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## THE POWER OF THE WORD!

(a marvelous secret that can help us change the world!)

by G.S. Chandy

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(Hyperlinked document)

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(The above is just an initial contents to help readers through the document before it is finalised).

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### THE POWER OF THE WORD!

(a marvelous secret that can help us change the world!)

## A: Background and (a very little) Theory

There's an enormous power underlying the word "CONTRIBUTES", which we scarcely ever realise or use in our lives (except intuitively, on occasion).

I want to explain in this document the astonishing power that's contained in this word, this wonderful 'relationship'. I claim that, if we were to learn to use the power in this relationship-word *effectively* in our real lives, we could create a revolution in the way we manage to utilise our resources and abilities, as individuals and in groups. There would be a paradigm shift in the way we tackle the problems and issues we face, in the way to work to accomplish the things we set out to do. A true revolution that would, over time, change the world to a better place to live in, as you'll see if you check out the tentative 'List of projects' that I've made out in another document - let me know if you want to see it.

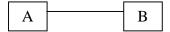
The underlying idea is that we succeed in any Mission when we successfully do the significant things that "contribute to" or "help accomplishment of" the Mission.

There **is** a little learning that's required: this is not a difficult kind of learning at all. It does involve thinking beyond the terms of our conventional prose, using a special kind of **'logical graphics'** (involving prose elements + pictures showing the inter-relationships between the elements) that can help us represent the models of reality that we keep in our minds.

I'm do believe we should be willing to do a little learning – we do want to create a real revolution in the world, don't we? The required learning is an extension of a very interesting form of mathematics called **'graph theory'.** Graph theory is very well established, has a huge number of advanced applications - but I'm almost certain you've not seen an application like the one I'm showing you. We use only the most elementary parts of graph theory, which I'll explain from time to time, in our **OPMS** work.

We use graph theory to make simple pictures of our ideas, like the ones below. (Such pictures are very useful to help us come to grips with complex issues in a more effective way than is possible via the 'conventional prose mode').

Suppose 'A' and 'B' are some 'elements' in some system we want to study, then we represent a relationship between 'A' and 'B' as follows:



The picture is called a 'graph' - and it tells us that there is some (unspecified) relationship between 'A' and 'B' and the same relationship holds between 'B' and 'A'.

We also create graphs showing a 'direction' - the direction of the arrow - and call them 'digraphs' as in the following picture:



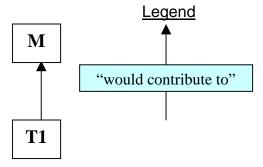
The digraph above tells us that there is a (directed) relationship between 'A' and 'B' (but not between 'B' and 'A'.

In all that follows, the 'T's represent prose phrases describing some activities (THINGS TO DO) to be performed, such as: "To motivate the department for high performance", "To get hold of the right people for the job", and so on. 'M' represents something ambitious that we want to achieve, some Mission that we want to accomplish by performing some activities. Missions could be, for example: "To become a top-rated software designer", or "To bring about true democracy in a nation", "To bring about an ecologically healthy civil society".

Now let's represent the statement: "T1 would contribute to M" by the following digraph:

### Illustration 1:

Case 1: Only 'T1' (and nothing else) contributes to 'M'



(Note: In order to understand the benefits of this 'graphical language' can confer on us, we should always keep in mind that the **'T'**s and the **'M'**s are each actually prose sentences or phrases as explained above).

Now just suppose for the moment that there is nothing else at all that can contribute to the accomplishment of 'M' other than T1. (This would never be the case in real life – but let's just suppose!)

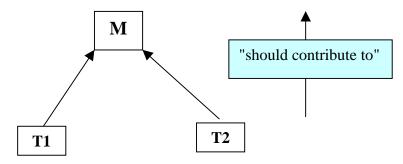
Well, if so, then the moment we've created the above picture, we know by doing T1 we are "**contributing to**" the accomplishment of '**M**' – and there is really nothing else to do other than to accomplish T1 in order to accomplish M!

Because of the 'contribution' of T1 to M (and there's nothing else that can contribute to M), we may for the moment entirely forget about 'M' and focus entirely on T1! We are confident that we shall accomplish M in due course because T1 is contributing to the accomplishment of 'M' (and there is really nothing else needed to do but to accomplish T1)! That is just one part of the magic in the word 'contributes'.

The Rule: As soon as we've made a structure like the above, we can put away the top level of the structure for the moment, and focus only on the lower level.

### Illustration 2:

Case 2: Suppose we know that two THINGS TO DO contribute to accomplishment of 'M'. The picture is below:



## Prose Translation: T1 and T2 may separately contribute to M

Again, we can just forget about 'M' – and focus entirely on the accomplishment of **T1** and **T2**.

Because **T1** and **T2** contribute to 'M', we really don't have to think about 'M' – we just focus on the THINGS TO DO that we know would help us accomplish M!

This is true for everything we want to accomplish: Whenever we know the THINGS TO DO to accomplish 'M', we can just forget about M and focus on the THINGS TO DO to accomplish 'M'!

Now, here is a further marvelous property of "contributes to" that we should take into consideration.

"Contributes to" is a 'transitive' relationship! That is to say,

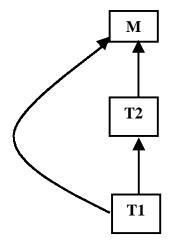
If 'A' contributes to 'B' and 'B' contributes to 'C' ('A', 'B', 'C' being some elements of interest, then 'A' **MUST contribute to** 'C'. This may be graphically represented as:

If 'A'  $\rightarrow$  'B' AND if 'B'  $\rightarrow$  'C' THEN 'A'  $\rightarrow$  'C'

where 'A'. 'B', 'C' represent THINGS TO DO, and '→' represents "contributes to"

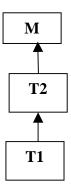
In the case of 'T1' and 'T2' above, let's say we find that T1 contributes to T2 and that T2 does NOT contribute to T1. Then we can write the picture as:

Illustration 3A (omitting the 'negative', non-contributions from 'M' to 'T1' and 'T2' and from 'T2' to 'T1':



We may conveniently omit the arrow leading from 'T1' to 'M', and the digraph above becomes

#### Illustration 3B:



The arrow from T1 to M is, by convention, **implicit** in the structure. We may also write the above digraph horizontally:  $T1 \rightarrow T2 \rightarrow M$ . The relationship from 'T1' to 'M' is, by convention, implicit in the structure.

Now, look at the picture above as a whole. T1 contributes to T2, and T2 contributes to M. This means that, for the moment, we could just keep M and T2 at the back of our minds and focus only on T1 till we have accomplished it properly. That should contribute to the achievement of T2. When we know we are properly achieving T1, we may move our focus to T2, because we know that accomplishment of T2 is contributing to the accomplishment of M.

This property of transitivity is easy to understand - but its implications may not be so easy to appreciate properly via a 'theoretical explanation' (as is being done

here) as they impacts on the design of real systems. We shall briefly describe some examples of the power it could provides to our communication in some real-life examples.

### Construction of these models:

How are these models constructed? We shall illustrate with a model containing elements T1, T2 and T3.

We simply ask questions, to the people involved, about the relationship they perceive between the elements, taking up elements 'two-by-two', as illustrated below (for the above case of T1, T2 and T3):

We know that both T1 and T2 "contribute to" M.

First 'modeling question':

Does, in your opinion,

T1

Contribute to

**T2?** 

(Remember that both T1 and T2 are full sentences or phrases describing various aspects of the 'system')

Response: YES

Second 'modeling question':

Does, in your opinion,

**T2** 

Contribute to

T1?

Response: NO

These two questions yield the model (shown here left to right for convenience):

 $T1 \rightarrow T2 \rightarrow M$ 

Now, let's take up element 'T3':

Does, in your opinion,

**T3** 

### Contribute to

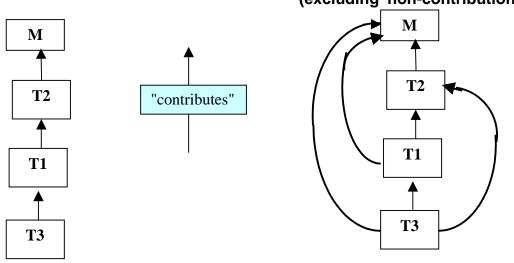
T1?

Response: YES

The model (of three elements only) is now complete: because of transitivity, we can **infer** that **T3** *must* also contribute to **T2** (as we already know that **T1 contributes to T2**)!

The model of three elements (excluding Mission) that we have at this stage is shown below:

# Illustration 4: (three elements + 'M') Illustration 4a - implicit contributions (excluding 'non-contributions')



Note that, because of transitivity of "contributes" we've only had to ask 3 questions to complete the model, instead of the 6 questions there would be between the elements (excluding questions about 'self-relationships', which we do not ask anyway). Further, we note that, implicit in the picture above are the following contributions that do not have to be explicitly shown:

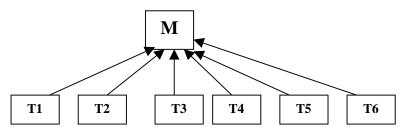
 $T3 \rightarrow T2$ ;  $T3 \rightarrow M$ ;  $T1 \rightarrow M$ ; (and all the 'negative' - does NOT contribute - relationships flowing downwards, i.e. M does not contribute to T2, T1 and T3; T2 does not contribute to T1 and T3; T1 does not contribute to T3).

As we become accustomed to 'reading these models', we shall be able to perceive all such implicit relationships with great facility.

Let's now look at a model with, say 6 elements, below:

Case 3: Many things contribute to M (6 elements + M): Illustration 5A:

As a picture:



The same logic holds as previously. Because we know all the **T**s **contribute to** the accomplishment of '**M**', we may just for the moment forget about '**M**' and focus on the THINGS TO DO (the **T**s) that **contribute to** M.

"Now just you wait a minute!!" you say. "Are you telling me that instead of thinking about just one 'M', I now have to focus on SIX Ts? Where's the focus in that? Where is the sense in that?"

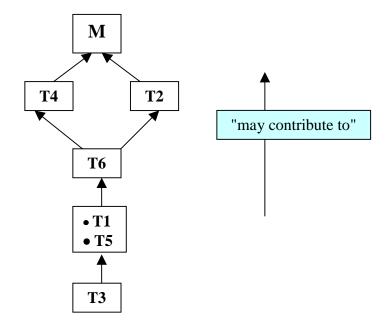
You're absolutely right! That's precisely where our magic REALLY gets to work! (I've already hinted at it in Illustration 4 above). Now, check out the sketch on the next page to see how we really do NOT have to focus on a whole lot of stuff!

In most real-life examples, we find there are many "contributions" between the various 'T's. Because of such contributions, using the transitivity property of "contributes to", we may find that the 'contribution picture' may look like Illustration 5B, below

Because of the 'leverage' available to us through transitivity, we would normally create a model asking, generally, just between 15% to 30% of the total number of possible questions. (Sometimes, depending upon the relationships perceived between elements, the total questions may go up to around 50% of the possible questions - but that's rare).

...8

### **Illustration 5B**:



**Note:** Two or more elements in a box with dots before them mean that each of the elements in the box contributes to the other(s).

Now, let's apply the magic of "contributes to" to the whole structure. We know that T3 contributes to T2 and T5 (which contribute to each other) – and these contribute in turn to T6, and so on up the structure till we reach the Mission M.

Because of the contribution flowing upwards, we may, for the moment, keep all else to the back of our minds and focus entirely on **T3**. We know that working to achieve **T3** is contributing to all the elements above, **and** to the Mission. All we need to do is to work to ensure that we accomplish **T3** effectively. As soon as we are confident that the structure we've created is more or less satisfactory - we know that the **contributions** are flowing up the structure, so we just have to focus on the lowest level. We can put all the elements at the upper levels aside because we know that improvement in the lowest level would contribute to effectiveness at the upper levels.

The logic holds for the entire structure! Thus, we may just focus on the specific 'T' or 'T's that we feel we are not accomplishing satisfactorily. Just concentrating on those will ensure that we accomplish the whole Mission effectively.

Now, here is the BIG MAGIC! --- The logic we've described above holds regardless how many elements there may be in a structure – six, or sixty, or six hundred, or six million! The moment we have used "contributes to" and created a 'reasonably satisfactory' structure, we can forget for the moment about ALL the upper levels in the structure and focus entirely on

the lowest level! When we're reasonably confident that we have got the lowest level more or less OK, we move to the next level. And so on!

I claim this astonishing fact of real life can help us, all together "contributing to' to *ALL* our worthwhile goals and Missions, change the world to make it a better place to live in - for all of us. Just let me know your goal, and I can demonstrate to you how this 'practical magic' can help you achieve it! (You'll fully understand why I describe this as "astonishing" when you read through the next part of this document, check out the links there to "The Magic of 'Contributes' ").

There is still some more magic available in the word! (explained in outline below):

Further, Illustration 3B contains the following direct, explicit 'sentences': (in all cases, the arrows mean "may contribute to")

```
T3 \rightarrow T2 and T5; T2 \rightarrow T5; T5 \rightarrow T2; T2 and T5 \rightarrow T6; T6 \rightarrow T4; T6 \rightarrow T1; T4 \rightarrow M; T1 \rightarrow M.
```

The sentences contained in the model but not explicitly shown by arrows connecting elements, as they are contained implicitly in the structure, are listed below:

```
T3 \rightarrow T6; T3 \rightarrow T4; T3\rightarrow1; T3 \rightarrow M;
T2 and T5 \rightarrow T4; T2 and T5 \rightarrow T1; T2 and T5 \rightarrow M;
T6 \rightarrow M; T6 \rightarrow M;
```

Also, as noted, the 'negative' no-contributions are also implicit in the structure.

A graphical picture may be needed here to enable a proper understanding of the above discussion. In order not to interrupt the flow of this narrative, I've put the graphical picture elsewhere in this document and provided a hyperlink to it - "The Magic of 'Contributes to'". (Click on the underlined title to go there, and after you've seen the pictures and the several explanations accompanying them, just click enough times on the "back button" of your browser to return here).

This mode of representing a large number of linked sentences obviously affords huge physical compression - a model, containing 20 to 30 elements, easily displayed on two or three pages, represents maybe the equivalent of 30-40 pages of prose. There is also huge 'mental compression and crystallisation that becomes possible in the human mind. Through learning to read such models, people can effectively grasp the 'deep logic' that lies beneath the surface of issues. Reading such models also ensures a powerful grip on complex issues that is quite impossible to realise via the customary 'prose mode' of debate and learning.

The above is a brief explanation of the magic of "**contribution**" - however, you should really feel the magic for yourself by doing such structures on any real Mission of current interest.

Now, that wasn't too difficult, was it? I claim that with this little learning we've done in these few pages – WE CAN TOGETHER LEARN HOW TO CHANGE THE WORLD FOR THE BETTER! Let's do it!

There is a computer package, a piece of rather nice software under development that is designed to help us easily create such structures (and many others). Several real structures, on real issues, created from this software are provided as examples in various documents of this application. Let me know when you want to check out this software. Though not quite fully developed, the software is highly usable, and we have been using it in a large number of 'proof-of-concept' workshops that we have been conducting. (We should always remember that it is NOT the software that's important - it is the idea behind the software).

(By the way, I can also show you how you can quite easily create such structures even if you do NOT have access to the software!)

B: A Live Application

### A real-life example:

In order to demonstrate the power and intuitive ease of using this process on real, complex issues, I provide, below, some illustrative part-models, which outline small parts of the development of a major model undertaken by the author. This series of models is shown here primarily convince you of the above-noted "practical magic" of the power-relationship "contributes to" - and of the case I'm trying to make. The models illustrated below are 'snapshots' of various stages of the 'global model' relating to the development of the *OPMS*.

You do not really have to study these models in any detail. Just glance through them, understanding the broad logic within them - in particular, with a view to understand the power of the relationship "contributes to". (You'd be able to read these models easily if you've been through Section 'A' with a little concentration).

As illustrated in outline example here, any part of any structure can be 'blown up' to really huge sizes - perhaps hundreds on thousands of elements (as needed). In fact, my whole *OPMS* project to date has mainly involved the 'blowing up' of the very first assertion of this series, namely, the Mission: "To propagate *OPMS* through India and worldwide".

Different parts of it are blown up as required, in the kind of detail that may be required at any point. As the model is developed, we try to implement the model, develop specific parts of it further as needed, and so on. (The arguments are shown in the models below in greatly simplified form, of course. Sometimes, it could have taken months and even years to progress what may be shown here in just a quick step or two. In fact, the models being shown below are, in fact, crystallisations of models that actually span the period between 1983, when the Mission was conceived, to date - and there are probably several scores of thousands of elements in the model if we were to write it up in full!)

In all cases, the models are to be read in the direction of the arrows: in the models illustrated herewith, generally **'bottom upwards'**. The relationships in each model would usually have started as **"may contribute"** - which steadily become strengthened to **"should contribute"** and finally (perhaps) to **"does contribute"**. (Many other transitive relationships were also used in my models over the years - but I shall here focus entirely on **"contributes to"**, as it is actually the magic of **"contributes to"** and its 'action-equivalents' that lie at the heart of **all development**).

## Mission: "To propagate Interactive Management through *OPMS* in India and worldwide"

After the concept of **OPMS** came to mind in 1983, I tried it out on some relatively simple tests of the concept. When those were successful, I thought of trying it out on the ambitious Mission above.

I had earlier tested out ISM on a number of relatively 'simple' Missions involving only myself - starting with models describing obvious physical circumstances only, such as, "To write a letter", "To get up from this chair and go and sit on that chair", and so on. Then I had tried out more complex models, such as:

- "To design effective ways of doing ISM manually"
- "To develop a more effective presentation of the Warfield structural modeling approach",
- "To speak convincingly about 'structural modeling' advances in systems science to a lay audience",
- "To convince a technical audience of my case",
- "To check out the validity of this newspaper or journal essay",

and so on.

In order to succeed at many of the above, I found I had also to work on Missions involving complex behavioural issues, such as

In all cases (except one), I found that the ISM tool actually worked, and it **always** ensured that I could always keep track of what I needed to do in respect of the identified Mission, much better than I could have done in any other way.

Later, during late 1982 and early 1983, I had invited Warfield and some of his Associates to India to conduct a series of workshops on what was then known as "Consensus Methodologies". At this time, I discovered the other systems modeling tool developed by Warfield, the 'Field Representation' (FR) method. Of course, as for ISM, I tried this modeling tool too out on many practical issues and found it worked.

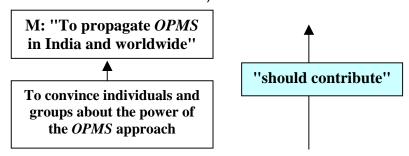
<sup>&</sup>quot;To improve my effectiveness at what I do",

<sup>&</sup>quot;To enhance my motivation",

<sup>&</sup>quot;To ensure frustration will not overtake me", and so on.

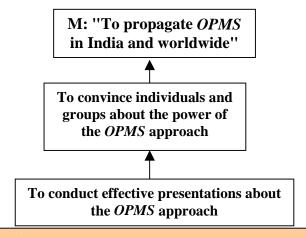
The single case where I was not able to make real headway? This one: "To make some money out of these efforts" (!! Some money is required to support the effort to propagate and apply the *OPMS*. Not enough money has come out of my efforts. However, I'm glad to report that I did discover, I feel, the reasons for my inability to make money - I do not treat this issue in this application - I can write about this if required, later. Now, I believe I've learned something about what it would take to make some money out of the Mission, as well, besides the huge satisfaction it has given me that, money apart, I <u>am</u> doing something of real value).

<u>Illustration 6a</u>: This model was started way back in 1983, soon after *OPMS* concept arrived. (all models to be read in direction of arrows – simply substitute "should contribute" whenever an arrow is encountered)



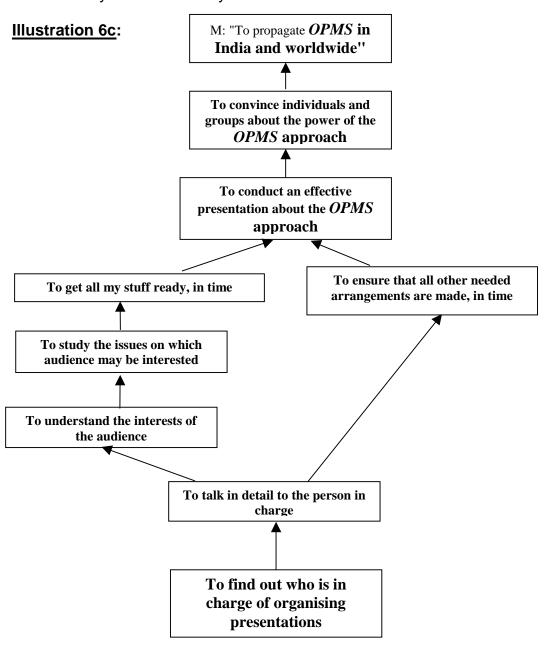
Prose translation: "To convince individuals and groups about the power of the *OPMS* approach *should contribute* To propagate *OPMS* in India and worldwide"

### Illustration 6b:



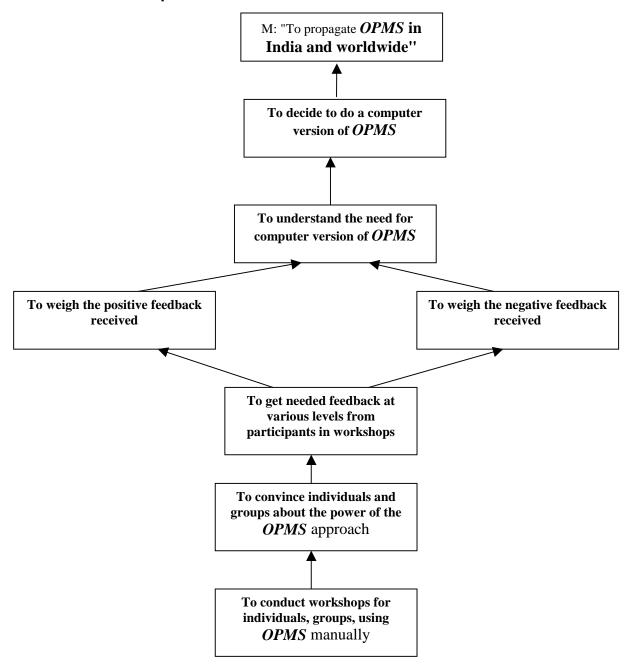
Prose translation: "To conduct effective presentations about the *OPMS* approach should constribute To convince individuals and groups about the power of the *OPMS* approach, which in turn should contribute To propagate *OPMS* in India and worldwide"

To keep document size within limits, I've not provided translations of the next models - please do read through them for understanding - as noted, you do **not** have to study them intensively.



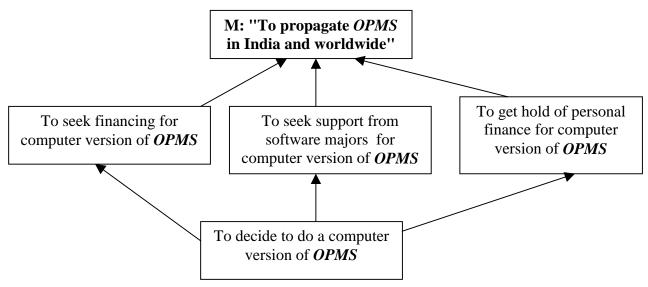
**Prose translation:** "To find out who is in charge of organising presentations *should contribute to...*" (**Please continue the translation yourselves!**)

# <u>Illustration 6d</u>: After many presentations, I started getting opportunities to conduct workshops:

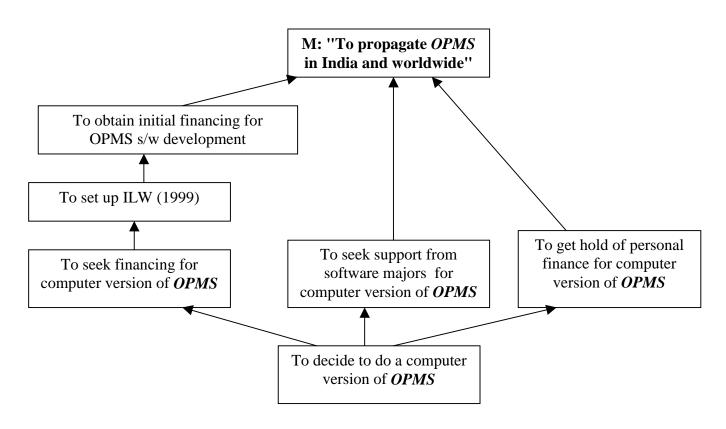


Feedback received from those workshops led to the understanding that people would not, in general, like to do the needed modeling 'manually' - and that led to a decision to create a software package to enable people at large to use the *OPMS* without worrying about learning to model manually.

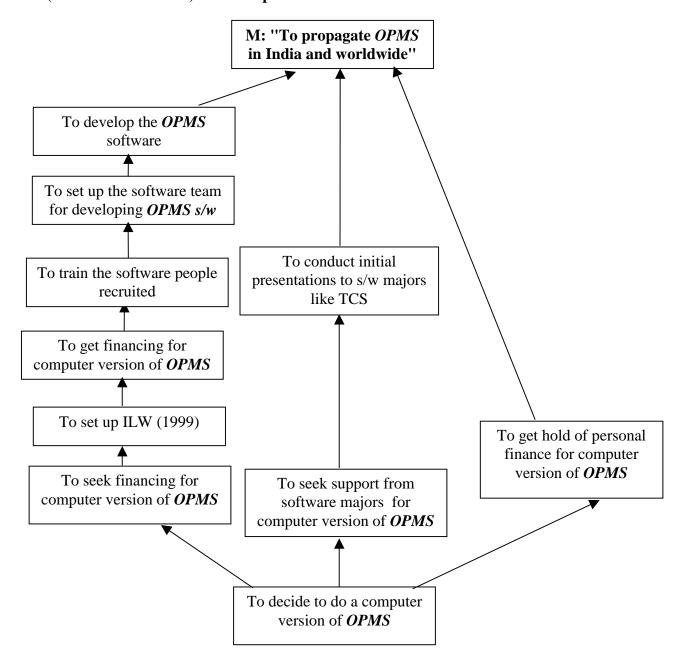
## **Illustration 6e:**



<u>Illustration 6f</u>: Many thousands of elements later, I had, by 1999, reached the stage depicted in the model below - when ILW was launched.



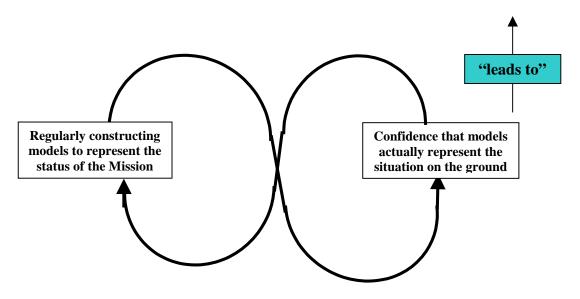
<u>Illustration 6g</u>: Still later, by mid-end 2001, with a great many more elements in our model now (as many others were also involved in the modeling), we had developed the *OPMS* software (to around 80% level). At this time, the majority financiers in ILW had decided to stop financing as per their M.O.U. Now, ILW started breaking up - but the Mission continues. As everything I've done since 1983 has been in pursuit of this Mission, and I create models (ISMs and FRs) for everything I do, there must be several scores of thousands of elements in my model for this Mission. **All** of these elements are part of the mental model I have of the Mission – even the ones I may not immediately recall (as I do not need them). **A small part of a real model:** 



In order to keep this document within manageable limits, I have shown only the barest skeleton of the development of the "Propagate OPMS" model. There are a huge number of models, of branches or parts of the main model that are not displayed in this skeleton representation. Further I've not displayed any of the Field Representations developed. I have not demonstrated how Barriers, Difficulties, Threats and Weaknesses are integrated into the 'Action Planning' model above. There are many other 'associated 'One Page Management System' models that are actually part of the above, but not shown. For example, not included are the models and reports made at our Workshops conducted (which constitute part of the "Propagate OPMS" action plan). Likewise omitted are the models made by various members of the team that created the OPMS software; the models made by members of the marketing team (both teams now disbanded, temporarily) etc, etc.

The OPMS process for the Mission "To propagate and apply OPMS in India and worldwide" would involve continuing development of the above model till the Mission is abandoned. The Mission will now not be abandoned, as, there has recently been considerable interest in this project from various sources - both commercial interests and non-commercial interests.

What's really important for the user(s) is to develop needed confidence in the models being constructed – confidence at each stage that all relevant issues in the Mission ARE properly represented. This happens if the models are built regularly, as illustrated below. Once this 'satisfaction cycle' has started in the mind, there's no holding back!



### 'Normative' and 'descriptive' models

Broadly, there are two modes of using Warfield's modeling tools:

- a) Normatively (briefly described below); and
- b) **Descriptively** (illustrated in a series of 'snapshots', illustrations 6a to 6g).

When I started on the above model, I just put down as my Mission 'M':

"To propagate and apply Interactive Management through *OPMS* in India and the world".

From that statement of a Mission, there naturally arose the first trigger question:

"What, in my opinion, are the THINGS TO DO to accomplish M?"

This led to a number of responses, like:

- 1. To convince people of the viability of the approach
- 2. To create effective presentations about 'Consensus Methodologies'
- 3. To demonstrate that this approach leads to clear, correct and usable descriptions of the system
- 4. To demonstrate that the manual modeling is simple enough for any high school student to understand in 2 hours, master in 1 week
- 5. To create simple ways of doing the modeling with using matrix theory
- 6. Etc, etc

Inserting those elements into Interpretive Structural Models (ISMs) initiated the needed Action Planning to accomplish the Mission. Field Representations (FRs) provided effective, usable descriptions of the system I needed to develop. Each model created guided me as to how I should proceed next. Continuing, daily development of the Action Planning led, step by steady step (via a process of discovery of "contributions" of various postulated elements), to:

- the launching of Interactive LogicWare, a commercial organisation, as an instrument to create and market the *OPMS* software;
- the development of the *OPMS* software
- the workshops to 'prove the concept' (of *OPMS*); informal presentations and workshops to demonstrate the software;
- formal workshops to prove the OPMS software in fact, everything that has quided the project since 1983
- etc

The other way to use the Warfield 'structural modeling' process (and **OPMS**) is "descriptively' - to recreate the history of a project (as I've done above).

The normative mode leads to action to reach a desired state from an existing state; the descriptive mode leads to descriptions of what happened in history to bring us to an existing state.

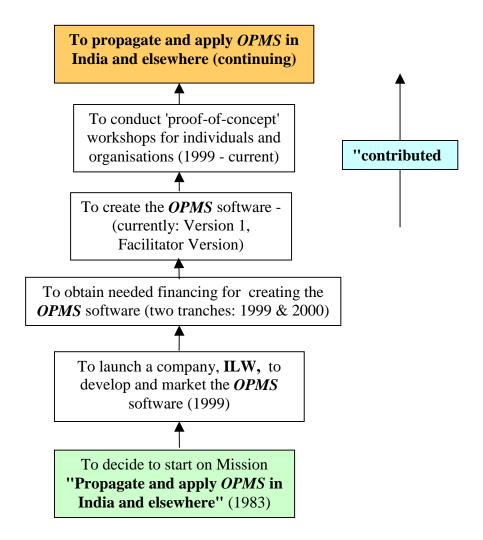
Each mode has its own uses and applications, which deserve to be explored in detail and depth to help us improve our individual, organisational and societal systems.

## The Power of the Word - 2

I now create a quick abstract of what's happened thus far in the *OPMS* project: "To propagate and apply *OPMS* in India and elsewhere".

### **Current status (in abstract):**

### Illustration 7:



The 'history' of the project ("propagating and applying *OPMS* in India and elsewhere") is crystallised in the above sketch (in outline, of course). Any part or portion of it could be blown up as needed - almost to any depth and degree of detail required.

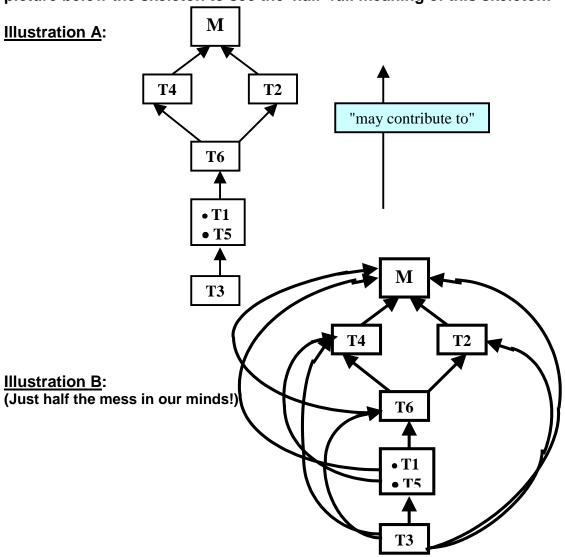
For example, the element "To launch a company, ILW (1999)" is actually a process that started long before 1999 (when the Company was formally launched) - and, when 'blown up', would include the interests of all stakeholders in the company, the Memorandum and Articles of Association of the Company, etc., etc. The single element "To create the *OPMS* software" contains within it the separate 'One Page Management Systems' of all the people who participated in creating the software (to the extent that any of them might have created his or her individual OPMS, of course - several have).

More in due course...now, let's directly apply *OPMS* to the ambitious 'Greenleap' Mission (of course, only if Greenleap members want to do this). My next document would illustrate how this process may be applied to the ambitious 'Greenleap' Mission.

...Last 2 pages: Pictures sketching the 'magic' of "contributes to"

## The Magic of 'Contributes to'

Illustration A shows a 'skeleton' model logically organised to show contributions (you've seen it earlier in this document). Now look at the picture below the skeleton to see the 'half'-full meaning of this skeleton:



The 'half'-full meaning of the 'skeleton' shown above may be the clinching portion for the claims I make of the power of this way of tackling complex issues. 'Half'-full? - Right, I've NOT included the 'negative', non-contributions that flow <u>downwards.</u>  $\{M \rightarrow T4, M \rightarrow T2; M \rightarrow T6; M \rightarrow T1, T5; M \rightarrow T3; T4 \rightarrow T6, T4 \rightarrow T1, T5; T4 \rightarrow T3; ..., ... and so on\}. I've left those linkages out so as not to make the picture a totally impossible mess on the page. But do please try to imagine, also, the 'negative, non-contribution' arrows flowing downwards to understand the full force of my argument). [Also, look at any real model to understand this argument more fully]. Now, I claim that all of these contributions - both positive and negative - easily$ 

spring to the mind of the trained reader of a picture such as Illustration A!! (Without creating any confusion at all).

It's my claim that, in the conventional 'prose mode' of articulation and debate, we are all, more or less, burdened by the kind of mess in our minds as is seen at Illustration B (when we include the 'non-contribution' arrows). Because of this mess in our minds, we tend, very often, to get ourselves confused. More (even when we are pretty clear ourselves), we very often tend to confuse people whom we are addressing in our discussions and debates, because we do not have an adequately 'clear-and-communicable' picture in our minds of the way things in our systems are related to each other.

The point I want to make is the following: Yes, it <u>DOES</u> take a little training to learn to read such models and to understand the implications to be drawn from them. But that training would enable us to understand complex systems speedily and effectively - in a way that just cannot be matched by *any* conventional 'prose means'.

What happens in the conventional arguments is that John is discussing, the linkage T3  $\rightarrow$  T2, while Joan is discussing linkage T6  $\rightarrow$  T4 - and neither sees the whole picture. We recommend that we should try to see the whole picture as shown at Illustration A above. We would then be in a better position to discuss the specific linkages perceived by others - and we would also be in a position better to discuss the issue as a whole and also the various parts of it.

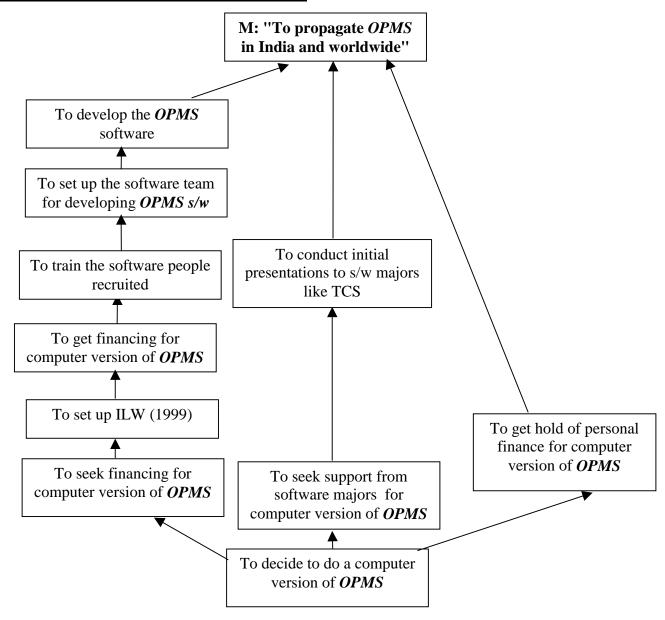
Now as a clincher, just click on the next hyperlink at the end of this paragraph to go to a model with some real elements written up in prose. Now imagine the enormous complexities that would be created in our minds by the clutter of all the possible linkages in the picture, including the negative 'non-contributions'. But exactly such clutter is seen in the conventional prose argument (and in our minds when we discuss issues without benefit of such 'structural models' to guide us)! No wonder we very rarely ever resolve, satisfactorily, the issues we debate! (Example of real model)

Now, imagine trying to explain such mental model (containing very many more than the 11 elements in the model below) through the 'conventional prose mode' of discussion. What would happen is that we'd be pretty swiftly lost in the intricacies of the issue. But this is precisely what we *are* in fact doing regularly when we work on complex issues through our conventional prose mode discussions!

On the other hand, should we develop such 'graphical support' for the logic of our arguments - then our prose explanations would be charged

with meaning, and irrelevancies and vague arguments would be minimised.	
	continued after illustration, next page.

### **Illustrating the magic of "contributes to":**



Further, the whole discussion, on all sides of it, would be raised to a far higher plane than any conventional prose argument can ever hope to reach.

There is a 'downside' also. It turns out that it's not quite enough that one person in a debate uses such supporting models for his/her part of the discussions. The others then would say, "We're entirely happy with our 'prose mode' of debate, which we've been using for -- number of years - and we've never had any problems with it". Forgetting entirely

that very few of the prose discussions ever arrived at a resolution other than each person on any side only becoming so much the more convinced that his/her argument was entirely correct.

This process can only be successful when at least a fair number of people start using such 'representations' of their mental models, showing the 'logical structure' with a view to gather available knowledge on an issue and to try and transform that into wisdom. I claim that wisdom is, in fact, the ability to take into due consideration the issues of concern to others in the system and to arrive at a resolution that includes all legitimate issues of concern.

Unfortunately, creating wisdom on issues is scarcely ever a desideratum in our debates and discussions.

### **Words of Power**

We've all been taught in school that a "verb" is an "action word". We need to remember that and learn to use verbs to enable and ensure *effective action*. The *OPMS* process is a practical means to use verbs ('action words') to help us generate and realise effective action to help us realise our ideas.

Verbs carry the idea of being or action in the sentence. We are particularly interested in the fact that a verb helps define or describe some action!

And of all the verbs, the most powerful for 'action planning' is "contributes to" (or its 'action equivalent' - "helps achieve").