

# Systems Theory and Literature: Application of Interpretive Structural Modeling to Jokha Alharthi's *Celestial Bodies*

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## Abstract:

Systems Theory studies the structure and fundamentals in terms of relationship and integration, through which different aspects and elements emerge leading to the creation of a whole. It is an approach of totality and wholeness which focuses on the relationship and correspondence between the constituent parts of a system. A distinctive feature of the Systems Theory is that it develops across numerous disciplines leading to the attainment of knowledge and perspectives related to the other domains or disciplines. Its concepts are not rigid but flexible in nature because of which it keeps on evolving. It is the Systems Theory that bridges the gap between science and humanities, leading to the elimination of age-old differences and gaps between literature and science. This elimination leads to the evolvment of a new and innovative relation and connection between the two extremely different disciplines i.e., science and humanities. The Interpretive Structural Modeling (ISM) approach is one of the approaches incorporated under the Systems Theory. It focuses on discovering the relationships among the elements, which tend to focus on a specific issue or a problem. ISM is used, when we encounter systems with complex structure and in literature, we quite often come across structurally complex texts.

This paper aims at applying the principles of the Interpretive Structural Modeling (ISM) approach to the complex literary system; the fictional system, *Celestial Bodies*, in order to resolve its structural complexity. This study aims to analyze and make an interdisciplinary study by incorporating the key elements of the Interpretive Structural Modeling (ISM) approach in literary interpretation.

**Index Terms:** Elements, Integration, Totality, Wholeness

## 1. INTRODUCTION

“System theory is a general science of wholeness... The meaning of the somewhat mystical expression, the whole is more than the sum of its parts is simply that constitutive characteristics are not explainable from the characteristics of the isolated parts. The characteristics of the complex, therefore, appear as new or emergent...” (Bertalanffy, 25)

In recent times, Literary Studies has witnessed expansion with the efforts of some literary scholars who have provided a new dimension to it by relating literature to Systems Science. According to Peter Checkland, a famous Systems Scientist, Systems Science is a transdisciplinary subject. The term ‘Systems Theory’ was coined in 1949 in a book entitled ‘*General Systems Theory*’ by the Austrian-American biologist Karl Ludwig von Bertalanffy, who considered a general system as any theoretical system of interest in different disciplines. His theory transcended the traditional disciplinary boundaries and led to

the emergence of various interrelated and corresponding elements of several disciplines into a whole. Therefore, it is rightly stated that Systems Theory bridges the gap between Science and Humanities as the concepts of this theory are flexible in nature. It leads to the elimination of the age-old differences and gaps between literature and Science.

In a generic sense, systems are there everywhere in the world, from the solar system to the rail network systems, social systems, natural systems, the internet and the World Wide Web and many more. In fact, the entire universe is one system, made up of several interconnected and interacting parts or elements. Referring to the application of Systems Theory to literature, eminent Systems Scientist and the founder of Systems Society of India, Revered Prof. P.S. Satsangi states:

Literary systems are perceived intuitive systems which belong to the typology of human activity systems rather than other types such as natural systems, designed physical or designed abstract systems. Accordingly, they represent soft ill-defined problems or concepts or situations which are complex. (46)

The concepts of Systems Theory can be applied with equal efficacy even to literature. Within the Systems theoretical framework, a literary text becomes a 'literary system', meaning hereby, as a system, the text and its elements do not exist in isolation, but are related to one another and also to the environment. A poem becomes more than the sum of its words when the stylistic and rhetorical devices are put together.

Interpretive Structural Modeling (ISM), one of the theories under the umbrella term, Systems Theory, is an approach or a methodology for discovering the relationships among different elements, which tend to focus on a specific issue or a problem. The term 'Interpretive' refers to different judgements and analysis provided on the basis of the elements and 'structural' means the organized and systematic relationship among the elements in a system. It is a well-defined methodology for identifying the relationships among the specific elements, defining a problem or an issue. It deals with defining complex issues that occur due to the presence of a large number of elements. It becomes difficult to deal with such a system that is not structured. Therefore, it is the ISM model that helps in structuring these numerous elements in a systematic manner.

This model owes its foundation (1974) to John Nelson Warfield's perception of enabling a systematic and organized study of a large number of elements. This holistic combination of the different elements would ultimately lead to the formation of a structured system. It is an emerging methodology that works as a support and assistance for individuals and groups for understanding the complex and problematic situations. In this approach, different elements are put together in a structured and systematic manner.

ISM approach determines the manner in which the different elements are related to each other. It establishes a structure on the basis of the interaction and relationship among the elements i.e., through a mutual relationship a systematic structure is extracted. This model tends to help in forming order and direction in accordance with the complexity of relationships among the different elements engaged in a complex situation. This complexity of the issue or any system becomes complex because of the presence of a large number of elements and interaction among these elements. When the number of elements is more in a system and the interactions are not very straight forward then it becomes complex.

*Celestial Bodies* by Jokha Alharthi originally published as 'Ladies of the Moon' in 2010 in Arabic language and then in 2019 in English translated by Marilyn Booth, is the first Arabic novel to win the International Booker Prize in 2019. It is a multi-generational novel portraying three different generations of women. The first being that of the women like Zarifa, Masouda and Hafiza, who struggled a lot under the patriarchal setup and were unable to stand up or raise their voices against it. The second generation includes Maya, Khawla and Asma, who stepped further, by trying to break away from the old and

traditional norms of the society including the dominance faced by them under men, the slavery system etc. The third generation is portrayed by London, a girl of immense courage and strength, filled with lots of dreams to achieve and assert her individual self in the society. It is through these different generations depicted in the novel, that Jokha Alharthi has highlighted the development and evolvement of women.

Alharthi accentuates the shifting patterns of gender roles, attitude towards education, treatment of slavery, weakening of class distinctions, breaking of taboos related to marriage etc. Oman saw a transition from being a country practicing a high number of slave trade to the one experiencing a shift in gender and class hierarchies, movement from agriculture to more profitable careers like medicine, engineering and law etc. As it is said in the novel, “Everything in this country changes with astonishing speed.” (Alharthi, 415) In the beginning chapters of the novel, the novelist has traced the practise of slavery in the Omani society. It is at numerous places that Alharthi has tried to draw the attention of the readers to the mindset of the masters towards their slaves. Even after the abolishment of the institution of slavery by the government, the masters are not able to change their frame of mind.

The structure of the novel, *Celestial Bodies* is extremely complex and nonlinear in nature. It is because of the multigenerational narratives, complex and nonlinear storyline, a large number of characters, multiple themes, and the different and complex style of writing done by Alharthi.

Alharthi has made use of multigenerational narratives as the novel takes into account three different generations of a family at the same time. She has shown a journey of especially the women of the family from living in a society having old and traditional beliefs to a society where there is the freedom to protest against the wrong done to the women and to lead a free and happy life. The novel is structured in a manner that it begins from a nation, Oman with closed and orthodox thinking to a new and modern one with the acceptability of freedom for women. The novelist offers three-dimensional perspectives at a time when the three sisters Mayya, Khawla and Asma are at the center of the novel living with their own choices and balancing the traditions with the emerging new way of life in Oman. The three different ways of living and their acceptance and movement towards the changing Oman is what makes the novel more complex and multifaceted in its structure. As described by the famous newspaper, *The National*, *Celestial Bodies* is “a densely woven, deeply imagined novel.”

There are a large number of characters and the relationship between them is also one of the most important factors that make the novel complex in nature. The novelist has incorporated numerous characters other than the three central characters. The characters like Abdallah, London, Zarifa etc. are also very significant. The story line of the novel revolves around their lives. The different chapters in the novel are addressed to different characters where most of the chapters are narrated from Abdallah’s point of view, who is Mayya’s husband. It is the style of writing that adds to the complexity of the structure of the novel like the chapters are not linear in nature i.e., they are not arranged systematically that one after the other only one-character addresses but it is non-linear in nature. The story unfolds from the point of view of various characters at the same time. There is no single event that is driving the storyline of the novel but there are numerous situations and circumstances that are working simultaneously.

Alharthi has incorporated multiple themes in the novel such as patriarchal setup in the society, failure of marriages, slavery, old and traditional beliefs with the history of Oman as the backdrop. The patriarchal setup in society is one of the most significant themes in the novel as it is through this only that the novelist has highlighted the journey of Oman from a traditional and orthodox nation to a modern one. From the old generation like Zarifa and Masouda who had to suffer a lot under the control of men to the new generation such as London and Khawla living with freedom following their dreams is the outline of the

novel. The theme of slavery is also moving simultaneously in the novel as Alharthi has highlighted the slave trade that used to take place in Oman, where a number of both men and women were bought by the rich people of the society and these slaves and their families had to work under their masters for generations.

## 2. LITERATURE REVIEW

The literature review conducted reveals that some research initiatives have been taken in the application of Systems Theory in literature with reference to other systems methodologies, but, so far, no in-depth research work has been undertaken in the application of Interpretive Structural Modeling in literature. Following are some important research initiatives in the domain of literature:

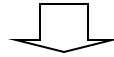
A research conducted by Dr. Bani Dayal Dhir on the topic, 'A Study of Emergentism and High End Complexity in Literary Systems', examines the relevance and validity of the transdisciplinary theory i.e., the Systems Theory in terms of interpretation in literature. An article entitled 'On Literature and Systems Theory', published on an online library, 'CiteSeer' (2001), by Florian Crammer examines the relationship between literature and Systems Theory. The writer has explained that how the Systems Theory bridges the gap between Science and Humanities. Cristina Mele, Jacqueline Pels and Francesco Polese, published an article on the topic, 'A Brief Review of Systems Theory and their Managerial Applications' (2010), in which they have focused on the connection between the key aspects of Systems Theory i.e., totality and wholeness and Aristotle's concept of Holism. In an article published on 'Research Gate' (2012), by Professor Sushil, entitled, 'Interpreting the Interpretive Structural Model', analyzed the characteristics and features of the approach.

The novel selected for the proposed research has drawn the interest of the researchers but not from the point of view of this theory. Asha S (International Journal of English Language, Literature in Humanities, Volume 7, Issue 6, June 2019) conducted a research on the novel, '*Celestial Bodies*' by Jokha Alharthi, portraying it as a picture of the Omani society in transition, in the paper entitled, 'Celestial Bodies as a Picture of a Society in Transition'. This has been depicted through the shifting patterns of gender roles, attitude towards education, treatment of slavery, weakening of class distinctions, breaking of taboos related to marriage etc. The researcher has taken the novel as a "medium of recognition of a work from a relatively lesser known Middle Eastern Culture". A review published in 'The New Yorker' magazine (October 14, 2019) written by James Wood, entitled, 'An Omani Novel Exposes Marriage and Its Miseries', examines the novel as an indicator of the institution of marriage and its miseries.

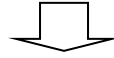
## 3. METHODOLOGY

On probing into the structuring complexity of the novel it emerges that the presence of a large number of elements, here in this system, characters and non-linear inter-relationships among them make the fictional system complex. It is noted that each element/ character has its own characteristic behaviour in a system which further comes into contact with the other element and influences them. In a literary fictional system under the consideration for the study here, each character has a narrative which shares a deep relationship with the other narrative. The interweaving of multiple narratives gives birth to the socio-cultural system, '*Celestial Bodies*'. The formation of Interpretive Structural Modeling (ISM) involves five steps-

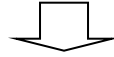
Structural Self Interaction Matrix (SSIM)



Reachability Matrix



Canonical Form



Diagraph



Interpretive Structural Model

While applying Interpretive Structural Modeling (ISM) to the fictional system, the adopted perspective is literary and descriptive, not mathematical and prescriptive. To accomplish the first model exchange isomorphism, the relationship R among the elements themselves of the element set S is identified in the object system, *Celestial Bodies*. The question asked for developing SSIM is, ‘Is element ‘i’ connected by relation ‘R’ with the element ‘j’? As participant or participants respond to the question the relation between any two elements and the associated direction of relation gets reflected. If the relation R holds from element i to j and not both directions, the response will be shown with ‘V’ suggesting the direction from upper element ‘i’ to lower element ‘j’. If the participant or researcher perceives relation R from j to i but not in both directions, the response will be indicated with an ‘A’ suggesting direction from lower element j to upper element i. If the participant or researcher perceives the relation both ways it is represented with the symbol ‘X’. If the relation between the elements does not appear valid, the response will be zero (0).

4. EXPERIMENT AND RESULTS

A possible Structural Self Interaction Matrix (SSIM) of the fictional system ‘Celestial Bodies’ is given below.

V	0	0	0	0	V	0	V	0	V	V	0	0	0	V	V	X	A	V	1 Sheikh Sulayman
0	0	0	0	0	X	0	0	0	0	0	0	0	0	0	0	A	A	A	2 Zarifa
0	0	0	0	0	0	0	V	0	0	X	0	X	X	0	V	0	0	0	3 Abdallah
0	0	0	0	0	V	0	0	0	0	0	0	0	0	0	0	0	0	V	4 Sheikh Said
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	X	5 Sanjar
A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6 Shanna
0	0	X	0	X	0	0	0	0	0	X	X	0	X	0	0	0	0	0	7 Mayya
0	0	0	0	0	0	0	0	0	0	0	X	X	0	0	0	0	0	0	8 London
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9 Hanan
0	0	X	0	X	0	0	0	0	0	X	0	0	0	0	0	0	0	0	10 Salima
0	0	X	0	X	0	0	0	0	0	X	0	0	0	0	0	0	0	0	11 Azzan
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12 Nazia
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13 Maneen
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14 Ahmad
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15 Ankhuta
0	0	X	X	X	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16 Asma
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17 Khalid
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18 Khawla
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19 Nasir
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20 Habib

Fig. 1. The transformation from Structural Self Interaction Matrix (SSIM) format to Reachability Matrix (RM) format is accomplished by transforming information in each entry of SSIM into 1s or 0s in the Reachability Matrix (RM). If the (i, j) entry of Structural Self Interaction Matrix (SSIM) is 0, both the (i, j) and (j, i) entries of Reachability Matrix (RM) becomes 0. Likewise, if (i, j) is ‘X’ then both the (i, j) and (j, i) entries of the Reachability Matrix (RM) become 1. If (i, j) entry in Structural Self Interaction Matrix (SSIM) is ‘V’ then (i, j) entry in Reachability Matrix (RM) becomes 1 and (j, i) entry becomes 0. Likewise, (i, j) in Structural Self Interaction Matrix (SSIM) is A, (i, j) entry in Reachability Matrix (RM) becomes a 0 and (j, i) becomes a 1.

Reachability Matrix (RM) for the above Structural Self Interaction Matrix (SSIM) is given below.



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
1	1	1	0	1	1	1	0	0	0	1	1	0	1	0	1	0	0	0	0	0	1
2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
3	1	1	1	0	1	0	1	1	0	1	0	0	1	0	0	0	0	0	0	0	0
4	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
5	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	1	0	0	0	1	1	0	1	1	0	0	0	0	1	0	1	0	0	0
8	0	0	1	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	1	0	0	0	1	1	0	1	1	0	0	0	0	1	0	1	0	0	0
11	0	0	0	0	0	0	1	0	0	1	1	1	0	0	0	1	0	1	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
16	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	1	1	1	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0
18	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	1	0	1	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
20	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Fig. 2. Reachability Matrix

3	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1		
4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	
5	0	1	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
6	0	1	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	
8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	
9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	
10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	
11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	
12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	
16	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	
17	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	
18	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
20	0	1	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	

Fig. 3. The Reachability matrix is checked for transitivity leading to the development of ‘Final Reachability Matrix’. The transitivity of the contextual relations is a basic assumption made in ISM. It states that if a variable A is related to B and B is related to C, then A is necessarily related to C.

	2	13	14	15	19	5	6	20	1	3	4	7	8	9	10	11	12	16	17	18	
2	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	0	1	0	1	1	1	1	0	1	0	0	0	1	1	0	0	0	0	0
3	1	1	0	0	0	1	0	0	1	1	0	1	1	0	1	0	0	0	0	0	0
4	1	0	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	1
8	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0
11	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1	1	0	1	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	1	1	1	1
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
18	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	1	0	1	0

Fig. 4. The Reachability Matrix is converted into canonical form by clustering elements, at the levels achieved, across rows and columns. The resultant matrix has most of its upper triangular elements as 0, and lower triangular elements as 1. Figure 4 shows the Reachability Matrix in the Conical Form. This also helps in identification of cycles ( 5-6, 1-4, 3-7,7-8,8-9,7-10,3-10,10-8,10-16, 10-11, 11-8,12-11,11-16,16-17 and 16-18) in the socio-cultural fictional system under consideration.

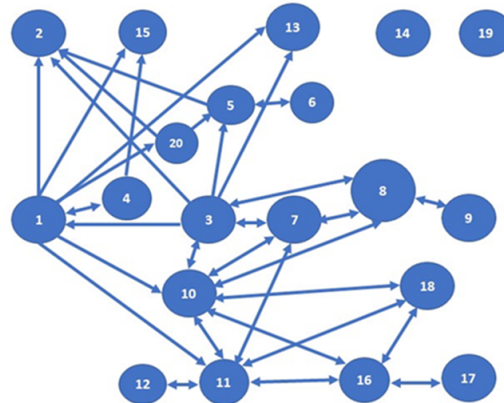


Fig. 5. The Digraph is a graphical representation of the elements, their directed relationships and hierarchical levels. We may now determine the structural model in the form of a digraph (directed graph) from the connectivity information contained in the canonical form.

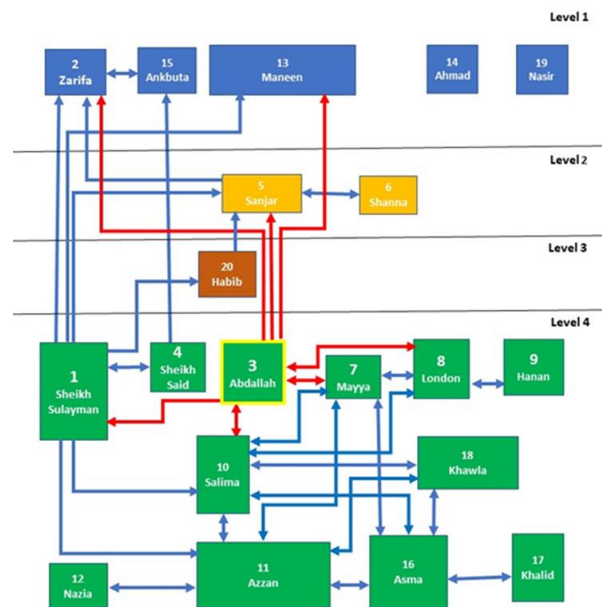


Fig. 6. Interpretive Structural Model (ISM)

The above Interpretive Structural Model of the socio-cultural fictional system *Celestial Bodies* clearly shows the complex interrelationships among the prominent elements/characters in the system which are not lucidly defined in the narrative. As we follow the meandering narrative of *Celestial Bodies*, at times, we get lost in the maze of multiple narratives of a large number of characters. The resultant ISM shows Zarifa, Ankabuta, Maneen, Ahmad and Nasir at level 1. All these characters at level 1 have no socio-cultural influence on the other elements in the socio-cultural system, instead they are influenced by other elements/characters, for instance, Zarifa, the slave woman, is influenced by Sheikh Said, Sheikh Sulayman and Abdullah socio- culturally but she has no influence on them. Zarifa, Ankabuta and Maneen are slaves and are from the lower rung of the Omani society, Ahmad is the son of a peasant and is also from the lower strata of Omani Society, and though Nasir is from the upper class and the son-in-law of Salima and Azzan, due to his bad character could not gel with the family members who had modern progressive

outlook. Therefore, he could not influence the characters socio-culturally. At level 2, we find Sanjar and Shanna, both slaves who influence each other. Their opposition to the horrible system of slavery separates them from characters at level 1 who believe in the old traditions and customs and do not want to be liberated from slavery. Sanjar is influenced by his father Habib (level 3), Sheikh Sulayman (level 4) and Abdallah (level 4). At level 3, we have Habib who is initially Sheikh Sulayman's slave and later runs away from the 'big house' of Sheikh Sulayman and becomes a free person. Habib's revolutionary ideology influences Sanjar who later revolts against Sheikh Sulayman and Zarifa and becomes free from Sulayman's slavery. At level 4 we have Sheikh Sulayman, Sheikh Said, Abdallah, Mayya, London, Hanan, Salima, Azzan, Nazia, Asma, Khawla and Khalid who belong to the rich upper influential class of the Omani society. The resultant ISM clearly brings out the marginalization of the slave class and the domination of rich merchants and Sheiks in the Omani social structure. The ISM also reveals that the characters with progressive outlook exercise more influence and share more interlinkages with other similar elements/characters for example Abdallah, Mayya, London, Salima, Asma, Khawla and Khalid leading to a gradual change in the socio-cultural system of Oman.

## 5. CONCLUSION

Thus, by applying the Interpretive Structural Modeling (ISM) approach to literature, it can be said that it helps in presenting a structured model because it can identify the relationships among the numerous factors and can also assert those which have the highest level of prominence and influence on others. This has been proven by the present research as the Interpretive Structural Modeling (ISM) has been applied to the literary system, *Celestial Bodies*, which has simplified and made it easily comprehensible in nature.

Therefore, it can be stated that the scope and relevance of Interpretive Structural Modeling (ISM) in the field of literature is very high and wide in nature. It helps in making a complex literary system easy and simple to understand by resolving its complexity. Through the present study, it can be strongly asserted that Interpretive Structural Modeling (ISM) is a beneficial approach in resolving the complexity of the highly complex literary system. This approach gives an insight into the collective understanding of the relationship of the system. As Bertalanffy rightly states,

"System is a complex of interacting components, concepts characteristic of organized wholes such as interaction, centralization etc."

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