□ N. L. Jain

The living reality does not exist for the materialists like Charvakas and Buddhas. They seem to believe in spontaneous generation of life. They attribute all the properties assigned to the living to the complex combination of five elements. The continuity or feeling of similarity is said to be due to continuing streams of knowledge. In general, they have a material view of life.

The Ajivikas seem to make an advance on this view by assuming a seperate reality. Though material in nature, it has a transmigration properties—a non-aryan theme according to Basham. It is atomic, circular or octagonal in shape, and blue in color. Basham has called some of these ideals as strange, fantastic and bisarre.

Many other philosophies postulate seperate existence of the living denoting it by several names. The Sankhyas call it Purusha, the Nyaya-Vaisheshikas call it 'soul or Atma' and the Vedantins and Jainas call it Jiva or Atma. Each of these systems have its own description about it containing many similar and dis-similar points. The first three systms (S, N, V.) stand on non-material nature of the living in its pure state, its other qualities like knowledge etc. being adventitious. It could not be identified without its association with linga sharir (S), Sukshma sharira (J)—different names of the fine physical body. That is why, the living one in the world is said to be impure with self-purification as its aim. How the inert pure living becomes impure, does not become very clear from literature for the common man.

The Jainas² postulate the seperate existance of the living on the ground of doubt, the realisation of 'I' and substratum of consciousness as by the Vaisheshikas. Its existence is also proved by its manifold functions. They have taken a dualistic and realistic approach regarding its descripion contained in large number of Jaina cannons and their commentaries. It has been described in many ways and scholars have explored about its spiritual aspects. However, proper attention does not seem to have been given regarding the biological concepts about it despite some attempts by Lodha,* Jain⁴, Sikdar⁵ and Pralayankar⁶. It will be endeavoured here to sum up and evaluate the overall Jaina picture in this regard.

It may be known at the outset that the dual nature of the living is found scattered all over the early cannons. But it was in Kundkunda's period (App. 100 AD) that the two types of living reality (pure and worldly) were specifically postulated and described per chance due to the extreme influence of Vedanta in these times.7 The worldly living is said to be impure and has material nature inherent because of its adherence to fine and gross karmic or other particles. It could be described in better positive terms. element is just the reverse of it. It is non-material and per chance indescri-Self-perception is the only way for its recognition and identification. This shows the Jainas to co-ordinate the extreme of materialists and nonmaterialist philosophies. The Vaisheshikas have also pointed out the two varieties of the living-omni-scientist and the reverse. Vedantins also follow suit in the terms of Jiva and Brahma, It has been very difficult philosophically to prove or disprove the pure living, hence we will be concerned here with the worldly living which could be subjected to physical description and scientific verification. One could easily extrapolate from the impure to the pure one. It is surprising that a large number of concepts regarding the living of date were developed by the Jainas even before the early Christian Some of the points of contrasts are also now coming to a point of comparablity.

Definition of the Living Reality or Jiva: Various Attributes

As the living one forms a seperate reality, it must have two types of definitions-general and specific. The early cannons like Bhagwatis and Panchastikaya (of Kundkunda)9 have given its characteristics classified in Table 1, without referring them as general and specific, nevertheless, containing many general and a number of specifics. Bhagwati has given six terms in the first instance 10 and twenty three literal terms later specifying these Though there seems to be some duplication because of characteristics. similar meanings of some terms, it is seen that most of the synonyms represent observable properties when action particles are taken as material. three synonyms seem to be non-observables. The details of these are given in Nav Padartha by Bhikhanji.11 Bhagwati and other cannons 2 also mention characteristics of size, weight, metabolism, irritablity, growth, reproduction and adaptation of the living. In contrast, Kundkunda has sevanteen attributes of the living. But it has some difference. non-materiality, weightlessness, thought activities and physical body size to the living in addition, which the connons like Bhagvati do not mention. This could be due to per chance Bhagvati and other cannons assuming a nearly material nature of the living in contrast to Kundkunda's presumption of its basically non-material nature. That is why, it has not mentioned the birth or the growth of the living. One could currently equate the sensitivity or irratablity with consciousness in these cases. There seem to be two terms



of Vigya and Veda in Bhagvati with meaning leading to consciousness. The same is true for Kundkunda when he uses two terms—Upayoga and Chetna having similar meanings. Kundkunda, thus, seems to be influenced by the dominant philosophy of his age.

Umaswati 13 followed Kundkunda stating the two types of characteristics in his two aphorisms. He mentioned five types of thought activities (the last type including almost all general attributes in current terms.) and Upayoga. Pujyapada14 has defined Jivatva as consciousness, indicating all living ones have inherently a life element or consciousness. It is subjected to various types of thought activities due to rise, subsidence, destruction of fine action particles and inherence. These activities prove material nature of the living and include 53+types of activities of physical or psychical nature. They are shown in Table II. Many activities are common in a number of basic types representing their different degrees and status. They are all various expressions of the elements of consciousness through its capacity of perception and knowledge. The living one has the capacity to experience and it is susceptible towards sensations of various types. These capacities vary from a very negligible extent to infinity depending on the type and development of livingness. These expressions are differentiating attributes. are supported by Akalanka. 15

These thought activities are related to mind or brain in current terms. Psycologists have delved deep into the nature and functions of mind. Some have equated it with consciousness itself and called it as substantive. This substance may be materially proctoplasmic or non-materially psycoplasmic as suggested by Bausfield. The true meaning of these two terms is dependant on the definition what we call material. It is agreed that sense perceptibility is conveyed by this term of pre-microscopic age. Thus, both these terms connote non-material nature. They however have become material in microscopic age.

Bhagvati and Kundkunda do not mention these thought activities in this connection. Devsen also does not point them out. Instead, he¹⁷ mentions six special attributes of the living including consciousness together with perception, knowledge, bliss, strength and non-materiality with duplication of two (first and last) general attributes. Kundkunda¹⁸ further adds that the living one is tasteless, colorless, odorless, soundless, genderless and has indefinable shape. Per chance these attributes elaborate the sense-imperceptiblity of the basic living. He does not mention the attribute of intactablity, however. Why so, is a subject of research. Devsen has also used different terms in this regard. Thus, despite consciousness being a common characteristic of the living in the descriptions of Bhagvati, Kundkunda and Umaswati, the terms used for this attribute by these seers create some difficulty in proper understanding.

Upayoga as Characteristic of the Living

Besides the above thought activities, Umaswati has also Upayoga as a characteristic of the living. It is taken as the capacity to see and know. This is termed consciousness, sensivity irritablity or chaitanya. He has only one term for all of them. But his teacher Kundkunda¹⁹ has used two terms seperately—upayoga and chaitanya in many places proclaiming some difference between the two seemingly synonymus terms though he has used only one term in Niyamsara²⁰ which seems to have been followed by Umaswati. Does this dual terminology have some bearing on the order of his many composition? Jain, SC²¹ has discussed this point and has opined that the two terms should be taken in terms of capacity and functional aspects perception and knowledge.

The literature reveals some difference regarding the meaning of the term consciousness. While, Umaswati has only knowledge and perception meant by it, Devsen (10th century) keeps them seperately from it in his six specific qualities of the living. Bhagvati and Akalanka²² include bliss and strength etc. also in this term assuming they are part and parcel of this quality. The term thus could be assumed to represent generality of the attributes distinguishing the living from the non-living. Mehta²³ also opines that the term should include all the four infinities as specificity of the living. This should be taken as correct interpretation. Rajmalla²⁴ has mentioned two types of consciousness due to knowledge and action particles. This requires elaboration.

It is observed that there seems some difference in the meaning of the term Cheta in Bhagvati and Panchastikaya. While it means collector of the action particles in the former, the latter has consciousness meant by it. Assuming the earlier one as the older cannon, it leads to a guess that consciousness was not a very clearout basic property of the living in the early philosophical development. Does this mean that the Jaina theory was in agreement with the NV theory in the beginning? When was the concept of concommitant consciousness evolved in the Jaina philosophy? This is a point for further scrutiny. Do the two terms specifying the living used by authors have some point to make in this regard?

Classification of the Attributes

All the attributes of the living found in Cannons and described above may be termed specific in current terms. It seems that the term Dravya (or reality) was not a Jaina coin as Kundkunda starts his description with five Astikayas (Existences) and Umaswati with "Tattwas". As the teacher²⁵ points out later these existences attain the reality by their property of permanance through change. So also, his worthy disciple²⁶ calls the living as Dravyaat quite a late stage in chapter 5 in place of first. It was



tattwa for him initially. This leads to a presumption that the term Dravya of NV system was included in Jain metaphysics at a later stage when the NV system had a profound scholastic appeal in the world of seers. This has also been observed by Malvania²⁷ specially in case of Umaswati, though he might be erring in stating his precedence over Kundkunda.

Drayya or reality has been elaborated with similarities (general) and dis-similarities (specifics) by the Vaisheshikas. This has been followed by Umaswati. Accordingly, the general definiton of reality detailed earlier applies to the living one as it has existentiality, i. e. permanance through change (birth and death). It has qualities and modes. It has eleven general attributes of Akalanka and eight of Devsen. It also has eleven general natures (Swabhavas) of Devsen which refer to the ways and forms the living one may have in general. These various definitions are shown in Table-3 below. It is seen that Akalanka and Devsen have developed over Umaswati where two attributes have gone upto four commons and many more uncommons. However, one could mark the differences. While Akalanka does not have consciousness, weightlessness and space occupancy of Devsen, the latter also does not have many attributes of the earlier. It can be surmised that the earlier characteristic of existentiality has been given more concrete meanings by thes, authors. As is clear, the general definition involves particulate nature, space occupancy, weightlessness, sense-imperceptiblity or non-materiality as physical and consciousness as psychical characteristics of the living one. The first and last terms here seem to be quite contradictory. It is also evident that Akalank's general definition seems to weigh more on the non-materaial side of the living in comparision to Devsen. If one removes the attribute of consciousness from Devsen's list, it will have purely material nature for the living.

In contrast, the specific attributes have very much in common with all the three authors—each one has various forms or expressions of consciouness as liberally defined earlier. The cannonical characteristics of the living in Table-1 can also be similarly classified on the basis of Table 3 where they prove more extensive.

It must, however, be accepted that in contrast to Devsen, consiousness should be called a specific rather than general property. The rest of the properties are suggestive of the material nature of the living. Its basic unit has all the qualities atom-like materials have. The single living unit is said to contain innumerable pradeshas or spacepoints with capacity for expansion and contraction. It has these space units in an independant and real sense. 28 They are invisible because of fineness and therefore sense imperceptiblity or non-materiality of the living in contrast with the visible parts of the gross matter. It is also said that the living one is partless but even a single living

part is made up of innumerablespace points.²⁹ These represent its approximate size or extension. The spacepoints of the living belong to two categories-fixed and movable.⁸⁰ It is said that there are eight central space points in a single living unit which are fixed. Others are movable during expansion and contraction by extirpation or interpenetration.

It has also been pointed that the living one always resides in a body in the world. Its size or extension depends on the size of the body. However, it has been added in the end that the extension applies only to the worldly living called Jiva due to action particles associated with it. The pure living unit exists, might be devoid of extension, and therefore, a non-existent reality as Jain⁸¹ has pointed out.

The real space point nature and extension of the living extends to the idea about the property of weight. Because of its extreme fineness, it must have negligible weight empirically said to be weightless. Jain³² has indicated the inverse relationship between extension and density which is its necessary accompaniment, pointing out indirectly the low density and hence finest weight of the basic living reality.

Pranas or Vital Airs and Paryaptis or Completions

The broad and extensive definition of the living as above, has been concocted in a single term—the first one of Table-1 by the Jaina seers. It is called Prani as it is characterised by Pranas translated as life principles, 3 life force, 34 vitality, 35 and vital airs, 36 The pranas are the most important properties of the living. There are four types of Pranas—pranas of strength, pranas of senses, pranas of respiration and age. They have been further elaborated to have ten types—three strengths of physique, speech and mind; five sense pranas of touch, taste, smell, sight and hearing and the last two of respiration and age as individual units. These represent the physical expressions or activities of the living one. The lowest level of the living ones have at least four pranas-strength of physique, sense of touch, respiration and age. This number increases up to 10 as the living character is gradually developed. These pranas may be physical or psychical. 87

Sankhyas, 38 Vaisheshikas, 89 Vedantins 40 and Ayurved scholars 41 also have the word 'Prana' with refrence to the living. They have comparatively quite a restricted meaning of the term. Activities like vibrations, expansion and contraction is the vedic view 42. The inhaling and exhaling is their main idea during which one takes the air in and gives out air in different parts of the body. This process of respiration also supplies the necessary for many physiological processes occurring in the body at every moment. This energy is known as fire or fire god. Hence prana is fire. In contrast, the concept of pranas in Jaina philosophy is more complex. The Acharanga 48 means the living one itself by this term. Bhagvati 44 has two



meanings for the term-respiratory precess and living ones with two to four senses. The Dashvaikalika churnis45 describe pranas as those which have visible respiratory process in 2-4 sensed living beings. Does it mean that livingness in one-sensed beings is a post-agamic development? Umaswati has also referred pranas in many places calling them material supported by Pujyapad⁴⁶ and Akalanka.⁴⁷ All this means that the word Prana was used by the Jainas in the same sense as in other contemporary philosophies—i.e. respiratory process. Later, more activities of the Living were observed to cover physical, vocal and mental ones. They incorporated the senses, their sensitivity and physico-chemical actions together with the duration of these activities. Thus, the meaning of the term Prana was also extended to include all of them in general which gave a better meaning for the term for the Jainas. Even Kundkunda48 had this meaning in mind and it can be seen that the respiratory process becomes only a part and not the whole of the Prana term. When and how this widened meaning of the terms was coined, is a subject matter for the scholars to pursue.

During the days of spiritualistic trend in philosophy and symbolism replaced factualism, 49 the term prana was also spiritualised to mean a force or energy making it indefinable in physical terms. It became Adhyatmvayu for Vedantins 50 That is why, it has been translated in many For simplicity, we have to be better factual and, thus, the last term of Vital Airs seems to be the most appropriate meaning representing the various types of fluids or gaseous substances so necessary for different types of physico-chemical activities including the respiratory one which is the most essential and direct proof of life. The Sanskrit-Hindi dictionary also supports this meaning.⁵¹ Thus, the term should not only meen respiratory process but any activity or process essential to life and supplies the necessary energy for functioning, maintaining and growth of various organs in the body. All processes occurring in the body for defined livingness have been found to be exothermic chemical reactions. More recently, Gurudattas' commentary on Nyayasutra^{5 2} maintains that air and pranas are aynonymous and mean inner energy rather than common material. The livingness is the functional aspect of the prana energy. This statement requires revaluation. The traditional prana has 5-7 forms in Nyaya, 58 ten physical forms in Jainas. eleven forms for Vedantins,54 twelve forms for Ayurvadins55 and forty-nine forms for shabda-kalpadrumists. 5 6 It may also be pointed out the Ashtangsangraha gives blood as a meaning of prana which is not a generally accepted view.

Every living one developes these pranas gradually depending on their sensory development until all of them fully developed. It takes an antarmuhurta (i.e. 48 mts.)⁵ 7 for this process. This gradual development has six stages. Firstly, the living one takes (i) food for building and running the

life. Food causes the (ii) body to develop. Due to this (iii) physical and conceptual senses develop gradually. When senses develop, (iv) respiration (v) speech and (iv) mind or brain also appear. Those living ones having mind are called fully developed. Otherwise, they are called undeveloped. It is assumed that all these six stages start nucleating simultaneously, but they develop in a sequence in about 48 minutes. These six stages are known as Paryaptis or completions. It is also said that paryaptis are causes of pranas. Thus, there are six of them namely food, body, senses, respiration, speech and mind-covering each of the above stages. It is seen that these six ones correspond to nine pranas as shown in the Table-4 The prana of age or duration may be called the resultant of these completions. Like the Pranas, the lowest living ones have four completions in appearance. Higher ones show all the six.

Table-4. Paryaptis and Pranas

, • A	
Paryaptis	Pranas
1. Food	 .
2. Body	1. Physical
3. Senses	2. Sense of touch
	3. Sense of Taste
	4. Sense of Smell
	5. Sense of Sight
	6. Sense of hearing
4. Respiration	7. Respiration
5. Speech	8. Vocal strength
6. Mind	9. Mental strength
	10. Age or Duration
Minimum Paryaptis 4.	Minimum Pranas 4

It may be pointed out that though the concept of Pranas is traceable in old literature, that of paryaptis is not so found there despite this being as one of the physique making Karma. This, however, has a variety of respiration but no pranas. One has, therefore, to look into the origin of this concept. Akalanka⁵ has equated the pranas with respiration. While differentiating the prana and paryapti, he has mentioned that paryapti is supra-sensual and imperceptible to the sense of touch and hearing in contrast to pranas. This suggests that pranas are physical and functional in nature and not a form of mysterious life force as suggested by Sikdar.⁵ He has called paryapti also as a vital force or actual living material consisting of many substances nearing protoplasmic type causing the capacity to develop various pranas. If both of these terms are described in terms of unique mysterious forces, it will be difficult to explain them in current terms. Moreover, two forces for the same purpose seem to be superfluous. Secondly,



this opinion has no cannonical support as vital force theory is not tenable for Jainas. Sikdar also seems to be off the track when he equates paryapti with force and a nearly protoplasmic material as these two entities have different natures.

The names of Paryaptis indicate their physical nature representing. various organs to perform different functions—internal and external. For example, the respiration paryapti should mean development of nasal organ, heart and nervous system. If any system has to function, it requires energy which is normally supplied by food intake during its digestion and metabolio transformation. If respiratory organ is not there, the process may be difficult. Even the development of various organs may be difficult. This point easily leads one to believe that Paryapti is also a physical phenomenon and not supra-sensual as pointed by Akalanka. In a sense, they seem to be grosser than pranas. The physico-chemical or physiological processes occurring in various physical organs are known to generate energy to give strength and activity expressed through various pranas. Thus, paryapti may be called a primary physical process of developing body and its various functioning organs and supplying the necessary energy or force (which is the inherent outcome of food intake) for different pranas to function. means that Paryapti is a primary building up of organs which are necessary to develop secondary characteristics of pranas. This view is also in agreement with Nemichandra⁵⁹ who maintains that pranas or activities are effects of Parvaptis. The true meaning of these terms could only be understood when one takes the spiritual sheaths off from their definitions. One then finds that the Jain Scholars were keen observers of physical and functional aspects of the living.

Instincts or Sangyas as Characteristics of the Living

The Jainas also have a third way of defining the Living. It has some instincts or sangyas—physical or psychical. The word 'Sangyas' has many meanings—name, knowledge, desire and thinking capacity about good or evil. 60 These are due to inherent consciousness or instincts of many types. Their number and varietis may vary. It is said that a minimum of four instincts must be present in the living-food, fear or irritablity, sex and belongings. 61 Some substitute sleep or rest in place of the last one. However, those being with better developed minds, have additional instincts of education, action, duty (updesa) and vocal expressions (alap). 62 The Pannavana mentions ten such instincts including psychic functions like anger, pride, deceit, greed, traditionalism (loka) and whim (ogha) besides the first four as above. 63 The first six of these are not found in later literature. Some scholars hold the view that these instincts belong to those living ones which have brain or physical and psychical mind. They also postluate that

only five sensed mammals have mind and they are the only instinctive. Other living ones with upto four senses do not possess these instincts. This does not seem to be correct in these days and even Pannavana^{6,4} declared all the ten instincts present in all the living ones though they might be dormant in lower life. Commentator Ratnakara^{6,5} has referred to these instincts in a different way. He has classified them in three types—longlived, logistics and polyviewing. All these seem to refer to the living with developed mind with five senses. However, he refers the first type for the living ones with uterine birth, second type for the living with 2-4 sensed and the third type for the living ones with right faith. This statement needs critical examination.

The characteristics of instincts is merely an extension of the basic quality of sensitivity or consciousness showing its various modes expressions. It could not be taken as any additional property of the living. The defining of the living by Paryapti and pranas has, however, a material approach to the living in contrast.

Current Scientific Concepts about the Living Reality

The scientists of today have come to the conclusion that the first life on earth was originated accidentally and spontaneously from complex combination of inorganic matter. Later on, it has been the rule that the living produces the living of its own species. They have characterised the living reality with the help of its structural and functional aspects on the basis of cell theory initiated in early nineteenth century. These characteristics are based on physical or mechanical concepts rather than the vitalist one. They are given in Table-5 below. The scientific concept has no place for non-materiality, indestructiblity of the living element. There may, however, be genetic continuity through transformablity. As earlier, the irritablity is akin to consciousness.

The scientific livingness consists of cells of the size invisible to the eye (10-4-10-6 cm.) but visible under fine microscopes. The cells have a very complex structure made up of few common elements. This complexity may be guessed when one finds that one of the lowest living tobbaco mosaic virus has 2000 column shaped molecules each consisting of 158 amino acids of 16 varieties, its core consisting of 6502 nucleotide molecules making for its genetic speciality. 66 It has been estimated that a normal human body consists of about 10¹⁸ cells performing various functions. These cells have an average energy of 0.06 V. They form tissues, tissues form nerves and various organs and these form the complex organism. 67 The scientists have not only identified the compounds in the living units, but they have been able to prepare them in the laboratory also. That is why they are now in position to not only create life in laboratories, but they can produce Gandhis,



Einsteins and Natwarlals at their will from the specific genes characteristic of these type of species. 68 These new experiments have created a stir in the minds of the east and west and they have started crying that these experiments should be prohibited. There will be chaos in the world as it directly affects their religeous beliefs.

This scientific concept about the living leads to the material nature of the living element suggestive of equating cells with life element. It reminds us of the materialistic philosophers but it seems to be more accurate and fine one. It would, thus, mean that human body has not one, but 1013 living units in it performing and coordinating their functions remarkably and independently. This concept also leads to the microscopic perceptiblity of the life element. Both these inferences do not find support from Jaina cannons as far as pure life element is concerned. The worldly living, however, satisfies these inferences as it is material and ultra sense perceptible.

Formerly, the scientists presumed the energies to be of non-material nature following the conservation law. Thus, the above cannonical concepts may be taken as suggestive of the pure life element in the form of energy rather than cellular. However, the Jainas have postulated the energy also to be of atomic or material nature from the very beginning though they may be sufficiently finer than cells. The current science has also confirmed about the interconvertiblity of matter and energy. Accordingly, the life element may be assumed to be of energetic nature whose non-materiality may be defined in terms of sense-imperceptibility. This assumption has been confirmed by scientific experiments which have shown that a newly born baby is associated with a charge of app. 500 V of electrical energy and at death, charge is nearly vanished despite the fact that nobody knows at present where does this charge go at death. 69 It is, however, presumed that the charge may be hoovering round the dead for sometime. This leads us to the fact that the living element is a form of fine energy particles called fine action or electrical or calorific bodies by the Jainas. The recent of telephonic talks (Spirocom) with spirits of the dead by O'neil and Meek also suggest a similar view of the life element to be made up of fine light waves. 70 This association of fine bodies with the living makes it material. The maximum number of properties described in cannons and Dhayla⁷¹ also support this view. The computers are another examples to support material generation of knowledge or conscicusness of the desired nature. That is why the physical brain of man is called one of the most efficient and complex natural computer.

It must, however, be noted that whether the cannonical life element is assumed cellular or energetic, there is no interference or effect on its important properties. Both concepts can explain the effects and changes in thought activities, knowledge and energy of the living unit due to cellular

denaturation, mutation or elimination. The philosophers could think a conceptual difference between the pure and worldly living. The scientists are, however, not in a position to prove this. They have only one type of living unit—the worldly one about which the philosophers have described the same way as the scientists. Lodha⁷² refers to Jivabhigama, Pannavana and Bhagvati to show that about eight important scientific characteristics of the living are included in the concept of paryaptis and pranas as given in the Table-5. The prana of age may mean death. As before, irritablity may be the first stage of consciousess.

Despite the fact that cannonical eternality of pure living does not involve birth, growth, reproduction and death phenomena, the worldly one does have these characteristics of life as shown in Bhagvati. The common man experiences these facts as he finds there could be no new worldly living entity until it has birth through any of the processes. Besides birth, the cannons have aslo described the growth and death phenomena. Summing up the contents spread over in different Jaina cannons, it is found that all the scientifically essential characteristics of the living are traceable there and they seem to have mostly material approach. It may be added, however, that the scientists idea about the material nature of the living seems to have recieved a setback from many types of analytically reported parapsychological phenomena and accounts of previous lives in many cases. 73 However, Khushwant Singh 4 eategorically denies the correctness of these descriptions mentioning this as the basic cause for the closure of the para-psychology dept. of Rajasthan University in the later seventh decade.

All scholars appreciate the cannonical contents about the definition of the living on the basis of current biological findings. It seems, however, that these contents mostly refer to externally observed facts. They keep mum over the why and how of these facts. They tell the five bodies to be visually gross and fine, but there is nothing about their physical or chemical composition or their physiological functions. They have seen respirations but there is nothing about the nature and compositions of the inhaled or exhaled gases or substances. It is said that matter or food affects the functions, activities or emotions of the living, but its structural causation is missing. These examples may be multiplied. It is possible to conclude that cannons represent an age of physical observations and of mental conceptualisations. The current age represents an era of experimentation and internal and external examination with the help of physical senses and finer instruments giving us better insight into various aspects of life.

Of course, the observation power of the Jaina seers seems to be quite advanced over other contemporary philosophies. The experimental age has given us a deeper understanding and clarity of cannonically observed facts. In most cases, they have been verified and supported but in some cases these



need be reexamined and re-told. Though the observational process represents one of the three important steps for scientific knowledge, but natural observation and observations through experiments and instruments makes a difference. This gap between results of natural and experimental observations must be recognised as a measure of intellectual growth of mankind between the cannonical and current age. There would have been much progress in biological field of today if the Jainological contents about the living could be known to the scientific community of the world during earlier centuries and they would themselves have peeped into the world of the living in early days in preference to the material world.

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Table-1 Properties of the Living: Bhagwati and Kundkunda Bhagwati Kundkunda

A. Observable

- 1. It has Pranas or Respiration (Prani)
- 2. It is knower (Vigya)
- 3, It has capacity to bind action Particles (Satva)
- 4. It is actor and detracter of action particles (Karta/Vikarta)
- It is collector, victor and leader of action praticles (Cheta, jeta, Nayak)
- 6. It is material and has a body (Pudgal/sa-shariri)
- 7. It is pervasive in the body (antaratma)
- 8. It moves (Jagat, Hinduks, atma)
- It has a time duration of living* Jiva
- It gives aura of love and hate— Rangan.
- 11. It takes birth (Jantu)
- 12. It gives birth (Yoni)
- 13. It has particulate nature (Astikaya)
- B. Non-observables
- It has neither beginning nor end (Bhuta, Manav)
- It has sensivity towards good/ bad (Veda)
- 16. It is self-existant (Swayamb-huta).

A. Observable

- It has physical/psychical pranas or life principles (Prani)
- It has knowledge and perception—upyoga
- 3. It is associated with action particles (Karmyukta)
- 4. It is the actor of action particles (Karta)
- 5. It is enjoyer of action particles (Bhokta)
- 6. It has extension of innumerable space points (Asamkhyat pradeshi)
- 7. It is pervasive in the body (Aikya)
- 8. It moves in all six directions (Upakraman)
- It has time duration of living-Jiva
- 10. It gives aura to body (Prabhasan, rangan
- 11. It has extension of bodysize (Dehmatra)
- It is imperceptible to senses— Amurta
- 13. It is weightless (Agurulaghu)
- 14. It has potency to exist in different states (Prabhu)
- B. Non-observables
- -15. It has neither beginning nor

end (Anadi-nidhan)

- 16. It has element of consciousness (Cheta/Chetan)
- 17. It has five emotional/thought activities (Bhava).

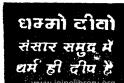


Table-2. Different Thought Activities of the Living

Subsidential, 2	Destructional, 9	Mixed, 18	Frution, 21	Inherent 3+10
1. Right belief	1. Rt. Belief	1. Rt. Belief	1-4. Existences	1. Livingness
2. Right conduct	2. Rt. Conduct	2. Rt. Conduct	5-8. passions	2. Salvation C
	3. Knowledge	3-6. Knowledges-4	9-11. Sexes	3. Non-sov. G
	4. Perception	7-9. Wrong Knowledge-4	12. Wr. Belief	+10. others
	5. Gift	10-14. Attainments-5	13. Wr. Knowledge	υ .
	6. Gain	15-17. Perceptions-3	14. Non-restraint	
	7. Enjoyment	18. Restraint/ Non-restraint	15. Non-salvatieon	E
	8. Re-enjoyment		16-21. Coloration	

Table-3. General and Specific Definitions of the Living

	Source	General	Specific
1.	Bhagvati	23 (with 7 repeatitions)	_
2.	Kundkunda	17	-
3.	Umaswati	(a) Existentiality —Permanance through change	(a) Five thought activities
		(b) Qualities and modes	(b) Upayoga/Consciousness (Sight and knowledge)
4.	Akalanka	(a) Existence Changeablity Particulate nature non-materiality (b) Differentiality Actorship Enjoyership Non-pervasivity beginningless bonding permanance Upgoingness	As in 3 above
5.	Devsen	8 (a) Existence Substantiality Particulate nature Non-materiality (b) Space occupancy Weightlessness Knowledgeablity Consciousness General Natures 11	6 Knowledge Sight Happiness Energy Non-materiality Consciousness Special Natures 10



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Table-5. Scientified Concepts about the Living

	Scientific	Agamic	Paryapti	Prana	Instincts
·	Characteristics	Term			
1.	Food, Nutrition, Metabolism		Food		Food
2.	Cellular Structure (protoplasmic)	Pudgala, Astikaya	Body	Phys. Strength	4,14
3.	Body Organisation	Multipradeshi	,,	13	
4.	Birth	Jantu			-
5.	Growth	elementes		-	
6.	Movements (Spontaneous, Induced)	Jagat, Hinduks, Atma, Upakrama	Senses	Phys. Str.	
7.	Respiration	Prani	Respiration Sense	Respiration	
8.	Excretion	39	**	**	
9.	Reproduction	Yoni			Sex
10.	Irritablity	Vigya, Veda	Mind	Mental Str.	Fear
11.	Adaptation				
12.	Death	Jiva	-	Age	
	—Gi				rls Colleg