

Contradictions in F. Herbert's Dune

There are quite a few contradictions that can be formulated with reference to the story line, but also to other aspects of the novel such as character-depiction, relationship between characters, purpose of the author, etc. The major contradictions are formulated in conformity with TRIZ rules and are illustrated in the Annex.

Lady Jessica perceives the importance of contradictions when she reflects: "*There should be a word-tension directly opposite to adab, the demanding memory. There should be a word for memories that deny themselves*" [III.203].

The mutual interplay of the more or less hidden conflicting forces described above creates a web of contradictions both external and internal that push the convoluted movement of the story forward. The main story line is connected with the destiny of the Atreides who, starting with their relocation from the watery Caladan to the desert Arrakis, go through several transformations which also reflect in the life of the planet. The Atreides start as representatives of the Emperor Padishah, governors of the planet, they become outcasts, then rebels and finally, through Paul's fulfilled dream of revenge, Emperors of the Universe. Within this dynamic motion work the objective laws of necessity and as Count Fenring puts it "discontent," mankind's only science [II.51]. The "problems on the horizon" draw lines of contradictions together into what the Guild calls a "nexus, a meeting place of countless delicate decisions" [III.251], only to spread again in need of other decisions to be taken.

The long nurtured conflict between two of the Landsraad's Great Houses, the Atreides and the Harkonnens, breaks out openly when Duke Leto Atreides is given Arrakis, formerly Baron Vladimir Harkonnen's fiefdom. This apparent victory actually leads to the **intensification** of the already existing **contradiction** and contains "the deadliest peril" [I.10], threatening the lives of the characters, but also the positive effect, the possibility of control over the universe. By giving Arrakis to Leto, the Emperor was forced to give him the CHOAM directorship and CHOAM controls the spice production on which the universe depends. The Harkonnens who had been

stocking the melange for more than twenty-years plan to get revenge. At the first meeting in the conference room on Arrakis, when Leto is evaluating the situation and preparing a strategy in the presence of all those who have accompanied him from Caladan, he is aware that the Harkonnens are not the only fiends: "Who else is stockpiling? That's the list of our enemies" [I.53]. The Landsraad's Houses would surely react to a reduction in their income.

Are the Atreides and the Harkonnens really different? Not in their goal, which is to increase their profits, but surely in the way they act. "The people (the Atreides, A/N) struck Kynes as a strange combination of softness and armed strength. There was a poise to them totally unlike the Harkonnens" [I.127]. Leto has come to stay and his purposes are profoundly humane: "We're working for a solid and permanent planetary base, we have to keep a large percentage of the people happy – especially the Fremmen" [I.102]. When preparing the first social manifestation on the planet, a dinner, Jessica thinks: "*We are father and mother surrogate to them all*" [I.149]. The first Harkonnen habit the Duke changes is that of "dipping hands ceremoniously into a basin" [I.145] before dinner, using a towel to dry them and then throwing the towel to the beggars. It was an unprofitable waste of water that had to be stopped.

During his first supervision of spice mining, Hawat explains to Leto what it all is about: "Harvesting spice is a process of getting in and getting out as much as possible" [I.101]. But when the activity is sabotaged, machine and spice are lost and two Fremmen die because the carryall, the 'thopter whose function is to rescue the spice factory when the warm appears, fails to show up. To Kynes' surprise: "*This Duke was concerned more over the men than he was over the spice. He risked his own life and that of his son to save the men. He passed off the loss of a spice crawler with a gesture. The threat to men's lives had him in a rage. A leader such as that would command fanatic loyalty. He would be difficult to defeat*". And then Kynes, the cool observer and hidden enemy, admits to himself, against his previous judgement: *I like this Duke* [I.142-43].

Duke Leto is a contradictory character. This born leader whose hawk-features and dark complexion are mentioned several times in the novel as compared with the fair, talkative, carnal Harkonnens, this member of the aristocratic bureaucracy who has good chances of becoming

Emperor, cares about everybody whom he considers to be his people. The Fremen become so when he moves to Caladan. But he is also a family man. He remarks that "the whole theory of warfare is calculated risk, but when it comes to risking your own family, the element of *calculation* gets submerged in – other things" [I.94]. He loves Lady Jessica deeply, his lifetime concubine, though for political reasons never his wife. And he directly supervises the education of his only son, the "child-man" [I.316] who does not suspect that, at only fifteen, he will have to take charge and change the fate of Arrakis, but who by that time is fully equipped to succeed and has, moreover, inherited from his father the willingness to take risks. Paul is a special child. As Princess Irulan states: "*At the age of fifteen, he had already learned silence*" [II.268]. Leto advises people not to be misled by his appearance and in fact, everybody who meets him very soon stops thinking of him as a child: "The child kept asking adult questions" [I.134], Keynes thinks during their first visit in the desert and "A child who thinks and speaks like a man" [II.308], Stilgar says when finding him and Jessica in the desert

Leto lets everybody around the council table know that the council is friendly and "any man may speak his mind" [I.99]. But the same Leto, when he gets the news that the Guild has refused their demand for a weather satellite to orbit the planet, cries out: "Justice? Who asks for justice? We make our own justice. We make it here on Arrakis – win or die" [I.99]. And in this purpose he uses his men who willingly follow him as subjects because he is generous and loyal and has a brave heart. He rules "not by fear and raw power, but by love and loyalty and courage" [O'Reilly, Ch.4]. However, he rules with an iron hand in a silk glove, and he has already started a campaign to build up his image among the locals. He readily shares his spice bonus among the crew who have exploited the deposit. At the same time when he is tormented by an attempt on his son's life made with a hunter-seeker, a "ravening sliver of metal guided by some near-by hand and eye" [I.77] which speaks of internal treason, he is also thinking about the usefulness of the notices posted "above his signature all through the populous places of the planet: "Our Sublime Padishah Emperor has charged me to take possession of this planet and end all dispute," and although he knows they are part of the game, he is not misled as to their value: they will not fool anyone, "not the Fremen, certainly" [I.88].

Duke Leto and Baron Harkonnen are the two antithetical forces around which the beginning of the novel is played. While Leto's qualities make him respected by both friends and enemies, the Baron, on the other hand, is in a permanent feud with everybody around including himself, and is despised by both friends and enemies. His only concern is his own welfare and making sure that his hands are not besmirched by the treacheries he himself directs. His desire to name Feyd-Rautha, his nephew, as his successor arises only from his acknowledgement of the fact that he will not live forever. He gives Rabban, his other nephew, the chance to rule over Arrakis because he knows that Rabban will extort the population to meet his spice quotas in order to make up for the money the Guild charged for military transports to the planet ("more than two thousand ships, lighters, frigates, scouts, monitors, crushers, troop-carriers, dump-boxes" [I.232] when forces were deployed for the defeat of Leto. "The entire spice income of Arrakis for fifty years might just cover the cost of such a venture. It *might*" [I.232], Thufir Hawat says. The Baron contrives Feyd-Rautha's succession in the secure knowledge that Rabban will be so loathed that Feyd-Rautha, who had killed "his one hundredth slave-gladiator in the family games on his seventeen birthday" [II.43], will be acclaimed as a saviour by the depleted Fremen population. The Baron is despised by the Emperor who uses him to remove the danger of the Atreides, by Jessica who, owing to Bene Gesserit manipulation, is his daughter, and by all his subjects who are aware of his atrocities. Hawat who, believing the Atreides are all dead, is cheated into becoming the Baron's Mentat tells him: "You have two alternatives, Baron. You can kill off the natives, wipe them out entirely, or ... abandon your dear nephew, Rabban" [103], and none of the solutions seemed too far-fetched for the degenerate, "immensely fat" figure who walked around with all this fat "sustained partly by portable suspensors harnessed to his flesh" [I.29].

"The Harkonnens mean to *destroy* you, my Lord," the loyal Thufir Hawat, Leto's old Mentat Master of Assassins, warns him. "Their intent is not just to kill....This could be a work of art among vendettas" [I.10]. The Baron attacks Leto in the wake of his arrival, before the latter can get accustomed to his new surroundings. In this enterprise he has the secret support of the Emperor Padishah who, jealous of his CHOAM profits, betrayed the Baron when giving his former fief to Leto. However, at the same time betrays the latter when he helps the Baron to deprive him of both his power and his life in the armed conflict in which his Imperial Sardaukar

were disguised as Harkonnen attackers. The conversation between Count Fenring and the Baron is proof of the Emperor's disdain as uttered by the Baron himself:

"The Emperor has obligations to me, too, Fenring. I rid him of the troublesome Duke."
"With the help of a few Sardaukar." "Where else would the Emperor have found a House to provide the disguising uniforms to hide his hand in this matter?" [II.49]

Shaddam IV uses the Baron but knows his worth only too well. Actually, he liked Leto. Princess Irulan, his daughter and confident says: ... *and I was but 14, yet I remember deducing in that instant that my father secretly wished the Duke had been his son, and disliked the political necessities that made them enemies* [I.120]. The political reason she hinted at was the Duke's growing popularity as well as the "*small fighting force*" which the "Duke's Warmasters Gurney Halleck and Duncan Idaho had trained" and which were "to within a hair as good as the Sardaukar. Some of them were even better" [III.99].

The Sardaukar, the Emperor Padishah's mercenary troops, are trained on Salusa Secundus, the prison planet. When Paul teaches his men to search a Sardaukar he says:

"each has a false toenail or two that can be combined with other items secreted about their bodies to make an effective transmitter. They'll have more than one false tooth. They carry coils of shigawire in their hair – so fine you can barely detect it, yet strong enough to garrote a man and cut off his head in the process. With Sardaukar, you must scan them, scope them – both reflex and hard ray – cut off every scrap of body hair. And when you're through, be certain you haven't discovered everything" [III.149].

Such a description is telling of the Emperor's concern: he is not willing to allow a military power comparable to his to be trained just as he is not very happy with the growing popularity of the Duke. Under the circumstances, the Emperor, who has to protect several interests beside his own, has to play the cards in his hand. Irulan says: "It may seem a dreadful thing to say, but I'm not at all sure my father was innocent in all these attempts. A Royal Family is not like other families" [I.290].

The Baron's situation is ambiguous and contradictory. He has to obey and defy the Imperial law at the same time. He has to hide that his spice stores were destroyed by the Atreides' raid on Giedi Prim. He also sends sly reports to the Emperor as to the bribes he paid and his expenses connected with the reshuffling of military forces to Dune. He knows too well that the Sardaukar just as the Emperor have the same disdain for weakness. Hence he cannot afford to disclose his to either of them. He cannot have a direct confrontation with Leto Atreides because he must be able to face the Emperor's Truthsayer: he must keep his hands clean in order not to be recognised as a conspirator and murderer. On the other hand, he must disobey the law if he wants to defeat Leto. That is how Jessica, while a prisoner, realizes that the Emperor is involved: "*If he (the Baron, A/N) knows he must face her questions, then the Emperor is in on this for sure. A-h-h-h, my poor Leto*" [I.188]. His hands must remain clean - this is a lesson well taught because Feyd-Rautha, who hates him, dares not kill him himself. Instead he sends a young man into the bedroom of his homosexual uncle to murder him.

Therefore the Baron's actions are always marked by a particular constraint: he cannot get directly involved, so he makes use of treachery and traitors. When the Sardaukar take Thufir Hawat prisoner, the Baron who has been dissatisfied with his own Mentat for quite a long while, turns Hawat into his Mentat. A man without emotions is to be feared, he explains to his nephew, but Hawat has deep emotions which can be bent to one's needs. However, he conditions him: he administers in his food both a poison and its antidote. There is equal mistrust on both sides. The Baron confesses: "I never could bring myself to trust a traitor. Not even a traitor I created" [I.202].

Dr. Yueh, the Baron's most important "creation," not only shares the same low opinion of the Baron as everybody else but wants him dead. He is the one who acts as the trigger for all subsequent action. Yueh thinks referring to Paul: "*Why do I stand here torturing myself? And torturing this poor lad ... though he does not know it. Oeyh! Damn those Harkonnen beasts! Why did they choose me for their abomination?*" [I.48]. Yueh was chosen because the Atreides, although they had been warned, could never have identified the traitor among them, the more so as Yueh's situation (that of an Imperial doctor) excluded the possibility. While Leto rejects even

the thought of it: *"It can't be Yueh.. He's conditioned"* [I.181], in Jessica the truth flashes up but, unfortunately, too late: *"How could that be? They'd have to know my exact weight, my metabolism, my... Yueh!"* [I.185-86]. She had already tested Thufir Hawat who, in trying to protect the Duke, weight up the possibility of Jessica herself being the traitor. They are both aware that "the Duke could be destroyed as quickly by his friends as by his enemies" [I.177]. Yueh was a successful choice because the Baron solved the contradiction: Yueh couldn't be a traitor because he was conditioned by the High College but he had to become a traitor in order to achieve the Baron's immediate goal, that of killing Leto. The solution for bending the Imperial Conditioning was to **intensify the contradiction**, that is to push Yueh into an extreme situation: he is promised the liberation of his wife, Wanna, whom he believes to be a prisoner but who has actually been killed. Yueh overrides his "pyretic conscience" [I.181] but his revenge is that, just while sending Leto to his death, he also envisages the Baron's death. He tells Leto "you will get close to the Baron before you die... And you will remember the tooth" [I.182]. Leto fails to kill the Baron and when Yueh is finally awoken to the truth of Wanna's death, he sees himself "as cast away in this place of destruction, spared nothing, given not the smallest pity" [I.197]. His conscience is relieved only by the fact that, together with Duncan Idaho he had already planned the escape of Jessica and Paul and found a place for them to hide among people "who draw knife at hearing the Harkonnen name, who hate the Harkonnens so much they'll burn a chair in which a Harkonnen has sat, salt the ground over which a Harkonnen has walked" [I.183]. He murdered the father but spared the heir. This thought becomes the more important and urgent as he is now aware of his own death:

"I must get to the 'thopter, Yueh thought. I must put the ducal signet where Paul will find it. And fear struck him: If Idaho suspects me or grows impatient – if he doesn't wait and go exactly where I told him – Jessica and Paul will not be saved from the carnage. I'll be denied even the smallest relief from my act. [I.197]

There is one character whom Paul can never see in his prescient dreams: Count Fenring, former administrator of Arrakis before the Harkonnens, whom the Emperor sends to evaluate the situation after the Baron's successful strike against the Atreides. Princess Irulan speaks of him as the Emperor's only friend, but at the same time he is *"the genetic-eunuch and one of the deadliest*

fighters in the Imperium" [II.290]. The Count and his Bene Gesserit wife are deeply involved in genetic manipulation. Before leaving Arrakis, Countess Margot had left a coded messages in which she warned Jessica about the danger of treachery hovering over her family. Both she and the Count regret Paul, whom they consider lost, and plan to continue the breeding by the countess conceiving a child with Feyd-Rautha. But the discrepancy that has prevented Paul from seeing him in his vision and discovering his reasons lies within the Count himself. And Paul with a feeling of brotherliness and deep compassion he has never known before grasps the truth: "Fenring was one of the might-have-beens, an almost Kwisatz Haderach, crippled by a flaw in the genetic pattern – a eunuch, his talent concentrated into furtiveness and inner seclusion" [III.221].

The planet, Arrakis, is growing with the main character but the two movements are working in opposite directions. While Kynes' and the Fremen's dream, and Paul's promise to Kynes ("From the throne I could make a paradise of Arrakis with the wave of a hand" [I.249]) is fulfilled, the planet is turning into a green paradise. Paul, on the other hand, turns into a projection of the Fremen. This is a paradoxical situation because, at the beginning Paul opposes the legend that flourishes around him. At the same time, he is aware that no matter what he does the legend seems to stem from him. His riding the sandworm "was the staff of a new legend" [III.133]; the first conflict with the Sardaukar happens without any intervention on his behalf, however he realizes bitterly that he has just written a new chapter in the legend of Muad'Dib: *I didn't even draw my knife, but it'll be said of this day that I slew twenty Sardaukar by my own hand*" [III.152]. The Fremen "demand from him the illusion of absolute certainty" [O'Reilly, 2004:77]. By living with them he has kept the myth alive, fed it with each and every one of his steps, turning himself into the Messiah they required him to be: *I cannot do the simplest thing without its becoming a legend. They will mark how I parted from Chani, how I greet Stilgar—every move I make this day. Live or die, it is a legend. I must not die. Then it will be only legend and nothing to stop the jihad* [III.114]. This is a conflicting situation to which Paul does not find a satisfactory solution so he accepts that he should go along with the legend instead of fighting it. In a fragment of her writings which she calls "Muad'Dib: The Ninety-Nine Wonders of the Universe," Princess Irulan says: *"When law and duty are one, united by religion, you never*

become fully conscious, fully aware of yourself. You are always a little less than an individual" [III.136]. And indeed Paul Atreides is less than an individual but he has become so much more: he has become Muad'Dib and Muad'Dib is "the legend."

The other paradoxical situation which is amplified as the novel flows along and which reveals a similar attitude on the part of Paul, is connected to his visions of the rebellion which he refers to by the Arabic name "jihad" – the holy war. He fights against it permanently, yet he cannot help these haunting visions which plunge him deep into the "abyss...blind time" with no past in his mind, except the future "fanatic legions following the green and black banner of the Atreides, pillaging and burning across the universe in the name of their prophet Muad'Dib" [II.27]. He keeps telling himself that he has to prevent it, that it cannot be, that he must not let it happen. He tries to keep himself on the "central line of the time storm" from where he can see the future and control the "central knot of it" [III.132]. All through the novel he fights against the idea of the Jihad. It is hovering over his every deed but this is a solution he is not willing to accept. At the same time he sees everything around him bringing it about. His own mother, it occurs to him, is his enemy for bearing him and training him; without even knowing it, she is bringing the jihad. He refuses to fight Stilgar but sees him transformed from "the Fremen naib to a *creature* of the Lisan al-Gaib...It was a lessening of the man, and Paul felt the ghost-wind of the jihad in it" [III.202]. Later on Paul wonders whether he will lose Gurney the same way he lost Stilgar and gain a creature instead. Initially he has a limited aim – to get back the dukedom – but it becomes impossible to obstruct the avalanching forces that he has roused around himself. As O'Reilly writes "the religious juggernaut that he rode to power and which is central to the author's approach to the theme of the jihad will inevitably turn on him" [1981: Ch.7]. He thought he could control the forces and "use them for his own purposes, but he eventually realizes that *he* is the one being used, as the survival of an entire race seek satisfaction in the upheaval of war" [Ch.3]. He sees the people around him caught up in the need of the race to renew its inheritance after the Empire's rigid caste system and he comes to acknowledge the jihad as the demand of the species for genetic redistribution: "And the race knew only one sure way for this – the ancient way, the tried and certain way that rolled over everything in its path: jihad" [I.224]. Aware of the race consciousness and its demand, Paul knows that, just like with his transforming into a legend,

this is a battle he cannot win. Quite early on in the novel it occurs to him that: "if he died this instant, the thing would go on through his mother and his unborn sister. Nothing less than the death of all the troop gathered here and now – himself and his mother included – could stop the thing" [II.39]. However he maintains the contradiction until very late in the story he admits "how futile were any efforts of his to change any smallest bit of this" [III.216]. But together with the sense of failure comes the realization that he has reached a climax: "From here, the future will open, the clouds part into a kind of glory. And if I die here, they'll say I sacrificed myself that my spirit might lead them. And if I live, they'll say nothing can oppose Muad'Dib." And again, he sees the many paths opening in front of him, the many possibilities of the future.

Bibliography

Herbert, Frank. *Dune*. Ed.Nemira, 1993

O'Reilly Timothy. *Frank Herbert*. Frederick Ungar Publ.Co.,Inc., 1981, 4 Sept., 2004.

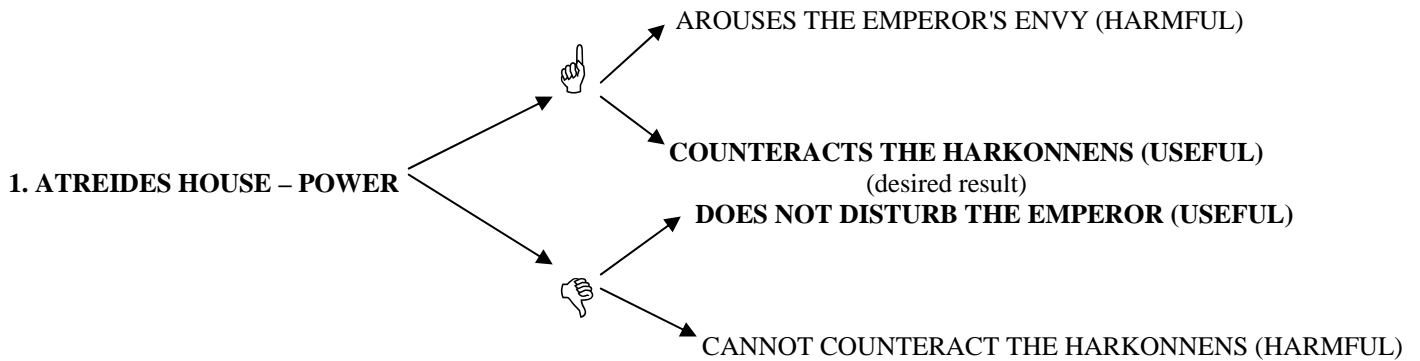
<<http://tim.oreilly.com/herbert/>>

ANNEX 12

Diagram of major contradictions in F.Herbert's *Dune*

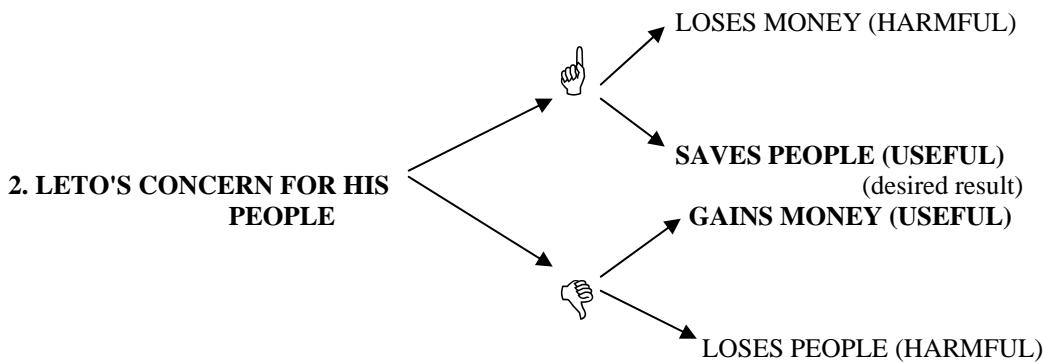
IF the POWER of the Atreides House is GREAT, **THEN** Harkonnen power is counteracted, **BUT** the Emperor's envy is aroused.

IF the POWER of the Atreides House is LOW, **THEN** the Emperor feels no envy, **BUT** Harkonnen power cannot be counteracted.



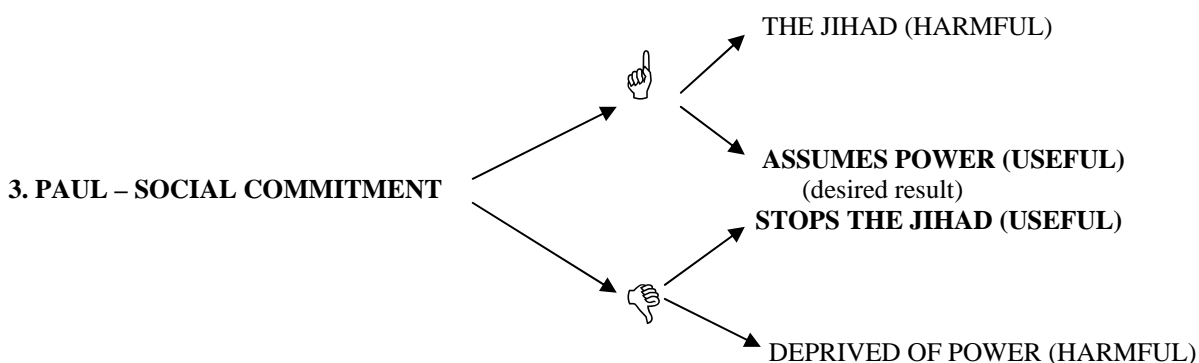
IF LETO'S CONCERN FOR HIS PEOPLE is GREAT, **THEN** he can save their lives, **BUT** he loses money.

IF LETO DOES NOT CARE FOR HIS PEOPLE, **THEN** he will gain money, **BUT** he will lose his people.



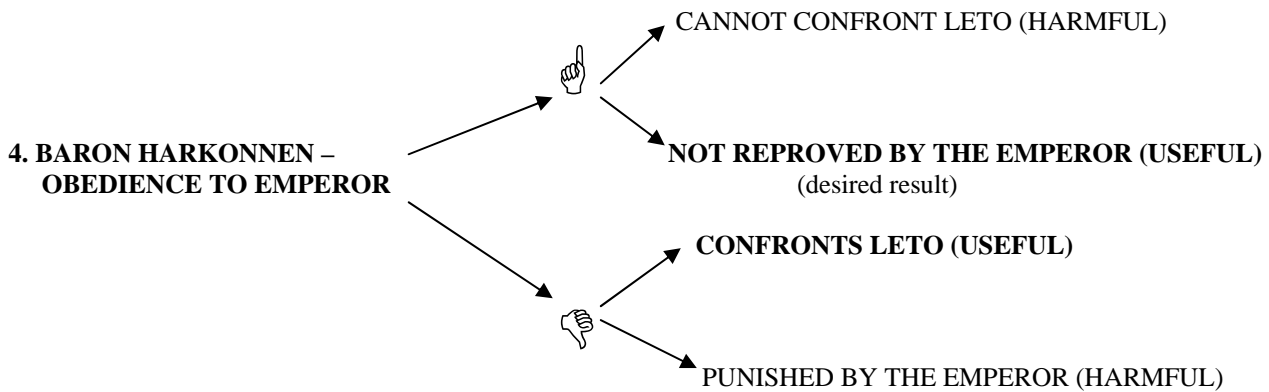
IF PAUL IS STRONGLY INVOLVED IN FREMEN LIFE, **THEN** he regains power, **BUT** the Jihad cannot be stopped.

IF PAUL IS NOT STRONGLY INVOLVED IN FREMEN LIFE, **THEN** the Jihad can be stopped, **BUT** he will be powerless.



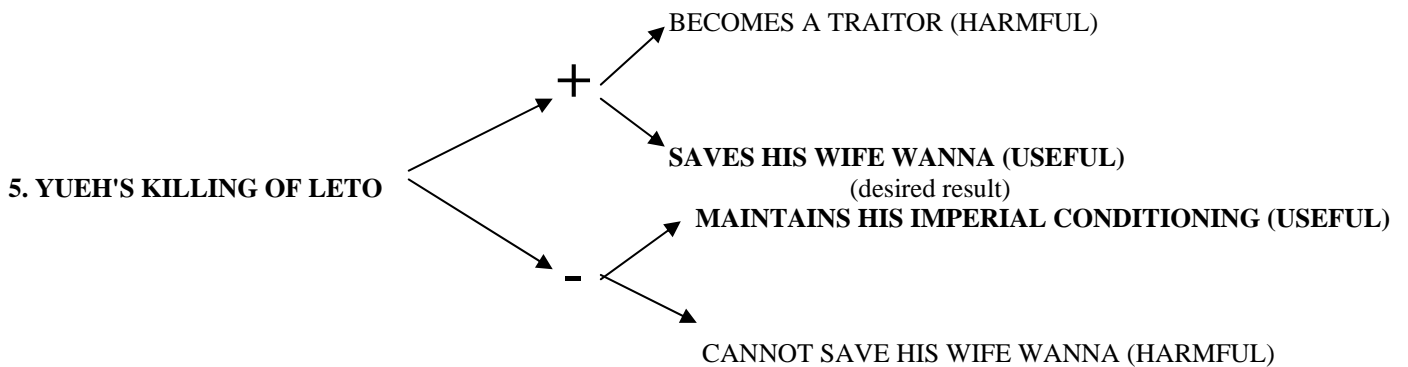
IF the BARRON RESPECTS THE IMPERIAL POWER, **THEN** he will not be reproved by the Emperor **BUT** he cannot defy Leto.

IF the BARRON DOESN'T RESPECT IMPERIAL POWER, **THEN** he can defy Leto, **BUT** the Emperor will punish him.



IF Dr.YUEH KILLS LETO, **THEN** he will save Wanna, **BUT** he becomes a traitor.

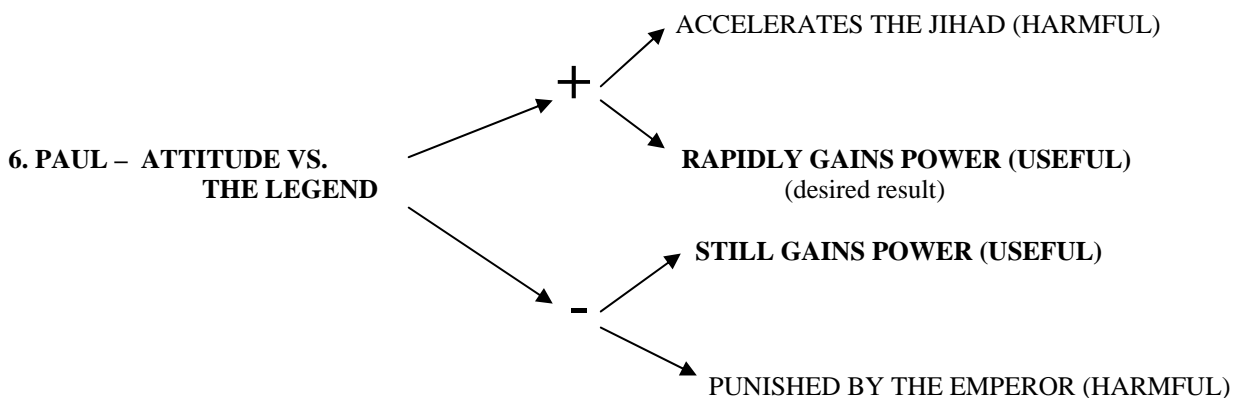
IF Dr.YUEH DOES NOT KILL LETO, **THEN** he maintains his imperial conditioning, **BUT** he cannot save Wanna.



Paul's attitude to the legend planted by the Bene Gesserit can be defined as a proto-contradiction:

it is necessary to do ... <aim/function> but ... <obstacle>

Paul **has to stop** the **Jihad** but the **power of the legend and the Fremens' expectations** act as obstacles. No matter what he does, he still gains power, he becomes the legend. Therefore the model below does not represent a coherent contradiction.



Resources and Partial Solutions in F. Herbert's Dune

The unravelling of the conflict situation, the process through which the Baron gains a victory and the Atreides are defeated, uses up the initial **resources** (the economic and military force of the Harkonnens and their treacherous infiltration in the person of Yueh; the potential of Arrakis for the Atreides and their perfect, though small military nucleus) and offers a **partial solution** to the conflict, apparently in favour of the Harkonnens. The initial specific situation and the resources have been modified through the process. But this opens the way for a new specific situation and new contradictions.

Once catastrophe has struck, Jessica has a glimpse of the future and her soul is prepared:

"So here we live out our lives, she thought, on this hell-planet. The place is prepared for us, if we can evade the Harkonnens. And there's no doubt of my course: a broodmare preserving an important bloodline for the Bene Gesserit Plan [I.222].

Young Paul Atreides, born on Caladan and brought up to be a Duke, has his own version of his father's defeat:

We came from Caladan – a paradise world for our form of life. There existed no need on Caladan to build a physical paradise or a paradise of the mind – we could see the actuality all around us. And the price we paid was the price men have always paid for achieving a paradise in this life—we went soft, we lost our edge [I.283].

When accepting the reversal of his family's situation, Paul is thinking of the first thing to be done, "running like cowards," but, in that very moment, he has already built an image of the **ideal result** he wants to reach, that of becoming Emperor of the Known Universe: "But how else can I live to avenge my father? [I.251]. Is such an early description of the most desirable result utopian? Maybe, but not to Paul who analyses the **core of the problem** in terms of a contradiction between the objective situation and his wish to avenge his father. What could he do in order to turn the situation in his favour? One solution would be to flee danger, to retire to the

edge of the universe; the other, which seems an **impossible solution** coming from a fifteen-year-old, is to evaluate the situation, and his resources, just as Leto did when arriving on the planet.

On that first occasion Leto sensed the source of possible danger: "But the important thing is to consider all the Houses that depend on the CHOAM profits. And think of the enormous proportion of those profits dependent on a single product – the spice. ...Think of the Landsraad Houses that look to me for a certain amount of leadership." He could also appreciate his son's penetrative thinking and "truly *educated*" observation: "Whoever had stockpiled melange could make a killing. Others would be out in the cold" [I.52]. During the following days Leto continued to inspect his resources: he could not use the shields, he could not eradicate the dangerous worms because that would destroy the spice, rescue services could not be set up because static electricity from the sandworms would block out the signals. What remained was the local resource, the people, the Fremen of whom Duncan Idaho, the warmaster, had such a high opinion. In this case the situation itself became the resource. And as Hawat put it: "the Fremen appear more and more to be the allies we need. They're waiting now to see if they can trust us, but they appear to be dealing openly." They have sent gifts, stillsuits, maps of the desert, jewellery, they have helped the Atrides in their dealings with the Judge of the Change, their reports have proved to be reliable and on the whole "there appears to be no trickery" [I.96].

Paul has inherited the force of his father's character. Like a real leader, Leto knew men and knew how to deal with men. The people his son comes into contact with acknowledge the superiority of his presence and are surprised to find it in a child. Paul is superior to his father because of his mother's Bene Gesserit teachings, among them his heightened perception. Both Kynes and Stilgar are won over by the maturity of Paul's judgements and by the trustworthiness of his character. Kynes offers his loyalty after having first disliked Paul, while Stilgar shows his respect after their first confrontation by saying : "And I shall not call you lad the more" [II.26]. Kynes assesses what Paul is worth before helping them to flee. He purposefully dismisses Paul's promises as "words," his resort to the legend as "superstition," but finally he admits: "You have a plan. This much is obvious...*Sire*" [I.248]. Paul, in his turn, identifies and appreciates Kynes' qualities. When Jessica wonders why they were left alone, Paul answers: "He did what any good

guerrilla leader would. He separated us into two parties and arranged that he couldn't reveal where we are if he's captured. He won't really know" [I.252].

Once on the run, Paul appraises the situation: "We will depend upon ourselves," and takes quick decisions: "Our immediate concern is our family atomics. We must get them before the Harkonnens can search them out." The fifteen-year old boy has no time to mourn his father: "*I'll mourn my father later... when there's time*" [I.214]. He has to suddenly grow up and Jessica is sometimes amazed at the speed of his train of thought. She has become slow in comparison to her son.

Paul sensed the hyperalertness of his mind reading her reactions, computing on minutiae. "You see it now," he said. "Satellites watch the terrain below. There are things in the deep desert that will not bear frequent inspection."

"You're suggesting the Guild itself controls this planet?"

She was so slow.

"No!" he said. "The Fremen! They're paying the Guild for privacy, paying in a coin that's freely available to anyone with desert power – spice. This is more than a second-approximation answer; it's the straight-line computation. Depend on it."

"Paul." Jessica said, "you're not a Mentat yet; you can't know for sure how – "

"I'll never be a Mentat," he said. "I'm something else . . . a freak" [I.216-217].

And this is a situation he will have to live with from that moment on.

Paul's decision to avenge his father will lead him to a **network of sub-problems** which he proceeds to solve, one by one, and which help him to build his future ideal solution. Annex 13 illustrates the way a diagram of the network of sub-problems in *Dune* would look. Paul has inherited his mother's teachings as well as combat and close fight strategies, subtleties and trickeries, codes for situations of danger. These are his first two resources. His father's ducal signet is his third. Of the latter he says: "I swore never to wear it again until I was ready to lead my troops over all of Arrakis and claim it as my rightful fief" [III.155]. But he was a duke without a dukedom. He needed to become a leader and he needed a population to lead. "We'll find a home among the Fremen, where your Missionaria Protectiva has bought us a bolt hole" he decides. And Jessica thinks "*They've prepared a way for us in the desert*" [I.222]. And once

again she's amazed at Paul's strangeness, at his knowing what he could not have known. Looking back to that period, Princess Irulan says:

On that first day when Muad'Dib rode through the streets of Arrakeen with his family, some of the people along the way recalled the legends and the prophecy and they ventured to shout: "Mahdi!" But their shout was more a question than a statement, for as yet they could only hope he was the one foretold as the Lisan al-Gaib, the Voice from the Outer World. Their attention was focused, too, on the mother, because they had heard she was a Bene Gesserit and it was obvious to them that she was like the other Lisan al-Gaib. —
from "Manual of Muad'Dib" by the Princess Irulan [I.110].

The Fremen, who "had lived under the Harkonnens for eighty years" [I.251] being "a deep thorn in the Harkonnen side," a population of "deep strength and healthy vitality" [I.59], were prepared for Muad'Dib both spiritually and as fine guerrilla warriors. The legend planted by the Bene Gesserit, that of "a leader, child of a Bene Gesserit" coming to "lead them to true freedom" [I.112] becomes Paul's next resource. It was so strong that even Kynes, when meeting Paul for their first incursion into the desert and observing that he was the only one of the newcomers who instinctively knew how to adjust his stillsuit, is struck by the possibility of his being "the one." "*He shall know your ways as though born to them*" [I.126], he remembers. The Fremen, the survivors in the desert, "perfectionists" [II.39] out of necessity, the only population adapted to live in such a harsh world, welcome him, apply the *test of reason* to him, give him a new name. He is no longer Paul Atreides but Mahdi, Paul Muad'Dib, and becomes the leader of a perfectly disciplined, population who have wished to be led. Jessica, just as aware as her son of the necessity of his ascendancy, thinks "*All of them an entire culture trained to military order. What a priceless thing is here for an outcast Duke!*" [I.318]. And what a perfect resource since the Fremen were people with a goal: they would have willingly died not only for a legend but also for the dream implanted by Kynes, "a dream to capture men's souls," as Jessica admits while prefiguring Paul's future: "Such people would be easy to imbue with fervor and fanaticism. They could be wielded like a sword to win back Paul's place for him" [II.41].

Paul needs to take decisions. The first **partial solution** he adopts as a way to consolidate his resource – the Fremen – and which in its turn involves decision making on several levels, is to

increase his credibility and win their trust. His first step is again a copy of the Duke's actions. His father had had a short hesitation before letting Kynes, the "Judge of the Change," who is "accepted in both sietch and village" [I.122], inside his personal shield in order to adjust his stillsuit: "*How delicate a moment! If I refuse, it may offend him*" [I.124]. Therefore he does not, thereby initiating a process that will be continued by his son. At the beginning of their conversation, Kynes stiffens when Paul wants to buy his loyalty. But Paul, realizing his mistake, apologizes and offers loyalty for loyalty. Kynes is taken by surprise: "No Harkonnen ever admitted error. Perhaps you're not like them, Atrides," He could feel the sincerity and commitment behind Paul's words. Paul has won him over: "*In this moment he'd give his life for Paul*, Jessica thought. *How do the Atrides accomplish this thing so quickly, so easily*" [I.249-50].

Paul proceeds with the Fremen. The importance of the specific situation for finding a solution to a problem is shown by the fact that both Paul and Jessica have first to offer a demonstration of their physical force to the Fremen before being rewarded with their trust. There is no choice, Jessica thinks, "we must move swiftly if we're to secure our place among these Fremen" [II.72]. In a wonderful example of a situational contradiction, Paul has to kill Jamis in order to be accepted by Jamis's sietch. He would readily refuse Jamis' wife, coffee set and water, but Jessica, who sees the importance of the moment uses the Voice: "You will accept the water" [II.32]. In other words, Paul must accept the Fremen's habits and their way of life, together with the shelter they offer. However, just like Duke Leto, he sets his own limits depending on his goals which he clearly states in front of the tribe and makes their own, while at the same time breaking their stereotypes. He helps himself with the Voice but Jessica is aware that "*that's not enough with these people. They've good insulation against vocal control. He must catch them also with logic*" [III.155] – one more laudatory statement regarding the Fremen. In killing Jamis, Paul has created another problem for himself. He will have to assert and reassert his physical superiority all the time. He solves the problem by refusing to challenge Stilgar to a fight whose ending was accepted as obvious by everyone, including Stilgar. "It's the way!" the Fremen cry and accuse him of cowardice. "Ways change," Muad'Dib decides. He needs the strong hand and loyalty of Stilgar for his planned future and is not willing to sacrifice him: "When I am Duke in Arrakeen

with Chani by my side, do you think I'll have time to concern myself with every detail of governing Tabr sietch?" ... "Do you concern yourself with the internal problems of every family?" ... "Do you think I wish to cut off my right arm?" ... "Do you think I wish to deprive myself or the tribe of your wisdom and strength?" [III.151]. Paul has already won the battle. Stilgar says: "The voice of any Fremen may be heard in Council. Paul-Muad'Dib is a Fremen" [III.155]. The Fremen have learnt that the time for killing off their best men is over; the time has come for killing the real enemies – the Harkonnens.

At this point in the story, Paul has covered a whole path in the network of his problems. He has learned the laws of the desert: to "sandwalk" in the Fremen's noiseless way, to avoid the drum sands where a single mistaken step would launch a call to the sandworm, he has learned to stay away from the dust basins which would have swallowed him. In a final symbolic gesture of acceptance and communion he becomes a sandrider and rides the sandworm. Once he passes this Fremen manhood test, he knows he will be accepted in the southland where the women and the children are hidden, and where he can rest before the final victory. He has already accepted Chani, Kynes' daughter, for illegitimate wife and she has given him a boy, Leto. He has now become a duke with a people; all that is left is to win his dukedom from his enemies.

With this purpose in mind, Paul makes another evaluation of his possible resources. Of the two men his father had most relied on, one was with the Baron and the other with the smugglers. In an attempt to solve his own problems, the Baron has conditioned the Atrides' former Mentat, Thufir Hawat. Later on, on becoming aware of the great mistake he has made in suspecting Jessica of treason, Thufir will kill himself using the poisoned needle with which he was supposed to kill Paul. Gurney Halleck, Paul's former swordmaster, who was the source of continual amazement for Duke Leto: "a head full of songs, quotations, and flowery phrases... and the heart of an assassin" [I.92], believing Paul to be dead, has fled to the smugglers. But the smugglers have close contacts with the Fremen and they are selling information, too. This is the reason why they were prevented from investigating the secrets of the deep desert but this also means that Paul can use them by controlling the information that reaches the Emperor. And Paul eventually retrieves Gurney during one of the smugglers exploratory incursions into the south and classifies

the event as "a good omen, a sign that he was on the course of the future where all was well. *With Gurney at my side...*" [III.140].

The Guild is not on his side but he is determined to "pull their fangs" [III.205] and to keep their fleet in space, and he knows he has just the weapon needed for that: "They have no choice. We can destroy the spice. The Guild dares not risk that" [III.181]. Paul is ready to blackmail them as he will do with the Emperor Padishah later on.

To his surprise, he finds the Sardaukar playing into his hands. Their abominable deeds in the ergs have raised the hatred of an otherwise indifferent population who would have considered "the coming battle as no more than a great inconvenience ... and the possibility of exchanging one set of masters for another. The Sardaukar recruit for us, Stilgar," Paul remarks [III.182]. The Sardaukar are not used to submitting and Paul spares the life of Captain Aramsham and sets him free, seemingly out of gratitude (the captain has killed one of his own Sardaukar who has attacked Paul while they were already prisoners) but in reality as part of a strategy for informing the Emperor that he is still alive and he has come to fight for his due.

Paul knows he can without question rely on Stilgar's men and on the Fedaykin, these Fremmen death commandos having pledged to give their lives to "right a wrong" [III.266]. He knows they will fight with him "until no Harkonnen breathes Arrakeen air" [III.131]. This is not only because of ancestral hatred but also because one of the solutions the Baron is considering is to turn Arrakis into a "pool of recruits already conditioned to the bitterest survival training" [III.99]. Paul also knows he doesn't have full control of the air and since fuel is scarce, he plans his strategy carefully: fuel and craft are saved for the crowning effort.

His last resource is his own vision before the final conflagration, not of the future but of the Now:

"The Space above Arrakis is filled with the ships of the Guild ... The Padishah Emperor himself is there ... With his favorite Truthsayer and five legions of Sardaukar. The old Baron Vladimir Harkonnen is there with Thufir Hawat beside him and seven ships jammed

with every conscript he could muster. Every Great House has its raiders above us . . . waiting" [III.175-76].

A shrewd military technique is needed beside bravery and Paul builds up solutions to a rapid victory. He is quick to understand the situation when he hears the news about Rabban's forces being inside fully fortified defences and expecting him to wear out his fighters in futile attack. He applies Gurney's teachings: this means they are immobilized while he himself can go where he wants. The enemy is exactly where Paul wants it to be: "They've lost the initiative, which means they've lost the war" [III.143].

When the Harkonnen forts and towns in the shielded inhabited area are all, except one, in the hands of the Fremens, Paul still has two cards to play. He is going to ask the Emperor to accept his claim to his father's dukedom. If the Emperor gives a signal by flying the Atreides' flag, he needs to deal with the old enemy only, the Harkonnens. But there are too many observers around the Emperor. In a gesture revealing both of cowardice and indifference, the Emperor raises neither the Atreides' nor the Harkonnens' banner: he flies the CHOAM "rag" for all to see that his interests are in the profit, whether he gets it through an Atreides or a Harkonnen governor. Paul is forced to resort to a stratagem. He knows that none of the forces deployed against him will dare use atomics because the Great Convention has made it clear as far as this is concerned: the use of atomics against people can cause planetary obliteration. Therefore he decides that blasting the Shield Wall is different from blasting the humans behind it. In these critical moments Arrakian weather is on his side: "a great-great-*great* grandmother of a storm" [III:185] is approaching which will blind the enemy and hide the gunners.

When everything is over, Paul has one more personal battle to fight, one that could be a catastrophe for the Bene Gesserit plans, because it could cost the lives of two end products of their breeding scheme. Paul has to face the last of the Harkonnens, Feyd-Rautha, a na-baron now that his uncle has died of a poisoned needle, thrust by Alia, Paul's little sister: "The Atreides gom jabbar" [III.195] as she called it. Once more Muad'Dib will prove his worth. He has now reached the end of the line, but once more he turns his victory into a partial solution. All the power of the universe is in his hand so he dictates the law now just as once, a long time ago, he

promised: "'Law is the ultimate science.' Thus it reads above the Emperor's door. I propose to show him law." Jessica guessed his aims then ("You'd aim for the throne?") while Kynes qualified them as "a desperate gamble" [I.248-49]. But Muad'Dib can now achieve both "kanly" (revenge) and a much higher goal than his father's dukedom. So the final solution for him is to become Emperor of the known Universe. This would crown his efforts. He finds the key to the Empire in the person of Irulan, the Bene Gesserit-trained Princess Royal and he asks for the Emperor's entire CHOAM Company holdings as dowry. As to the Emperor, he bans him to a Salusa Secundus where he promises to ease the harshness. The last words of the novel belong to Jessica trying to calm a distraught Chani: "Think on it, Chani: that princess will have the name, yet she'll live as less than a concubine – never to know a moment of tenderness from the man to whom she's bound. While we, Chani, we who carry the name of concubine – history will call us wives" [III .223].

Arrakis goes through a complete cycle in the Dune series. From a desert it becomes the garden state envisaged by Kynes and Paul. But some fifteen centuries later, by the death of Leto II, the sandtrout is returned to the planet and it becomes a desert planet again in *Heretics of the Dune* (1984), only to face its destruction in *Chapterhouse* (1985). Palumbo remarks: "Echoing the planets own repeated transformations into its opposite, many things become their opposites on Dune." On each of the many levels of the novel there are several other examples of contradictions and opposing concepts, development of characters into "foils, shadows and doubles" all part of the great theme of "metamorphosis into the Other." While the "fair, fleshy, reckless and grossly sensualistic Harkonnens are meticulously presented as foils to the dark, lean, restrained and perceptive Atrides" in a desire to create a clear antithesis between the leaders of the two Greatest Houses of the Landsraad, there is a more subtle change in Paul's becoming his opposite when he finds out that he is a Harkonnen and interestingly enough it is the "Harkonnen-like ruthlessness" and the loss of "one of his father's defining traits," the concern for his men, that finally lead him through warfare and final victory over both his enemies and Dune [2002:154]. At the end of the novel a mature Paul has separated good from evil, and in the process, his life has been shaped by a host of experiences.

Herbert's theory of the superheroes is quoted in O'Reilly's book on the writer:

I had this theory that superheroes were disastrous for humans, that even if you postulated an infallible hero, the things this hero set in motion fell eventually into the hands of fallible mortals. What better way to destroy a civilization, society or a race than to set people into the wild oscillations which follow their turning over their judgment and decision-making faculties to a superhero? [1981: Ch.5]

Taking that into account, Herbert magnificently succeeds in demolishing his own theory and turning Paul into a moving, perfectly accomplished superhero. The incompleteness of this first message is proved only by the reading of his next Dune books. In *Dune Messiah* (1969), although Paul's character still retains something of its majesty, Herbert starts demolishing the mystique surrounding his figure. Paul loses his eyesight but his prescient powers have become so strong that he can see without it. As a blind Prophet he preaches against the religion he himself has established. He witnesses the mistake Leto II makes, in *Children of Dune*, by taking the one path that he himself feared to take and becoming an absolute tyrant. From now on, in three more volumes, Herbert builds up the demolition of the idea of messianic leadership.

Bibliography

Herbert, Frank. *Dune*. Ed.Nemira, 1993

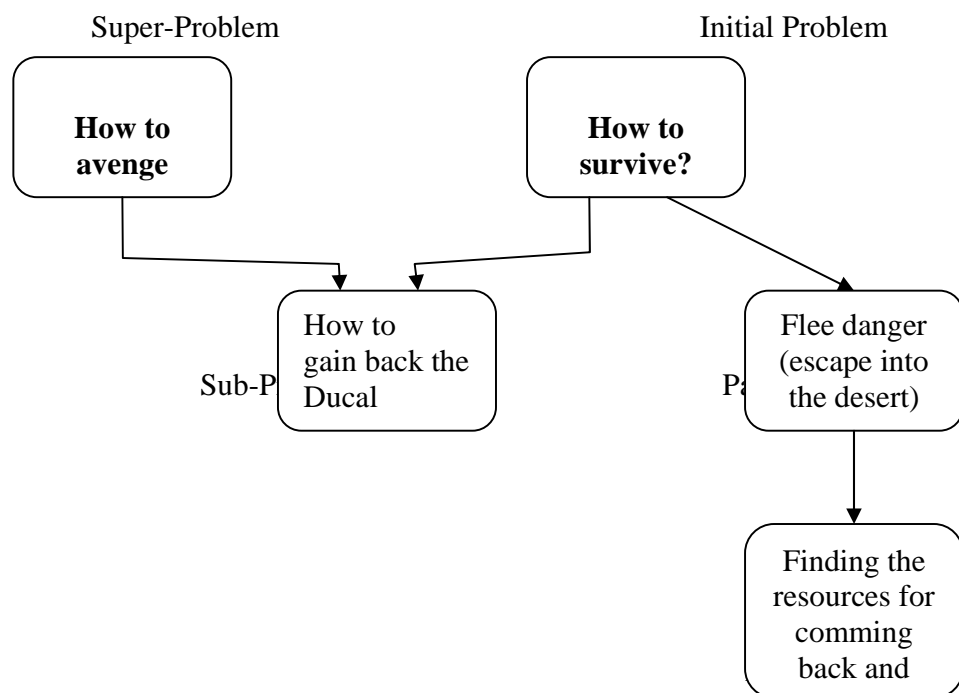
O'Reilly Timothy. *Frank Herbert*. Frederick Ungar Publ.Co.,Inc., 1981, 4 Sept., 2004.

<<http://tim.oreilly.com/herbert/>>

Palumbo, Donald, E. *Chaos Theory, Asimov's Foundations and Robots, and Herbert's Dune, The Fractal Aesthetic of Epic Science Fiction*. Greenwood Press, 2002

ANNEX 13

Starting point for building a network of problems in F.Herbert's *Dune*



The Construction and Deconstruction of Su-Field Models (1). "The Minority Report" – Philip K.Dick's short story (1956) vs. Steven Spielberg's film (2002)

Author: Coşer Cornelia

lia_coser@hotmail.com

Abstract. OTSM and TRIZ instruments, originally developed for the engineering field, can be transferred to the study of literature. The goal of an analysis involving the construction and deconstruction of Su-Fields is to demonstrate that such functional models can play the same constructive, beneficent, or destructive, harmful role in literature as in technology. Incomplete models compromise the story and the relationships between the characters. This is demonstrated by comparing Philip K.Dick's short story "The Minority Report" with Steven Spielberg's homonymous film.

The goal of an analysis involving the construction and deconstruction of Su-Fields is to demonstrate that such functional models can play the same constructive, beneficent, or destructive, harmful role in literature as in technology. They can connect people and reveal the emotions involved in personal relationships, just as they connect substances and fields. If they are incomplete, the complexity of the story is left wanting and relationships are disharmonious. If they are complete, a richness of relationships and meanings delights the reader.

In case of "The Minority Report," the conciseness of the short story, while imposing a quick pace on the thrilling succession of events, leaves little space for character and relationship development thus meeting the everlasting disgrace science fiction has suffered from. On the other hand, the film version built on the screenplay by Joe Cohen and Scott Frank seems to fill in precisely the dimensions that were missing and therefore creates a richer construct with more satisfying relationships, connecting full-bodied characters who reveal their inner life of contentment or chimera chasing along the background of an electrifying thriller. Both plots, of the short story and of the film, are sometimes too intricate to follow and the use of the Su-Field analysis throws a lot of light on the main characters' relations to each other and on the plot lines, and the concepts they involve.

The short-story and the film start from the same premise: in New York, respectively Washington, in the year 2054, the traditional role of the police has become superfluous. This specific instantiating of the novel's historical moment opens the door to social criticism and the introduction of thematic elements which "deviate from the author's and implied readers norm of reality" being both "historical and

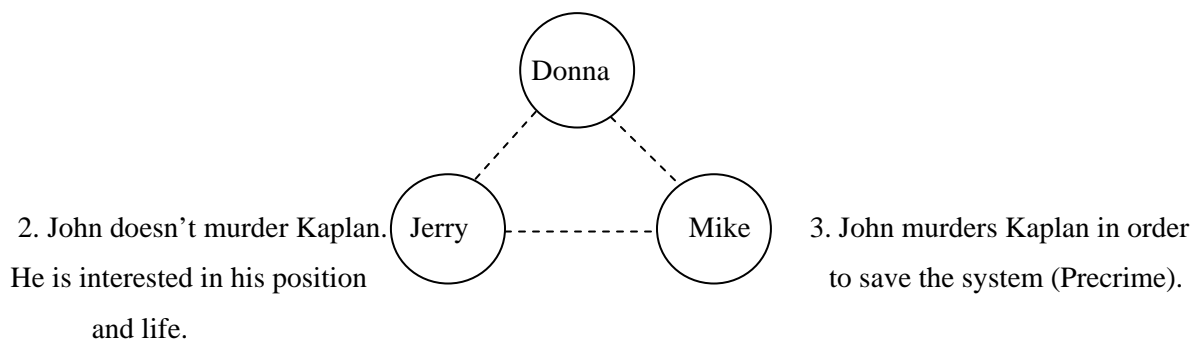
estranged" and allowing Dick to "reflect" the contradictory tendencies of his historical conjuncture as much as to "reflect on them" [Suvin qtd. in Durham, 1992: 194]. A system called "precrime" requires policemen endowed with high technology weapons to race through a completely automated city to protect the would-be victims. They get their information from a reliable source: "the prophecies" of the "deformed and retarded" "three precog idiots" [Ch.I]. Criminality is thus reduced with 99.8% since the would-be criminals know they will be run down anyway, before committing the act.

From now on the novel and the film highlight different moments and connections between the characters, starting with the status of the main character, John Anderton. In the short-story he is the founder and director of Precrime, the result of thirty years of hard work. "In our society," Anderton explains to Witwer, "we have no major crimes but we do have a detention camp full of would-be criminals." There is no way either to cheat the system or to accept bribes since a duplicate file of each card is received at the Army GHQ where general Leopold Kaplan, the leader in charge, is preparing to retire. The drawback to the methodology is that they are "taking in individuals who have broken no law." In the film, a much younger Anderton (Tom Cruise), runs the system whose director is Lamar Burgess (Max von Sydow). With masterly logic, a dancer's movements, and a virtual reality interface, Anderton analyses and selects the information contained in the precogs' prismatic visions of the future, he freezes the image or runs back and forth in time changing points of view until he gets the precise place, time and author of a would-be-crime, hours or even weeks before it would actually happen. There is no reason whatsoever to doubt the performance of the system, in the short-story or the film, until ... the precogs predict a crime that Anderton is going to commit against a person he does not know, Kaplan, respectively Leo Crow.

Seven Su-F models are incomplete or present destructive relationships in the short-story. Their completion in the film is discussed below. Two observations have been taken into account when constructing the Su-Fields. One belongs to Semyon Savranski: "The presence of a field always assumes presence of a substance, as it is a source of the field" [2000: 190]. The other belongs to James Kowalick: " a field comes from an object. There is an object behind every field. And it is often the case that two or more "fields" - as Altshuller defines the word - are associated with a particular function." [xxx (10), 1997]. I therefore use "object" here in its largest meaning, real or imaginary, animate or inanimate.

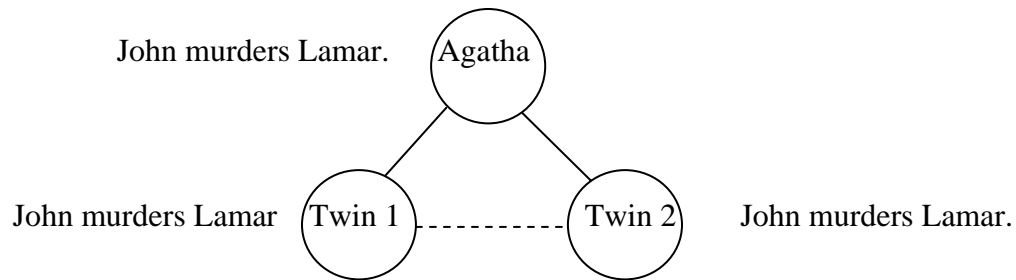
In the short story the three precogs, besides fulfilling their only role, that of precognition, appear as totally undifferentiated characters, the field between them being weak. The reader finds out that their "talent absorbs everything." Apart from that, they lead vegetable-like lives, they are strapped to chairs and wired to recording equipment, their physical needs being taken care of automatically, while their "dull, confused" minds are "lost in shadows" [Ch.1], so obviously they have no spiritual needs. They are useful only together and their accomplishment is comparable to the majority reports obtained in the case of computers. Their three different predictions actually represent three different temporal lines, each influencing the previous, while the interrupted lines are the sign of an insufficient field and of a model that cannot sustain itself.

1. John murders Kaplan.



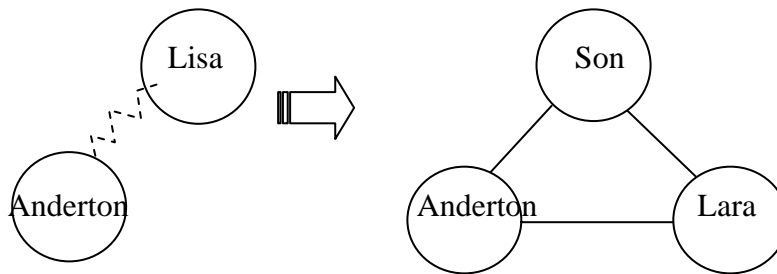
In the above analogy between the three precogs and the three computers, the idea that the third computer, after analysing the data obtained by the other two, has overriding power of decision over them is not made clear. On the contrary, in the film, Agatha acquires those interaction properties – major interests, strong feelings – that allow for the model to be fulfilled with her acting as a field. Just like the twins, Agatha is the monster baby of a drug addict mother, born with severe brain damage. Anderton has no special interest in either of the precogs other than their precognitive performance, and explains to Witwer that they are "just recognition filters" that convey images with the help of optical tomography: "We see what they see" [Ch.1]. What the film does is to humanize Agatha in order to construct a credible relationship, based on mutual trust, between her and Anderton. When Anderton drags her to Rufus Riley's VR entertainment centre to "download" the minority report from her, Agatha, during some nicely machinated scenes in the film, delays the period before his being caught by his former colleagues for as long as she can. She saves his life while Anderton, in return, punishes the murder of her mother, Anne Lively, a character that does not exist in the short-story, but is the key character who triggers the action in the film. Therefore the film changes the previous non-functional

model into the functional model represented below in which Agatha acts as a field but, as different from the short-story, there is no minority report:

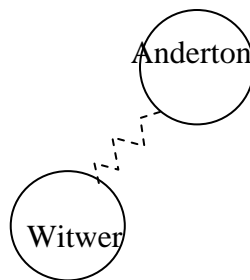


In Robinson's opinion paranormal abilities, like the ones manifest in Dick's three precogs, are not science fiction's strongest element since they are not relevant to the society that generated the text. They have little metaphorical power "no doubt because of their origin in an older genre, the supernatural or Gothic. They do little to represent human existence in a technological society" [2005: 31]. Obviously Dick's concern in this short story is not reflected in his preoccupations with the kind of existence a technological society would imply but in much more urgent matters: How would a change in the police's prerogatives affect the whole social system? and, If such a change involves the power to inflict existential changes on human beings, how does it affect ethics and to what extent should human consciousness be involved? To what extent would the exercise of free will affect a deterministic system?

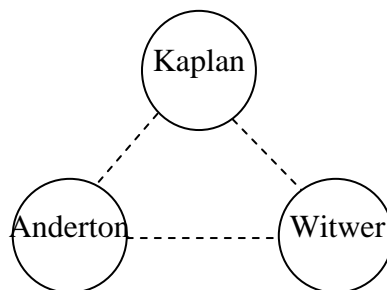
The short story offers an incomplete model and an unsubstantiated interaction between Anderton and his wife, Lisa. She is the first whom Anderton suspects of plotting against him while later, in a scene which is much too short and abrupt in the short-story, the reader is offered his changed perspective, his wife is innocent, but how this dawned on the character is not really clear. This very weak, and mostly unexplained relationship becomes much stronger in the film with the addition of one character, the couple's son, and a supplementary plot line, in which Anderton feels responsible for his disappearance, and after six years, he still cannot come to terms with it, especially since it led to a divorce caused not by the loss of love but by painful memories. The son, even though not an actual presence in the film, is a container of strong feelings of affection on behalf of both the mother, Lara (Kathryn Morris) in the film, and the father and acts as a field uniting the two. And that's exactly what was in the minds of Frank and Cohen, the creators of the screenplay, when they considered that by introducing a dead son, they can play on the affective string much more convincingly. The transformation of the model is shown below:



Another incomplete model in the book, which is also bidirectional and harmful, is the relationship between Anderton and Witwer, the representative of the Attorney General sent to act as Anderton's assistant until his retirement. He misinterprets Anderton's increasing nervousness and observes: "You really dislike me." It was true: Anderton "couldn't believe he disliked the young man that much. It didn't seem possible" [Ch.I], but still he could have dissimulated that. What actually happened was that Anderton had just discovered the prevision accusing him of murder and the shock this caused was harder to conceal.



One could imagine the completion of the model if Kaplan were included. Kaplan, in the short-story, plays the part of Lamar with the difference that he wants the system destroyed. This is the only reason why he needs Anderton, whom he hasn't personally met, while his only interaction with Witwer is confined to keeping the former out of his hands.

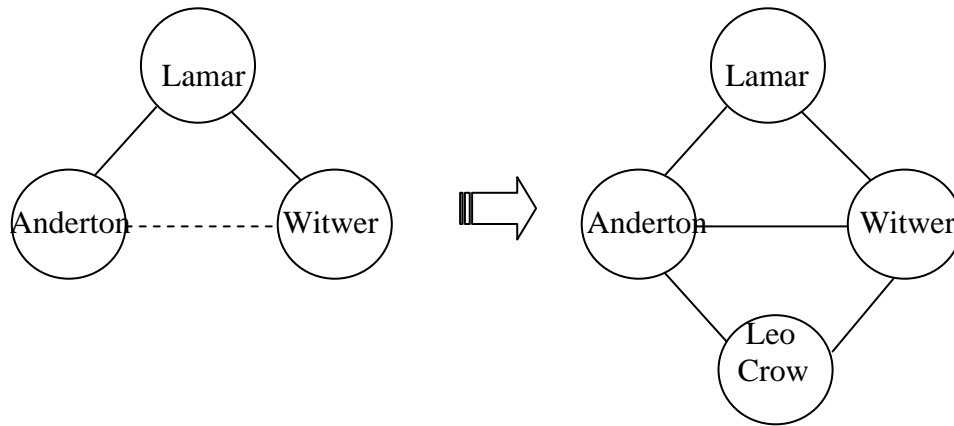


Even now the triangle is very loose. At the moment when the prediction is processed by the army, Witwer has already taken control and wants to turn Anderton over to the police to prevent him from committing the crime, while Kaplan pretends he wants the same thing for "his own protection" [Ch.III]. Actually, what Kaplan wants is to prove that the report is wrong and thus discredit the police and

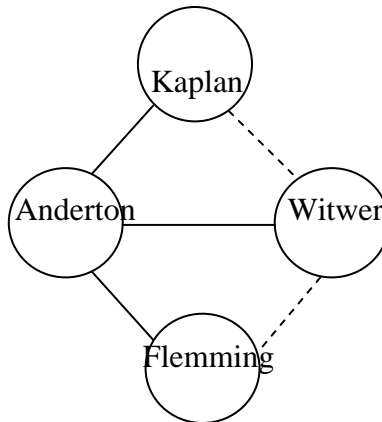
attract more financing for the military. He strongly resents his retirement after the Anglo-Chinese War and the division of authority between the army and the police forces.

In the film, Lamar acts as a much better field than Kaplan. He is the Director of Precrime, he holds control and strongly relates to both Anderton and Witwer. During the course of events, he is shown to change his mind: he doesn't want to retire anymore, on the contrary, he wants to promote the system nationwide with himself at the head of it. But Anderton, who considers him a friend, gets too close to a dirty secret which Lamar has been trying to hide: he had to murder somebody and to cleverly and deliberately cheat on the system itself in order to implement it. The stratagem including Leo Crow was a necessity from Lamar's point of view, since it offered him the possibility of controlling the situation: aware of Anderton's only weak point and foreseeing his reaction, he offers him a fake killer of his son. Anderton will be taken to the detention camp and the secret of Ann Lively's drowning will not be revealed. The film, by introducing one more character, Leo Crow, fulfilling the role of another field, allows for the transition to a dual system. In conformity with Standard Solution 2.1.2. "If it is necessary to improve the efficiency of SFM, and replacement of SFM element is not allowed the problem can be solved by the synthesis of a dual SFM through introducing a second SFM which is easy to control" [Salamatov, 1999: 53]. It is not Crow's individuality that is important, in fact he has no more individuality than the precogs themselves, but what he succeeds to arouse in Anderton by pretending he is the child molester that kidnapped and killed his son. Interestingly enough Anderton's reason for murder is his being hunted and pre-accused of committing it. Thus, in his case, in a vicious circle, the prediction draws the act which would fulfil the prophecy.

Witwer, whose only role in the film is that of finding imperfections in a seemingly perfect system, also becomes involved because, in order to prevent the system from falling apart, he has to catch Anderton before committing the crime. Consequently, the relationship between Anderton and his assistant becomes much stronger. They strongly dislike each other especially when Witwer discovers that the former hotshot policeman has become a "clarity" (drug) addict after the death of his son. But in front of so much evidence planted against him, even Witwer has to admit something is wrong. His interaction with Lamar is quite loose until, totally unexpectedly and with no obvious reasons, the latter kills him. Witwer committed the same mistake as Anderton: in all good faith he revealed his uncertainties to Lamar, who thus commits a second murder for the system. The initially simple model is changed into a dual one:



By analogy, the very loose Kaplan – Anderton – Witwer model in the short story, can also be turned into a dual model with the addition of Flemming who interacts strongly with Kaplan by being his protected subordinate, with Anderton by directly influencing his judgement as to the plot against him and keeping him out of the hands of the police, and standing in almost no relationship with Witwer.



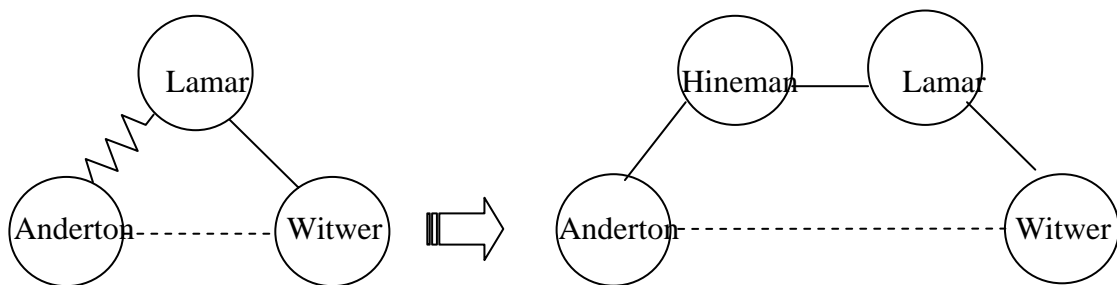
The model is much weaker than the one produced in the film because of the lesser involvement of Witwer. Just as in the former dual model and, therefore, in the story just as in the film, Witwer is a straightforward supporter of Precrime. However, he does not establish strong, radical relationships with either of the characters. Even at the end of the short-story when he becomes the next Police Commissioner, Anderton's successor, the success yet appears to be Anderton's and not his.

There is another triangle which is of a binary importance in the film. Anne Lively is already dead when the events unfold but between mother, victim of a murder, and the precog daughter there is a strong bond, an unresolved wish of the now cured mother to get back her damaged child, a relationship strong enough to unleash the action which will overthrow the order existing at the beginning of the film. This triangle is also important because the endeavour to complete the Su-Field is transparent here: Agatha, the "idiot," is purposefully luring John Anderton into disclosing who the person responsible for her

mother's death is. This relationship becomes thus strengthened from the emotional point of view, just as the one involving Lamar, as murderer of Ann Lively.

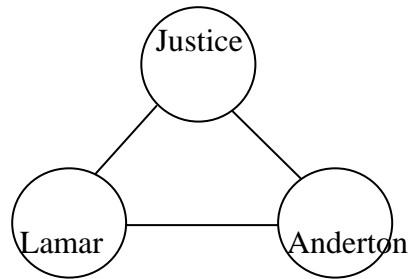


Alongside the same lines of bringing more humanity and feeling into the film, one more character is introduced, which does not exist in the short-story. In the latter, Anderton listens to the news on the radio and this reminds him of the possibility of a minority report. In the film, the role of the radio is taken over by Dr.Hineman, the genetic researcher, who had been trying to return to a useful life the brain damaged children of drug addicts. From her point of view, her attempts ended in failure. However, she made the remarkable discovery that some of these children had a gift: they had horrible dreams about crimes all of which would be performed a short time later. She is the one who developed the precogs, designed the system, and pioneered the interface. When, as the film unfolds, the Lamar – Anderton relationship becomes a harmful one, Dr.Hineman takes over part of the harmful effect and neutralizes it by serving Anderton with the information he needs: Agatha is the cleverest of the precogs and she stores the original minority report. Without her, Willy the caretaker says in the film, the other two are useless and "hive-minded," and this is true since, Lamar can confidently shoot Witwer while the fugitive Anderton is keeping Agatha with himself. In the film the model is developed:



One last model should be mentioned: the complete Su-Field formed of the concept of Justice in relation to Anderton and Lamar, which makes up the backbone of the film. If any of them were missing, the equilibrium would be overthrown. If Anderton would restrict the model by his absence, Lamar would be the only one in charge and could infringe the law as he desired. If the latter were absent, Anderton would be the perfect law-obeying policeman and nothing more. If the concept itself were missing, the

connection between Lamar and Anderton would be one of dependence between superior and subject. All three points of the triangle need to be there for the model to work.



The conclusion of the short story seems to be that the precogs are never wrong, the system proves correct, but by knowing your future you can interfere with it. But Anderton's allegation at the end of the story " My case was unique, since I had access to the data. It *could* happen again – but only to the next Police Commissioner," that is to Witwer, is wrong since, in all probability, the Army will still get duplicates of the files.

In the film the system was proved wrong, the precogs may make mistakes: Anderton, knowing his future, had a choice and didn't shoot Leo Crow. Therefore Precrime is abolished, says Anderton in a voiceover at the end of the film and everybody leaves the jail since the possibility exists that, under the influence of free will, some of those people would change their minds and not commit the crime. While the precogs are moved to an undisclosed place where they can be taken care of and can live in tranquillity without the burden of their talents, John and Lara expect their next baby boy. Therefore the film's conclusion is different from the ending of the short story: the precogs could be wrong because humans can exercise their free will and change the future. As a result the whole system collapses.

As shown above, Spielberg's film dwells more on the emotional side of the story. And this is one of the facts that has guaranteed its success. Whether we speak about the same thing when associating the short-story and the film is debatable. Not much of the original story is left in the film except for the main idea whose outcome develops in totally opposite directions. The message Spielberg sends out to the Americans and the world is that the system in place is good enough and it doesn't need to be changed. Life goes on, the new baby is going to be born, the conclusion is thoroughly soothing. Gary Goldman, producer and co-writer of *Minority Report* says:

The basic sentiment of the film is that the U.S. constitution and our current ideas of civil rights are more important than having absolute truth. These are good lessons but not what Philip K. Dick was writing. In his story, he is willing to contemplate that the system

actually works, and if it does work, then we have to get used to new ideas about justice. Anderton's exercise of free will is accurately foreseen. He chooses to fulfil the prophecy – in part merely to prove that the system is infallible. But that's hard to wrap your mind around [qtd.in Koornick, 2002].

Thus the film becomes appealing to a general audience by taking it as a given that there has to be free will "that the system was bad because it violated the constitution." Its nomination for several awards proves its generic qualities. But the film "doesn't go to the roots of Phil Dick's story" who did not take anything for granted and was willing to question everything" [Goldman qtd.in Koornick, 2002].

What Philip K.Dick was interested in were not so much the technological developments *per se* but their consequences reflected in human society. More than other writers in the domain, he was aware that good science fiction should always be dissecting some social problems and dwell on social concerns since technology is just a reflection of social dynamism. The serious problems reflected in many of his works are as actual nowadays as ever and not much room is left for comforting humanity.

To do Spielberg justice in this respect, one cannot but remark that, besides the harmonious closure and in spite of a preoccupation with amazing technical solutions and the creation of some fabulous scenes, such as, to give just one example, the one in which Tom Cruise leaps among the speeding cars on vertical highways and narrowly escapes being killed on the assembly-line of a car factory, he, in his turn, seems concerned with something much more substantial. In his characteristic way, he wants to offer the audience something to think about after the film is over. To those who are willing to.

Works consulted

- Dick, Philip K. "The Minority Report." Random House, Inc., New York, 2002
- Durham, Scott. "From the Death of the Subject to a Theology of Late Capitalism" in Mullen,R.D., Csicsery-Ronay, Istvan Jr., Evans, Arthur B., Hollinger, Veronica, eds. *On Philip K.Dick: 40 Articles from Science-Fiction Studies*. Terre Haute & Greencastle, SF-TH Inc. 1992
- Koornick, Jason. "The Minority Report on 'Minority Report': A Conversation with Gary Goldman (Producer & co-writer of 'Minority Report' and 'Total Recall')," July, 2002. Nov. 2006. <www.philipkdickfans.com/interviews/goldman.htm>
- Robinson, Kim Stanley. *The Novels of Philip K.Dick*. Studies in Speculative Fiction, No.9. Ed.Robert Scholes. U.M.I. Research Press, London, 2005
- Salamatov, Yuri. *TRIZ: The Right Solution at the Right Time. A Guide to Innovative Problem Solving*. Insytec B.V., 1999
- Savransky, Semyon D. *Engineering of Creativity. Introduction to TRIZ Methodology of Inventive Problem Solving*. CRC Press, 2000
- x x x (1) "Interview with a TRIZ Pioneer. James Kovalick, Ph.D, PE." 1997. 14. Aug., 2005. <http://www.triz-journal.com/archives/1997/08/c/index.html>