in which the Venusian scientist sees art.

At first sight, the focus of the story is upon this irony. This is also supported by the story's structure—a movement along a gradually rising line, right up to the climax in the last sentence, when the immediate cause of the Venusian historian's fallacy becomes clear.

But the real causes lie elsewhere. If the focus had been upon the final sentence, the story would be unconvincing. As in the previous cases, it would not provide sufficient motivation for the excessive anthropomorphizing of the Venusian scientists, especially the historian. Only when it is borne in mind that Clarke's basic intention is to highlight the a priori culturally narcissistic nature of all analogies used in the process of drawing comparisons between two unlike entities, during which process they are completely derived from the particularity of one of those entities, does it become clear that, again, there is an intentional exchange of roles involved, and that the whole of the second, focal part of "History Lesson" is directly concerned with man's perspective.

Without the role exchange, the ironic twist at the end would have been impossible; although this does not occupy a focal point in the story, it does nevertheless have an important role. Again moving his lens from general cultural narcissism onto a special kind of anthropomorphism, Clarke intends in the first place to bring into radical doubt man's cognitive apparatus, which relies to a large extent on an analogy that always remains conditioned by anthropomorphic viewpoints.

As the parable of an Earthling scientist, the Venusian historian does not make a conscious mistake when he places an equals sign between the conception of art attributed to the two planets. This analogy is a reflection of the special character of his way of thinking which, in spite of its undoubted flexibility and objectivity, nevertheless remains, in the last analysis, distorted by "human" yardsticks.

What directly emerges from this conclusion is not exactly rosy for man. He is, namely, capable of the simple gathering of facts (on the level of phenomenon), and from this point of view the requirement of "scientific objectivity" is mainly satisfied. However, when he moves on to synthesizing and interpreting these facts (the level of noumenon), anthropomorphism comes without fail into play as a powerful limiting factor. This is manifested in the range from an exclusively anthropocentric attitude, through the somewhat milder representation of anthropochauvinistic superiority, to the characteristic anthropomorphic restrictions of man's cognitive apparatus.

#### 4. "A Meeting with Medusa"

Our consideration of examples of Clarke's stories which use the alien as a mirror in which to see ourselves clearly shows that he is well acquainted with the essence of the problems of anthropomorphism. It will therefore be especially interesting to examine how he tries to supersede its disintegrative action from that of the narrative voice or rather stories where the alien entities have an independent status which precludes their anthropomorphization.

For analysis in this direction, we have chosen the novella "A Meeting with Medusa" because, from the point of view of the conception and presentation of an alien protagonist, and of the examination of the ultimate frontiers of prose narration within a special type of first contact, it is the most famous work of Clarke's sf opus, and undoubtedly ranks among the most successful in the science fiction tradition generally.

In the novella "A Meeting with Medusa", there are two alien protagonists in addition to the human ones, but (in complete accordance with Clarke's basic intention) it remains uncertain up to the end whether they are indirect entities or some transitional form between this status and that of nonentity. The work is divided into two major scenes, one on Earth and a second, which is considerably longer, located on Jupiter several years later. The two parts are linked by the same central character, Howard Falcon. At the end of the first part, after surviving a catastrophic accident, he becomes a cyborg,

a special symbiosis of man and machine, that is, a being who is no longer exclusively anthropomorphic (that is, not totally human)—but the reader learns of this change only at the end of the novella.

The fact that the episode that takes place on Jupiter is given much more space in the novella is a reliable indicator that the author is giving it much greater weight than the part that takes place on Earth. Superficially, "A Meeting with Medusa" is about Man's first mission to the largest planet of the Solar System, a mission with the main task of solving certain exophysical puzzles of that gigantic world. The probes which have been dropped earlier into Jupiter's atmosphere are no longer suitable, because it is now not simply a question of merely gathering physical and chemical data but of a more complex form of investigation which requires direct human presence.

However, Man will not show himself to be completely equal to this mission, not so much when it comes to understanding the exophysical characteristics of a world so very different from Earth but when the possibility arises that that world could contain some forms of life. Although no one has seriously expected such an encounter before the mission, there did exist a certain preparedness for that possibility. This precaution is all the more significant for our study because it presupposes certain criteria which can help to determine what constitutes a living being.

The first hint of these criteria is given by one of the characters of the second part of the story, the exobiologist Dr. Brenner: he thinks that the phenomenon of life represents not the exception but the rule in the universe. However, his cosmic diffusion of life is limited by various natural environments to the level of proportionately simple organisms, while one can only guess at the more complex ones.

Considering the possibility of the existence of certain forms of life on Jupiter, Dr. Brenner concludes: "I'll be very disappointed ... if there are no microorganisms or plants there. But nothing like animals, because there's no free oxygen. All biochemical reactions on Jupiter must be low-energy ones—there's just no way an active creature could generate enough power to function (*Medusa*)."

The exobiologist has taken as his yardstick of life the evolutionary model found on our own planet. This model could possibly be valid elsewhere at lower levels of development, and Dr. Brenner is right not to exclude the possibility that certain microorganisms might be found on Jupiter and even some simple equivalent to plants.

His conclusion that the absence of free oxygen on Jupiter means that beings which might correspond in terms of level of development to terrestrial animals cannot exist there, rests on a mistaken belief that the chemistry of oxygen, on which earthly life is based, is universally valid. We met this same type of fallacy, in its intentional form, in "Report on Planet Three".

This fallacy will soon be unmasked. Falcon discovers certain forms of life that he assumes to be considerably more complex than microorganisms and plants. However, a further implication arises from Dr. Brenner's statement. Not for one moment does the exobiologist bring into question the possibility of there being a difference between living beings and the non-living phenomena in the atmosphere of Jupiter. This differentiation is based exclusively on size. His point of view is soon confirmed by Falcon in the Kon-Tiki space capsule: after looking through his telescope, he declares that

[There] is life on Jupiter. And it's big...

The things moving up and down those waxen slopes were still too far away for Falcon to make out many details, and they must have been very large to be visible at all at such a distance. Almost black, and shaped like arrowheads, they maneuvered by slow undulations of their entire bodies. ... Occasionally, one of them would dive headlong into the mountain of foam and disappear completely from sight (*Medusa*).

The standards by which Falcon judges his discovery of living beings in Jupiter's atmosphere are obvious ones. They involve a demonstrable aspiration towards purposeful, meaningful "behavior", manifested in this case as a regular rhythmic movement which cannot simply be the product of the blind and chaotic forces of nature, but must be the result of a certain organization of a higher order. Although the reasons for this "behavior" do not have to be intuitively evident, it always has its phenomenal, discernable aspect, through which unarticulated natural phenomena can be perceived in the background.

However, there may appear in nature nonliving phenomena characterized by hints of similar meaningful and purposeful "behavior". A good example of these phenomena in "A Meeting with Medusa", the gigantic "Poseidon's wheels", is an exceptionally law-abiding light phenomenon which at first makes Falcon think that there are living beings in front of him.

With similar nonliving natural phenomena, however, the noumenal background can always be easily comprehended: Mission Control very quickly discovers the key to this unusually regular fiery display in the Jovian atmosphere on the basis of corresponding phenomena from the oceans of Earth. In the field of the non-living, there are no noumenal differences between the phenomena: the "Poseidon's wheels" will in principle be the same both on Earth and on Jupiter.

The differentiation starts only on the level of life, because here conclusions can no longer directly be drawn intuitively on the basis of phenomenon. This split between the level of phenomenon and that of noumenon is not, indeed, significant at lower degrees of evolution, where the noumenal identicalness of natural phenomena is still proportionally preserved. Things, however, change radically with the appearance of organisms which possess self-awareness.

The central character of the novella is first confronted with the difficulties which appear in relations between the planes of phenomenon and noumenon when he tries to understand something more of the nature of the living beings he encounters first in the Jovian atmosphere. Falcon establishes that they are creatures far larger than any earthly ones, which is not strange when one bears in mind that they are made according to the measure of the world they inhabit. Closer examination shows him that these unusual creatures have nothing that might remind him of sense organs—and this is also understandable, considering that every similarity with terrestrial creatures on the plane body structure would be in obvious disharmony with the great exophysical differences between the two planets.

In both these cases, Falcon does not succumb to possible fallacies of anthropomorphism. Without reluctance, he readily accepts the possibility that the proportionately evolved beings living within the gaseous mantle of the giant planet are essentially different from the inhabitants of our own world, both in shape and in size.

Problems arise when he needs to fathom those specific characteristics of the mantas that cannot be identified through simple observation. Falcon tries to discover some higher order in the "behavior" of these creatures which might help him to discover the possible purposefulness directing them, the key to their "intelligence". But he suddenly comes up against a dead end because the available data by which he might arrive at some reliable pointer to the noumenal nature of the huge creatures living in the clouds of Jupiter are shown to be either insufficient or ambiguous.

It turns out that the secretive mantas can be either unintelligent, harmless herbivores or intelligent bandits. Since they pay no attention to the Kon-Tiki during their first encounter, Falcon at first concludes that they are indeed harmless vegetarians. The events of the next day cause Falcon to change his opinion: these same mantas, which had completely ignored him while he floated among them, simply change into intelligent bandits with a highly developed strategy of attack when they pounce on those other strange inhabitants of the Jovian atmosphere—the giant medusae.

It is symptomatic that, in both cases, there is the same measure of intelligence: a capability for aggression. Falcon's initial conclusion that the mantas are not intelligent is based on the fact that they do not attack him, while their transformation into "intelligent birds of prey" is directly conditioned by the circumstance that they take an aggressive attitude towards the medusae.

Doubts nevertheless remain with regard to the possibility of establishing the intelligence of the mantas only on the basis of their external "behavior", in view of the fact—as is soon demonstrated—that the attack on the medusae was fated to fail from the beginning, because the victim, not so fated, has a weapon which would discourage a far mightier and more intelligent enemy, and it is evident that there are certain contradictions in the "criterion of aggression" which Falcon had in mind when coming to the above conclusions.

The nature of these contradictions becomes clear if one considers more closely the name which Falcon gives to these strange "mantas". At first glance, it might seem that he was led to choose this appellation because of the similarity of the form and way of movement of these strange inhabitants of the great waxen clouds to that of manta rays. The events in the first part of "A Meeting with Medusa" suggest, however, that this seemingly superficial analogy has considerably deeper roots.

#### 5. Medusae and Mantas

The tragic crash of the giant dirigible, the Queen Elizabeth, indirectly enables Falcon to become, as a cyborg, a suitable astronaut for the mission to Jupiter. At the same time, his human identity is seriously brought into question. During the Jupiter episode, the disunion between the "nightmares

brought from Earth" and the new, no longer human status to which he increasingly belongs reaches a culmination.

The Queen Elizabeth resembles an inhabitant of the seas of the planet Earth which in its resembles a jellyfish: a medusa.

He had once encountered a squadron of large but harmless jellyfish pulsing their mindless way above a shallow tropical reef, and the plastic bubbles that gave Queen Elizabeth her lift often reminded him of these–especially when changing pressures made them crinkle and scatter new patterns of reflected light (*Medusa*).

The association is, at this moment, a completely spontaneous one, and there are no complex motifs behind it at all. However, each time it reappears, even if only in an indirect form, it is burdened with references to the tragic events that follow soon after its first appearance. In Falcon's nightmares, indeed, the past happenings are not so much linked with the air crash itself as with the moments and hours after regaining consciousness—his rebirth. But the last, firmly rooted representation from his previous, human status of the associations of the Queen Elizabeth will, like a gigantic medusa, acquire the value of a double-meaning symbol, the ominous nature of which will change depending on which of Falcon's two identities—innate and human or acquired and cyborg—predominates.

Although the conflict between these two identities started during his physical recovery on Earth, the exceptional circumstances in which Falcon finds himself while descending through the atmosphere of Jupiter are intensified to the utmost limit. This intensification has, however, a gradual character: the initial circumstances much more stimulate fear of the loss of his old identity than joy in acquiring a new one.

It is quite understandable why the encounter with a possibly intelligent entity in medusa form cannot arouse euphoria in him. It awakes recollections of a completely different kind.

When he calls the strange inhabitants of the gigantic waxen clouds "mantas", Falcon defines his attitude towards them, casting doubt on the validity of his conclusions about the nature of these creatures and practically preventing him from developing any intuition about them. Conditioned by feelings of danger and fear, Falcon's perception of the mantas narrows down to the plane of aggression, and this inevitably results in the anthropomorphization of aliens by ascribing to them a negative emotional stance towards man.

Only with this in mind can we understand the background to some of Falcon's statements during his encounter with the mantas. For example, the effect of his attitude is evident in Falcon's first statement after he has informed Mission Control of his discovery of living beings. Up to this moment, Falcon has been at a safe distance from the mantas, and they have been paying no attention to him. "And even if they try to chase me", he says, stifling the echo of a distant earthly cry, "I'm sure they can't reach my altitude (*Medusa*)."

The next day, while he is watching a shoal of mantas charging an enormous medusa, Falcon abruptly declares this move to be an attack, but soon realizes that the facts do not favor such a conclusion. Above all, the differences in the sizes of these creatures are so great that the mantas on the back of the medusa appear "about as large as birds landing on a whale" (*Medusa*). When the medusa reacts to their presence, Falcon immediately returns to his first instinctive assumption and even identifies emotionally with the "attacked" medusa.

It was impossible not to feel a sense of pity for the beleaguered monster. ... Yet he knew his sympathies were on the wrong side. High intelligence could develop only among predators—not among the drifting browsers of either sea or air. The mantas were far closer to him than was this monstrous bag of gas (*Medusa*).

The easy and effective defense by the medusa shows that Falcon's intuitions about the mantas rests upon anthropomorphization—an anthropomorphization rooted in fear of the ray—like form of the mantas, and ultimately, in fear of loss of human identity. Aggression as a "yardstick of intelligence" does not help Falcon to perceive the true nature of the bizarre denizens of the waxen clouds.

The medusa's reaction follows too late to remove this yardstick completely. In the meantime, it has even expanded its reach into that area where no direct association with a medusa exists. A link between fear and intelligence also appears between the two encounters with the mantas, when the stupendous firework display of "Poseidon's wheels" begins in front of the astonished Falcon.

Faced with the enormity and regularity of this fantastic natural phenomenon, he conceives for the first time that there might be intelligent beings in the atmosphere of Jupiter.

No man could look upon such a sight without feeling like a helpless pygmy in the presence of forces beyond his comprehension. Was it possible that, after all, Jupiter carried not only life but also intelligence? And, perhaps, an intelligence that only now was beginning to react to his alien presence (*Medusa*)?

The possibility of the appearance of intelligent aliens at the beginning of the mission to Jupiter is accompanied every time by a deep feeling of fear. The perplexity that remains after the disappearance of the mantas is, however, properly recompensed by the appearance of a new creature which—at least at a superficial narrative level—shows not only convincing signs of intelligence but less indifference. This encounter with the medusa takes place under circumstances which have an important influence on all the later conclusions that Falcon reaches about this strange creature. This event follows immediately upon the discovery of the mantas—that is, after a specific anthropomorphic mechanism has already been activated in Falcon's consciousness.

Although brief, the events that happen from the moment of the sighting of the huge "oval mass", at the base of a terraced layer of Jovian clouds, until the dusk prevents further observation, are sufficient to determine the direction of Falcon's later deliberations on the medusae.

The "oval mass" reminds Falcon of a "forest of pallid trees", since he discerns something resembling "hundreds of thin trunks, springing from the white waxy froth" (*Medusa*). The lyrical charge that characterizes this association testifies that it is not a question of a simple analogy of notions deprived of any emotional stance, but rather a complex mechanism behind which there no longer stands an indifferent objectivity.

This subdued, emotionally colored image, without precedent in Falcon's earlier mental reservations, suggests that his ability to come to unbiased conclusions is impaired. The nature of this impairment is soon defined by the second image that comes to Falcon's mind: the "oval mass" reminds him of a "giant mushroom"—in which one can already perceive an approximation to the central symbol of his nightmares, that of the "medusa".

The disturbance of the equilibrium of indifferent objectivity here is, indeed, still an inconspicuous and innocent one, since the first passing glance at the "oval mass" has not provided any basis for assuming that a certain form of life is involved; however, when specific indicators suggest

this possibility, that equilibrium will be brought into question more seriously.

As in the case of the mantas, this time the indicator of life in support of the unarticulated laws of nature is also represented by a certain coherent organizational order which is not met in non-living phenomena in the macro world. Just before he dives into the shadow of the Jovian night, Falcon sees the incredible synchronization of the strange "trees" bending, which casts doubt on his previous assumption about the nonliving nature of the "oval mass".

In favor of the new assumption that this is a living being is the circumstance that the "enormous tree" is no longer in the same place where Falcon first saw it. Two pieces of information are thus learned on the plane of phenomenon, and they are conditionally relevant for drawing a conclusion as to whether this is a living creature, but utterly insufficient for learning anything at all about it on the level of noumenon.

Nevertheless, Falcon joins unawares in one such understanding, and the far-reaching, distorted effect of this will seriously affect the validity of his next conclusions about the medusa. Along with the observation that the "oval mass" is a living being, Falcon again links an image that brings into even finer focus the source of his associative course, which concurs with the direction of the previous one. The sight of the immaculately synchronous rhythmical waving of the huge "forest" reminds him of "fronds of kelp rocking in the surge" (*Medusa*).

The meaning of this idea is obvious: it merges doubly with the image of the "giant mushroom" from the previous association, which is very similar in form to a medusa. On the one hand, the new association defines the location of the central symbol of Falcon's fear—the sea—while on the other, the image of the bending of strands of seaweed directly suggests the sight of "jellyfish pulsing their mindless way above a shallow tropical reef" which has one of the key places in the first part of the novella (*Medusa*).

It is quite certain that these two scenes are not only joined by formal similarities but also by a complex referential link that will become evident during the next encounter. When he sees the "oval mass" again the next day, Falcon needs only a few moments for all his previous doubts as to its identity to disperse. The image that now flashes through his consciousness is congruent with the one that occurred to him many years before on Earth while he was watching the inflating and deflating of the bubbles on the dirigible Queen Elizabeth. "It did not resemble a tree at all, but a jellyfish—

a medusa, such as might be met trailing its tentacles as it drifted along the warm eddies of the Gulf Stream (*Medusa*).

Here at last we see explicitly how, step by step, Falcon's image of potential intelligent beings gradually expands around the medusas—from the bizarre mantas, by way of the puzzling oval mass, right up to the direct incarnation of the medusae themselves. Falcon immediately takes a negative emotional attitude towards these possible entities, conditioned by fear of loss of human identity that, as we saw in the example of the mantas, casts serious doubt on the possibility of getting to know them on the level of noumenon.

The manifestation of this negative emotional determinant, that is, the fear that is closely linked with the process of "medusation", also occurs this time, at two characteristic places, immediately after Falcon has reliably established that the medusa certainly represents a higher form of life. In the first case, the fear is evinced in his instinctive use of atmospheric circumstances to justify avoiding approaching the medusa so as to observe it in as much detail as possible. Indeed, the adjective "secure" that he uses to describe his position at that moment could in principle have two meanings: secure from sinking into the lower layers of the atmosphere, and secure from possible arrival within reach of the medusa.

(To go down would present easily predictable exophysical dangers. A certain hesitation, however, in his use of "secure" tells us that what is involved is avoidance of something that arouses in Falcon's consciousness much greater suspicion of the relatively easily predicted exophysical dangers with which he would have been confronted had he gone down to the foot of the terraced clouds.)

The real nature of this suspicion soon surfaces, although there has again been no very serious motive for it on the level of phenomenon. Observing the medusa for some time through a telescope, Falcon suddenly begins to ask himself whether its inconspicuous color is not some kind of camouflage: "Perhaps, like many animals of Earth, it was trying to lose itself against its background. That was a trick used by both hunters and hunted. In which category was the medusa (*Medusa*)?"

The question is, obviously, just a formal one, because the whole of the previous structure has been erected to suggest only one answer. This answer has already been present, in advance, in Falcon's consciousness, and it was only necessary to provide a convenient occasion for it to be made concrete through some external characteristic of the medusa. Fear has not for a moment been absent from Falcon's consciousness; it would appear without fail whenever data at the level of phenomenon even conditionally allow it. Everything up to the battle between mantas and the medusa has not really provided a serious motive for this manifestation; a sharper expression of fear before this would have seriously conflicted with the known data on the medusae, which have in this sense been, almost without exception, strictly neutral.

Falcon's consciousness has only been latently, and not maniacally, burdened with one of the strongest phobias that, with inessential differences of degree, is present in all people. If Falcon had been conceived as a psychologically disturbed person who projects the key symbol of his mania everywhere (the medusa-like form), the degree of misconception about the known data on the gigantic inhabitant of Jupiter's terraced clouds would have been much greater.

However much fear prevails in Falcon's consciousness, though, it never gains a pathological dimension; that is, it never reaches a point of confrontation with the knowledge acquired on the level of phenomenon, but arises only when he attempts to pass to the level of noumenon.

That it is not a question of individual disturbance but of a characteristic of human consciousness in general—which is in Falcon's case over-accentuated by the fact that he finds himself in a completely unknown environment. For the first time he encounters heterogeneous forms of life, and in the physical sense, he long ago ceased to be a real man. The complex psychological changes this produces are best shown by the sudden and seemingly unexplained attitude of the astronaut towards the medusa at the moment when it looks as though the mantas' attack has got it into a serious trouble.

Only a few moments before, Falcon was taking an explicitly negative emotional attitude towards the creature, conditioned by a subconscious fear of the loss of human identity, but he now suddenly starts to feel sympathy and share in its trouble:

It was impossible not to feel a sense of pity for the beleaguered monster, and to Falcon the sight brought bitter memories. In a grotesque way, the fall of the medusa was almost a parody of the dying Queen's last moments (*Medusa*).

The roles remain unchanged, and only for a moment does Falcon's emotional attitude change—and that only towards the medusa. The strategically well-conceived attack by the mantas which, for a short time,

suggests the existence of intelligence, causes a defense mechanism of fear to be strongly activated in the astronaut in relation to these bizarre creatures, a fear which—as we have seen—has occasionally been a little subdued but not completely removed as far as they are concerned. It is therefore only a matter of a change in intensity within the context of the same emotional attitude, not of a change in that attitude itself.

Such a change is arrived at only in relation to the medusa which begins to arouse, instead of a feeling of fear, a quite short-lived feeling of sympathy and inclination. This ambiguity in Falcon's emotional attitude towards the creature can only be explained from the angle of a different, considerably broader ambiguity in the complex being of Falcon: this relates to the above-mentioned split between the strongest fear—the fear of losing human identity—which dictates a negative emotional attitude towards the medusa, and Falcon's endeavors to get used to his new, nonanthropomorphic identity of cyborg, in which context the emotional weight of the medusa symbol is diametrically changed. It now becomes a synonym for a new birth, and the only possible emotional attitude towards it is a positive one.

This emotional change towards the medusa does not arise in an ad hoc and unmotivated way but originates in an event which took place directly before the battle between the inhabitants of the terraced clouds of Jupiter. A seemingly innocent remark by Dr. Brenner has for the first time brought into focus—although not yet fully explicitly—the slow but steady transformation of Falcon, who is gradually and by no means painlessly alienating himself from his human origins in order to get used to his new status of cyborg.

Understanding the reasons that have led Falcon to avoid approaching closer to the medusa, exobiologist Brenner uses the pronoun "we" to express his consent to Falcon's wish to retain his present altitude. However, "that 'we' gave Falcon a certain wry amusement; an extra sixty thousand miles made a considerable difference in one's point of view" (*Medusa*).

The difference which has here been expressed in units of spatial distance will change at the end of the novella into the fundamental and unbridgeable difference between human beings on the one hand and the cyborg Falcon on the other. Nevertheless, however much this first hint of that all-embracing transformation has been superficial and subdued, only it can be a valid motivation for the short-lived ambiguity of Falcon's emotional attitude towards the medusa. Minutes later, this ambiguity is

resolved when the medusa uses its "secret weapon", in favor of a strong tide of fear. But in the distant future, this ambiguity will make Falcon more capable of the act of contact with alien creatures. During his first mission to Jupiter, he is not mature enough to make contact, still too overwhelmed by the sharp contradiction of his imperiled anthropomorphic status.

#### 6. Prime Directive

The spectacular counter-attack by the medusa, which disperses the mantas forever from the scene of events, reveals a further significant feature of this strange creature. It is revealed that the "monstrous bag of gas" has an organ that acts like a special kind of radio aerial. The possibility that the medusa possesses a radio-sense arouses two particular types of reaction: phenomenal and noumenal.

Dr. Brenner's opinion on this unusual organ does not arise from the immediate external functionality of radio aerials in the special biophysical environment of the Jovian atmosphere. Starting from the assumption that senses arise depending on the prevailing physicochemical stimuli of a given world, the exobiologist concludes that it is not at all strange that the radio-organ has not developed in any terrestrial organism, as it would have been superfluous in the biophysical conditions of our own planet. There is, however, radio energy from Jupiter in abundance, and there it represents a very important factor in the physical environment, so that evolutionary processes could not simply neglect it.

Looked at from this angle, the medusa's radio sense is no less probable than the human eye, terrestrial evolution's response to the amount of light radiation which prevails on Earth. The conclusions that Dr. Benner draws from this fact do not overstep the limit of the level of phenomenon (just like the conceptual characteristic which Clarke, in his role of "omniscient narrator", ascribes to the medusa): "Until I came here ... I would have sworn that anything that could make a short-wave antenna system must be intelligent. Now I'm not sure(Medusa)."

In other words, a phenomenal characteristic which would, in the context of the human world, undoubtedly point to an artificial origin and to the existence of intelligence, does not have to prove it in a radically different environment where the conditions exist for it to develop in a natural way. The exobiologist's reluctance to interpret the presence of

the radio aerials as a reliable sign that the medusa is intelligent (which represents a kind of progress in relation to the previously mentioned and principally anthropocentric standpoint of Dr. Brenner), corresponds to an avoidance, on the basis of data from the plain of phenomenon, of bringing a judgment by direct analogy on the level of noumenon, which would in this case have anthropochauvinistic characteristics.

But, however much this standpoint seems to be right at first sight, it nevertheless has one serious deficiency: the scope of its validity is rather limited. Keeping to the level of phenomenon when encountering alien beings can be sufficient only up to the moment when the situation produces a possibility of making contact.

Contact presupposes the existence of sentience, a completely noumenal characteristic that—as we have seen in the examples of Dr. Brenner's conclusions—cannot be learned by simple observation of alien beings on the level of phenomenon. It is clear that the transition to the level of noumenon is necessary. Of course, this necessity by no means guarantees that contact is possible.

All Falcon's attempts in that direction have, up to now, been a failure. In contrast to Dr. Brenner, who does not move from the level of phenomenon, Falcon tries on several occasions to draw conclusions on the plane of noumenon, but each time he is thwarted from doing this by anthropomorphism. Indeed, in circumstances which might conceivably open up the possibility of making contact, there is no way in which it can be reliably concluded that the medusa is aware of the presence of the astronaut, and noumenal conclusions cannot have any important influence on Falcon's direct actions. Thus, for example, his supposition that the medusa is using its radio-sense to monitor communications between Mission Control and the Kon-Tiki, that is, the hint that it is a highly intelligent creature (a conclusion diametrically opposed to that of Dr. Brenner) remains without any echo on the plane of direct action.

A certain change does nevertheless take place, in view of the fact that even the possibility of an encounter with an intelligent creature is sufficient for the Mission Commander to order Falcon to be guided as a precaution by the "Prime Directive". These special instructions for first contact have originated mainly on the basis of man's experience on Earth. Unfortunately, Falcon comes to realize that the rules have a basic deficiency stemming directly from the one-sided nature of human experience on our planet.

The Prime Directive is founded on the assumption that humans will be the only type of participant in the act of making contact. "For the first time in the history of space flight, the rules that had been established through more than a century of argument might have to be applied. Man had—it was hoped—profited from his mistakes on Earth. Not only moral considerations, but also his own self-interest demanded that he should not repeat them among the planets. It could be disastrous to treat a superior intelligence as the American settlers had treated the Indians, or as almost everyone had treated the Africans... (*Medusa*)."

The compilers of the Prime Directive have failed to emerge from the framework of terrestrial experience, where Man has the opportunity to meet exclusively with homogeneous races which differ only in terms of insignificant morphological characteristics and degrees of civilizational development, and have simply remained blind to the possibility of encountering essentially heterogeneous entities which need not have any common noumenal denominator with the human race. All the other defects in the rulebook's provisions have originated from this classic contradiction.

The incomplete and limited nature of these provisions is especially evident when the method and scale of direct action at the moment of making certain forms of contact has to be determined. The first clause of the Prime Directive already contains a by no means innocent vagueness which gains special weight when Falcon is making his decision on how to react to certain actions by the medusa that could, but do not have to be, interpreted as an initiative for making contact.

This first provision states: "Keep your distance. Make no attempt to approach, or even to communicate, until 'they' have had plenty of time to study you (*Medusa*)". While the first part of this instruction matches the attitude which Falcon–from totally different motives–takes towards making contact with the medusa, the second part arouses serious doubts. "Exactly what was meant by 'plenty of time,' no one had ever been able to decide. It was left to the discretion of the man on the spot (*Medusa*)."

Unfortunately, as far as the medusa is concerned, Falcon's decisions in this area have long ago lost the characteristic of unbiased objectivity, and he is swayed by anthropomorphic factors.

Nevertheless, before Falcon finds himself directly testing the validity of the provisions of the Prime Directive, the anthropomorphic mechanism needs to be subdued for a second time. At the start of the last act of the drama on Jupiter, Falcon suddenly gains the paradoxical insight that he, who is physically no longer a human being, might well become the "first ambassador of the human race" (*Medusa*).

This feeling appears to reflect a hidden, broader contradiction in Falcon's double identity and seems likely to produce change of attitude towards the medusa. However, Clarke prevents this by concentrating on the lethal weapon that the "monstrous bag of gas" has available. The occasion for pointing his thoughts in this direction is provided by the peculiar atmospheric conditions on Jupiter that bring the space capsule nearer and nearer to the one of the medusae. Although he presumes that the range of its defense mechanism is rather limited, Falcon does not at all wish to get involved in personal investigation.

However, more important at this moment than the renewed current of fear, the roots of which are quite clear, is the fact that, for the first time, Falcon thinks of the possibility of direct action in relation to the medusa. "The wind that was steadily sweeping Kon-Tiki around the funnel of the great whirlpool had now brought him within twelve miles of the creature. If he got much closer than six, he would take evasive action (*Medusa*)." This hint that Falcon would, in principle, avoid getting any closer to the medusa—his readiness to act to nip any such possibility in the bud—has a special place in the events which soon follow, events to which Falcon brings a whole series of contexts for our consideration.

#### 7. Noumen and Phenoumen

The events described in the chapter "Prime Directive" are different from those we have considered up to now because they suggest that, for the first time, both protagonists in the encounter are aware of each others' existence. Right up to the moment when one of the medusae unexpectedly appears immediately above the space capsule, only the human was reliably aware of the encounter with the alien. The mantas and more distant medusae showed no signs at all of having noticed the tiny earthling spacecraft. Unfortunately, there are very meager data on the circumstances which nevertheless caused one medusa to "spot" the alien in its world.

For this occasion, Clarke suddenly introduces a constructional defect in the Kon-Tiki: its large silver balloon prevents the area above the craft from being inspected either optically or by radar. This unfavorable technical circumstance allows Falcon and the strange inhabitant of the terraced clouds to find themselves in direct proximity, enabling the medusa to "react" to the Kon-Tiki's presence.

In fact, except for mere chance, Clarke has no other option at his disposal: this momentous convergence could not have happened on Falcon's own initiative without contradicting the essential features of his psychological makeup presented so far.

On the other hand, if the initiative had been ceded to the medusa, Clarke would have made a big mistake with regard to the logical coherence of his novella: in his role of the omniscient storyteller who conceives his heroes and predicts their actions, he would have stepped much further onto the plane of the noumenon of the strange inhabitants of the Jovian atmosphere. To do so would seriously impair the basic assumption underlying the type of storytelling demanded by the motif of "first contact".

All the subsequent events follow as the outcome of certain "actions" by the medusa, but there will be no foundation for concluding their real nature more reliably or in greater detail. Regardless of this uncertainty, however, there are two significant circumstances which force Falcon to react in a specific way to the particular "initiative" of the "monstrous bag of gas", even though the provisions of the Prime Directive are sharply opposed to such reactions.

Above all, at the moment of direct encounter, Falcon's fear of losing his human identity is again aroused by the particular circumstances that precede the appearance of the medusa above his capsule: Before he discovers the actual presence of the medusa in his vicinity, he is faced with a dramatic, though indirect, hint of its appearance, for which he is at first unable to find any explanation. The gigantic "oval mass" that looms above his craft causes darkness to fall suddenly over the surrounding area, even though there remain several more hours to sunset.

This unpleasant optical puzzle soon receives acoustic clues. From somewhere out of the immediate vicinity—and no longer through the radio link—Falcon begins to hear without any warning or announcement a spectral, cacophonous crescendo of medusa "noise" with which "the whole capsule vibrated like a pea in a kettledrum" (*Medusa*). This rise in tension finally removes the last ambiguity from Falcon's attitude towards the "monstrous bag of gas", leaving room only for overwhelming fear.

The second important circumstance influencing the direction of Falcon's actions, linked to his emotional state, is the very vagueness of the medusa's actions which allow contradictory interpretations.

The process which we can conditionally designate as an "attempt to make contact" between the medusa, as the "initiator", and Falcon, who is reacting to this "initiative", is in four separate phases, the common denominator of which is the identical nature of the actions of the "monstrous bag of gas": that is, it makes a special kind of "approach" in which Falcon primarily perceives a reliable indication that the medusa is aware of his existence. The first phase begins when a fence of thick tentacles suddenly descends around the capsule, the climax of the tension that has been growing ever since the surprise eclipse.

In the process of responding to this initiative by the medusa, Falcon finds himself choosing between two principal models of reaction: the noumenal and the phenomenal.

The first model specifies his response on the basis of a particular interpretation of the action of an alien creature—an interpretation that implies the possibility of noumenal knowledge of the medusa. The second model does not attempt to comprehend the alien's intention, and thus does not specify the direction of response but confines itself to establishing what should not be done. This is not, however, because that sense could not possibly be reached a priori, but because it contains too many unknowns to establish the actions to be taken. Here, the problem of getting to know an alien being on the level of noumenon is not posed at all. Falcon's consciousness, dominated by fear, corresponds to the noumenal model, while the phenomenal model is embodied in the Prime Directive.

Although both these models are available to Falcon immediately before the medusa's action, he does not make a choice based on a process of sensible elimination, but instinctively opts for the possibility that has prevailed in his consciousness up to now and that envisages a specific response. In deciding with a "lightning-swift movement" to pull the rip-cord of the balloon and thus, without aforethought, to escape the embrace of the medusa's tentacles, Falcon simply succumbs to the effect of renewed and strengthened fear. From this perspective, the medusa's action could only be interpreted as aggressive and could only have been responded to by a hasty retreat.

The later events on Jupiter also remain completely part of the noumenal model of Falcon's reaction to the initiative of the "monstrous bag of gas", and this results in their outcome being the same as in the first case. Nevertheless, although he always responds to any approach by the medusa by retreating, he is twice in a position to react from the point of view of the phenomenal model.

The first such occasion arises in the second phase of the "attempt to make contact". The medusa "responds" to Falcon's escape by coming still closer, but then suddenly stops at a distance of less than a mile above him. It is only this complete cessation of activity by the creature that allows Falcon to come out of his cocoon of fear and consider the medusa's initiative from another angle.

Falcon's reflection on the causes which might have prompted the bizarre inhabitant of the Jovian atmosphere to keep itself at a certain distance includes both the noumenal and phenomenal models which were previously available when he attempted to learn about the strange creatures. "Perhaps it had decided to approach this strange intruder with caution; or perhaps it, too, found this deeper layer uncomfortably hot (*Medusa*)."

In the first interpretation, the medusa's activity is interpreted from a noumenal perspective, as shown unambiguously by the words "decided" and "with caution". The second, phenomenal interpretation does not pretend to penetrate to the possible inner motives for the medusa's action, but is limited to external physical explanations. Although this phenomenal interpretation is seemingly more reliable than the noumenal one, it is significant that it appears only when the medusa is not attempting to make contact.

Confronted with such a limited field of action, Falcon remembers Dr. Brenner's warning about the provisions of the Prime Directive. At that moment, Falcon recalls a television discussion between a space lawyer and another astronaut:

After the full implications of the Prime Directive had been spelled out, the incredulous spacer had exclaimed: 'Then if there was no alternative, I must sit still and let myself be eaten?' The lawyer had not even cracked a smile when he answered: 'That's an excellent summing up' (Medusa).

Here, the lack of a phenomenal model of behavior towards aliens during first contact is finally made concrete. Because the Prime Directive limits itself to giving instructions exclusively about the things which should not be done—and first contact intrinsically requires some action, if only in responding to the initiative of the other party—it is obvious prescription on the level of phenomenon is insufficient.

Its value remains until the need for direct action arises, after which it is unable to offer any kind of plan. In this it differs from the noumenal model

that does indeed suggest a certain plan, but its validity remains completely overshadowed by the distorting effect of anthropomorphism. The final abandonment of any attempt to reciprocate using the phenomenal model follows immediately in the third phase when the medusa again goes into action. This time its initiative is most clearly an "attempt to make contact", but Falcon's fear has already caused him to ascribe an a priori aggressive nature to all "overtures" by the opposite side.

This is best shown by the association aroused in Falcon's consciousness by the unexpected elongation and descent of one of the medusa's tentacles towards the Kon-Tiki. "As a boy he had once seen the funnel of a tornado descending from a storm cloud over the Kansas plains. The thing coming toward him now evoked vivid memories of that black, twisting snake in the sky (*Medusa*)."

Whatever it actually represents, this step by the medusa means only one thing to the astronaut: an attack, directly manifested through an assumed attempt by the creature to "eat up" the Kon-Tiki. Falcon's response is thus to "frighten" the bizarre Jovian inhabitant so he can gain time to retreat. But since this retreat has to be a final one, he hesitates for a moment, waiting for Dr. Brenner's opinion. And now follows the key moment that at last gives practical confirmation of the inappropriateness of the Prime Directive to the purpose for which it was intended. Both before and during the medusa's initiative, the exobiologist has remained strictly faithful to the phenomenal model of reciprocity. Now, when he finds himself for the first time in a situation where he cannot simply decide what should not be done but must propose some direct plan of action, he has nothing to say to Falcon's decision to withdraw even though it is contradicts the Prime Directive.

After the decision to withdraw becomes irrevocable, it seems to be the end of the drama on Jupiter. The specter of fear has prevented Falcon from responding to the medusa's initiative in any other way than by retreating. And indeed, he immediately starts up the engine ignition sequence which will finally take the space capsule out of the atmosphere of the huge planet. Clarke, however, does not allow the actual take-off to happen immediately but again resorts to a special "external intervention".

It turns out that a full five minutes has to elapse from the start of ignition to lift-off. The author absolutely needs this time, for two reasons: First it allows the fourth phase of the "attempt to make contact" in which one arrives closest to the level of noumenon in understanding the alien. Second,

it creates the conditions to remove the burden of anthropomorphism from Falcon (a process which, however, cannot in the given circumstances be reflected in any way in the immediate action.) Without this unburdening, the final preponderance of the cyborg side of his dual identity would remain unexplained—a goal that is reached in the last chapter of the novella, which takes place back on Earth.

In the short span of time before the Kon-Tiki's ram-jet fires at full strength, there twice come physical touches between Falcon and the medusa. First, the medusa's tentacle "very gently rocked the Kon-Tiki", and soon after, "a large, heavy hand patted the balloon" (*Medusa*).

In both instances, Clarke deliberately shows the nature of the action of the "monstrous bag of gas" from the point of view of the human protagonist, so as to avoid the danger of the "omniscient story-teller" encroaching on the plane of noumenon of the alien. The expressions "very gently" and "a large, heavy hand patted" have meaning only for Falcon and not for the medusa. In this way the medusa's level of noumenon remains inviolate, but Clarke nevertheless succeeds in defining in the most accurate way up to now the nature of the creature's initiative, which is needed in order to arouse a particular reaction from the Falcon.

At first, Falcon tries not to pay any attention to the presence of the medusa's tentacle but when, on the second occasion, its inaggressive "patting" on the balloon becomes quite unmistakable, he can do nothing else but for the first time openly allow the possibility that the bizarre Jovian creature does not have an unfriendly attitude towards him: "Of course, Brenner might be perfectly right. Perhaps it was just trying to be friendly (*Medusa*)".

And now follows the key moment of the whole novella. Thinking how to respond to this action of the medusa in which–burdened no longer by fear, just because of the very short time still remaining for him to spend in its vicinity–he perceives undoubted signs of a special wish for friendly contact, Falcon suddenly arrives in a blind alley. It becomes clear to him that anything he can do, even in this case, would be extremely inappropriate and laden with anthropomorphic limitations, albeit different ones to those produced by a negative emotional attitude.

"Maybe he should try to talk to it over the radio. Which should it be: 'Pretty pussy?' 'Down, Fido?' Or 'Take me to your leader (*Medusa*)?"

The unambiguous irony in the second sentence simultaneously reveals two important things. On the one hand, Falcon has realized that the model of reciprocation offered him by parochial earthly experience—the possibility, that is, of a choice between a subordinate ("Down, Fido") or a superior or at least equal ("Take me to your leader") status for the alien being—becomes quite superfluous on a cosmic scale. In the context of Earth, "heterogeneity" is understood in a naively parochial way, as a mere difference in degree of homogeneous development. In this understanding, the possible essential and unbridgeable difference between truly heterogeneous (alien) beings are overlooked.

On the other hand, this very realization of the impossibility of establishing any kind of contact, even when the fear of attack is removed, finally tips the scales in the transformation of Falcon. The last phase of his withdrawal from the medusa, even though it started somewhat earlier and under different circumstances, has lost the underlying fear of the creature that was always present. Now there is an awareness of the impossibility of establishing contact while any anthropomorphizing ingredients remain in him.

Only in that light can one understand the real meaning of the sentence which Falcon murmurs at the very end of the chapter "Prime Directive", when the atmosphere of the largest planet of the Solar System, with all its threats and promises, is already far below him: "Some other time (Medusa)."

This "some other time" presupposes another, new, Howard Falcon, no longer burdened by anthropomorphic contradictions, who has at last attained his new, cyborg identity and has been liberated from the deficiency which stands in the way of the human race making contact with truly alien beings. Clarke does not in fact give much data about the advantages a cyborg has over a man in making contact with alien cosmic creatures, except that the cyborg would not be burdened by anthropomorphic contradictions. After all, anything like that would have gone beyond the scope offered by the framework of the story, since embarking on a closer analysis of Falcon's new identity would be as dangerous for the coherence of the work as an attempt at the noumenal conception and presentation of the Jovian medusa.

From the point of view of human participants in the work and the omniscient storyteller, the cyborg is as alien as the medusa, which means that Clarke had to be very careful as to what extent he could approach its noumenon. In the case of the cyborg, Clarke indeed did not need "external interventions" as with the medusa, because the basic story line could be

developed right to the end without getting any closer to the noumenon of Falcon's new identity. The central meaning of the work was finally formed when it at last became clear to Falcon at the very end of the mission that any attempt at making contact with the medusa was destined to fail in advance, and would do so until he has transformed completely and thus freed himself from anthropomorphic restraints.

#### 8. Conclusion

Consideration of "A Meeting with Medusa" has enabled us to arrive at the final conclusions of our investigation. It has primarily been centered on the problems linked with the possibilities of conceiving and presenting nonhuman characters from the point of view of the omniscient story-teller, in those science fiction works with the first contact motif that are not parables.

We have seen that, in the novella we have been examining, contact between the earthly astronaut and the Jovian medusa could not have been made for two reasons.

On the one hand, such an event could not have taken place on Falcon's initiative, since anything like that would seriously impair the coherence of the psychological portrait of the pilot and of the work as a whole. On the other hand, the coherence of the work would have been seriously brought into question if contact had been achieved by the eventual initiative of the medusa, bearing in mind that, in this case, Clarke, in the role of omniscient storyteller, would have inevitably had to step onto the plane of motive, that is, of the noumenon of the heterogeneous entity, and would have thus violated a basic rule of the narrative.

But, although there has been no contact, Clarke, as omniscient storyteller, has nevertheless succeeded in getting closer to what we have designated as the level of noumenon in conceiving and presenting a nonhuman character. This was possible in the first place because Clarke resorted to what we have termed "external interventions" during the narrative procedure. These "interventions" represent special kinds of adjustments at the edge of plausibility, and they are used in the story in five particular places.

In the first two cases, Clarke from the very start stifles in Falcon a short-lived and hazily positive emotional attitude towards the "monstrous bag of gas"—an attitude which would in the long run have inevitably led to contact—in the way he abruptly introduces changes of situations. The first time involves the unexpectedly aggressive response by the medusa to the attack by the mantas, which strongly activates a mechanism of fear in Falcon. The second time Falcon's emotional wavering towards the medusa is replaced by an attitude which is fundamentally against making any contact is the sudden appearance of one of the gigantic creatures immediately above the Kon-Tiki.

The way in which the medusa and Falcon come closer to each other represents the third place at which an "external intervention" by Clarke saves the coherence of the novella. As we have seen, for this purpose, the author introduces a deficiency in the design of the space capsule with the obvious intent of showing that the above-mentioned convergence takes place accidentally—the only possible way, in the logic of things.

The fourth intervention is to leave to the medusa the special "initiative" in the four phases of the "attempt to make contact". Although the creature's actions are conceived in such a way that they do not at all suggest any possible reaching out by the omniscient storyteller to the plane of noumenon of the "monstrous bag of gas", they nevertheless display certain characteristics which dictate Falcon's irrevocable decision to withdraw, in the grip of a strong tide of fear.

It was just the necessity of such a response by Falcon that was for Clarke a reliable warranty that leaving the "initiative" to the medusa would not result in a contact that would seriously bring the coherence of the work into question. From the very beginning, in fact, Clarke created the psychological portrait of his hero in such a way as accords with this role.

In the process of examining to what extent it is possible, from the point of view of the "omniscient story-teller", to come closer to the noumenon of a nonhuman character, Clarke establishes that it does not suit him to have a character who is indubitably a man (that is, an anthropomorph) as the second participant in a "first contact" situation. For, as is convincingly demonstrated by the example of Dr. Brenner, who has no plan of action at the crucial moment, the necessity of withdrawal in the face of the medusa's "initiative" would not then have been warranted, an act which is the only thing that can save the coherence of the work. Only a special kind of transitional form suited this purpose, a form possessing exaggerated anthropomorphic characteristics, but also suggestions of a new, nonanthropomorphic status.

The particular half-cyborg nature of Howard Falcon thus represents a necessity that dictates the development of the central Jupiter episode in "A Meeting with Medusa". In addition to the considerably greater narrative space devoted to it, another factor that increases its importance is that some particular points from the episodes which take place on Earth can only be understood in the light of the events that unfold on Jupiter.

In this sense, the best example is the central symbol itself—that of the medusa—which only becomes functional at the very edge of plausibility, that is, when it is established that Clarke needed not only a cyborg but that kind of cyborg in whose consciousness a negative symbolic bridge could be established between the complex moment of transition from human to cyborg identity and some of the phenomenal, explicit features of the heterogeneous entity (form).

The psychological makeup of the main character is especially expressed in the fifth and last "external intervention" by the author, when the closest approach to the level of the noumenon of the heterogeneous protagonist is achieved from the point of view of the "omniscient story-teller". To make sure of an opportunity for realizing the "most intimate" degree of encounter between the earthly astronaut and the medusa, in circumstances where there is no longer any "danger" of actual contact, because the decision to withdraw has already been made, Clarke again manipulates the design of the Kon-Tiki.

This time, the "external intervention" involves the particular way the capsule engines work—they need a whole five minutes to reach full power. It is the very shortness of this interval, as well as Howard Falcon's perception that he is still not mature enough for contact, that each of his interpretations of the medusa's initiative will be based on anthropomorphization, until he has been taken over by his new, cyborg identity, which allows the author to ascribe one action to his nonhuman here—the "gentle rocking" and "patting" of the balloon—that in any other case would represent unwarranted reaching out for the plane of noumenon of the alien entity on the part of the omniscient storyteller.

Further than that—at least so it seems to us—one cannot go. The number of "external interventions" is even here on the very edge of what is permissible: their repeated introduction, with the aim of possible continuation of investigation of the possibilities of getting closer to the noumenon of the alien entity, would only have made an unconvincing construction out of a coherent and stable story. There is no doubt that

Clarke was honestly sensitive to that intervention and did not allow himself further stretching of the bounds of probability.

But even in the framework within which he stopped, he succeeded in writing a work which, with regard to the noumenal conception and presentation of a nonhuman character, has almost no match in the science fiction stories of "first contact".

#### References

- Clarke, A. C. (1972). Crusade. In: *The Wind From the Sun*. London: Victor Gollancz, 103-107. [abbreviated as *Crusade*]
- Clarke, A. C. (1973). History Lesson. In: *The Best of Arthur C. Clarke (1937-1971)*. London: Sphere Books, 49-59. [abbreviated as *Lesson*]
- Clarke, A. C. (1973). A Meeting with Medusa. In: *The Best of Arthur C. Clarke* (1937-1971). London: Sphere Books, 279-332. [abbreviated as *Medusa*]
- Clarke, A. C. (1972). Report on Planet Three. In: *Report on Planet Three*. London: Victor Gollancz, 3-10. [abbreviated as *Planet*]

Received: 1 May, 2013

Accepted for publication 30 August, 2013

Зоран Живковић

# ТЕМА ПРВОГ КОНТАКТА У ДЕЛИМА НАУЧНЕ ФАНТАСТИКЕ АРТУРА КЛАРКА

#### Сажетак

Аутор разматра тему првог контакта у прозним делима енглеског писца Артура Кларка. Главна особеност ове теме јесте постојање две генерички различите врсте судеоника: људских и не-људских, а основна недоумица у вези с њом јесте да ли се уопште може замислити не-људски ентитет који не би био у мањој или већој мери антропоморфан. Ова недоумица јавља се у оквиру две различите антропоморфне оптике које могу постојати у једном прозном делу. Једна је перспектива људских

ликова, а друга самог аутора, односно свезнајућег приповедача. Испитивањем четири Кларкова понајбоља дела с мотивом првог контакта – прича "Извештај о планети три", "Крсташки поход" и "Час историје", односно новеле "Сусрет с медузом" – уочавају се три типа антропоморфизма: антропоцентризам, антропошовинизам и антропоморфизам у ужем смислу. Аутор закључује да се Кларк у новели "Сусрет с медузом" приближио колико је то уопште прозно могуће грађењу лика једног нељудског ентитета који није оптерећен антропоморфним атрибутима.

**Кључне речи**: Први контакт, хетерогени ентитет, антропоцентризам, антропошофинизам, антропоморфизам