

On 9 July 1970 Ove Arup spoke to a meeting at Winchester of his partners from the practices around the world bearing the Arup name. His talk was in response to the collective desire to continue working together, despite the changes that would take place as the founding partners progressively retired and gave up ownership, handing over control to the successors they would choose for these practices.

The pre-natal name of 'key-speech' for this talk has endured, in recognition of the fact that in it Ove both states the aims of our firm and analyses in his very distinctive way, the principles through which they may be achieved. From time to time we have asked ourselves whether what he said in 1970 remains valid for us, despite the fact that, inevitably, some specifics about the firm's organisation and individuals' roles therein, to which he refers in passing have changed over the years. On each occasion we have found that it does, and thereby reaffirmed our commitment to these principles.

The Key Speech is required reading for each person who joins Arup or who wants to be reminded of what we are all about, and for those who want to learn about us.



In its pre-natal stage, this talk has been honoured with the name of 'key speech'. It is doubtful whether it can live up to this name. What is it supposed to be the key to? The future of the firm? The philosophy? The aims? At the moment, sitting in my garden and waiting for inspiration, I would be more inclined to call it: 'Musings of an old gentleman in a garden' – and leave it at that.

I have written before a piece called 'Aims and Means' for a conference of Senior and Executive Partners in London on 7 July 1969. It did not manage to deal much with means, however, and it is of course difficult to generalise about means, for they must vary with circumstances. The first part of this paper was published in Newsletter 37, November 1969. This you may have read – but I will shortly summarise the aims of the firm as I see them.

well, as well as we can do it – and as well as it can be done – is that. We must therefore strive for quality in what we do, and never be satisfied with the second-rate. There are many kinds of quality. In our work as structural engineers we had – and have – to satisfy the criteria for a sound, lasting and economical structure. We add to that the claim that it should be pleasing aesthetically, for without that quality it doesn't really give satisfaction to us or to others. And then we come up against the fact that a structure is generally a part of a larger unit, and we are frustrated because to strive for quality in only a part is almost useless if the whole is undistinguished, unless the structure is large enough to make an impact on its own.

We are led to seek overall quality, fitness for purpose, as well as satisfying, or significant, forms and economy of



There are two ways of looking at the work you do to earn a living. One is the way propounded by the late Henry Ford: work is a necessary evil, but modern technology will reduce it to a minimum. Your life is your leisure lived in your 'free' time. The other is: to make your work interesting and rewarding. You enjoy both your work and your leisure. We opt uncompromisingly for the second way.

There are also two ways of looking at the pursuit of happiness: One is to go straight for the things you fancy without restraints, that is, without considering anybody else besides yourself. The other is to recognise that no man is an island, that our lives are inextricably mixed up with those of our fellow human beings, and that there can be no real happiness in isolation. Which leads to an attitude which would accord to others the rights claimed for oneself, which would accept certain moral or humanitarian restraints. We, again, opt for the second way.

These two general principles are not in dispute. I will elaborate them a little further: The first means that our work should be interesting and rewarding. Only a job done

construction. To this must be added harmony with the surroundings and the overall plan. We are then led to the ideal of 'Total Architecture', in collaboration with other like-minded firms or, better still, on our own. This means expanding our field of activity into adjoining fields: architecture, planning, ground engineering, environmental engineering, computer programming, etc. and the planning and organisation of the work on site.

It is not the wish to expand, but the quest for quality which has brought us to this position, for we have realised that only intimate integration of the various parts or the various disciplines will produce the desired result.

The term 'Total Architecture' implies that all relevant design decisions have been considered together and have been integrated into a whole by a well organised team empowered to fix priorities. This is an ideal which can never - or only very rarely - be fully realised in practice, but which is well worth striving for, for artistic wholeness or excellence depends on it, and for our own sake we need the stimulation produced by excellence.

The humanitarian attitude

The other general principle, the humanitarian attitude, leads to the creation of an organisation which is human and friendly in spite of being large and efficient. Where every member is treated not only as a link in a chain of command, not only as a wheel in a bureaucratic machine, but as a human being whose happiness is the concern of all, who is treated not only as a means but as an end.

Of course it is always sound business to keep your collaborators happy – just as any farmer must keep his cattle in good health. But there is – or should be – more in it than that. (we know what happens to cattle.) If we want our work to be interesting and rewarding, then we must try to make it so for all our people and that is obviously much more difficult, not to say impossible. It is again an ideal, unattainable in full, but worth striving for. It leads to the wish to make everybody aware of, and interested in, our aims, and to make the environment and working conditions as pleasant as possible within the available means.

This attitude also dictates that we should act honourably in our dealings with our own and other people. We should justify the trust of our clients by giving their interest first priority in the work we do for them. Internally, we should eschew nepotism or discrimination on the basis of nationality, religion, race, colour or sex – basing such discrimination as there must be on ability and character.

Humanitarianism also implies a social conscience, a wish to do socially useful work, and to join hands with others fighting for the same values. Our pursuit of quality should in itself be useful. If we, in isolated cases, can show how our environment can be improved, this is likely to have a much greater effect than mere propaganda.

There is a third aim besides the search for quality of work and the right human relationships – namely prosperity for all our members.

Most people would say that this is our main aim, this is why we are in business. But it would be wrong to look at it as our main aim. We should rather look at it as an essential prerequisite for even the partial fulfilment of any of our aims. For it is an aim which, if over-emphasised, easily gets out of hand and becomes very dangerous for our harmony, unity and very existence.

It costs money to produce quality, especially when we expand into fields where we have no contractual obligations and can expect no pay for our efforts. We may even antagonise people by poaching on their domain or by upsetting and criticising traditional procedures. It also costs money to 'coddle' the staff with generosity and welfare, or to lose lucrative commissions by refusing to bribe a minister in a developing country, or to take our duty too seriously if nobody is looking.

Money spent on these 'aims' may be wisely spent in the long term, and may cause the leaders of the firm a certain satisfaction – but if so spent it is not available for immediate distribution among the members, whether partners or staff. So aim number 3 conflicts to that extent with aims 1 and 2. Moreover, if money is made the main aim – if we are more greedy than is reasonable – it will accentuate the natural conflict about how the profit should be distributed between our members – the partners and staff or the different grades of staff.

The trouble with money is that it is a dividing force, not a uniting force, as is the quest for quality or a humanitarian outlook. If we let it divide us, we are sunk as an organisation – at least as a force for good.

So much for our aims. As aims, they are not in dispute. What is debatable, is how vigorously each shall be pursued, which is the most important, how to balance long-term against short-term aims. Let us first see what these aims imply.

Obviously, to do work of quality, we must have people of quality. We must be experts at what we undertake to do. Again, there are many kinds of quality, and there are many kinds of job to do, so we must have many kinds of people, each of which can do their own job well. And they must be able to work well together. This presupposes that they agree with our aims, and that they are not only technically capable but acceptable to us from a human point of view, so that they fit into our kind of organisation. And that they are effectively organised, so that the responsibility of each is clearly defined and accepted. In short, we must be efficient – individually, in all our subdivisions, and as a world organisation.

I have tried to summarise the foregoing in a number of points. Like all classification, it is arbitrary and rough – but may nevertheless be useful as a help to understanding and discussion, if its imperfections and its incompleteness are borne in mind.

The main aims of the firm are:

Group A

- 1. Quality of work
- 2. Total architecture
- 3. Humane organisation
- 4. Straight and honourable dealings
- 5. Social usefulness
- 6. Reasonable prosperity of members

If these aims could be realised to a considerable degree, they should result in:

Group B

- 7. Satisfied members
- 8. Satisfied clients
- 9. Good reputation and influence

But this will need:

Group C

- 10. A membership of quality
- 11. Efficient organisation
- 12. Solvency
- 13. Unity and enthusiasm

Of course there is not really any strict demarcation between aims (Group A) and means (Group C) and the results (Group B) flowing from the whole or partial fulfilment of the aims in A. And it is not absolutely certain that these results are obtained. For instance, A3 and 4 (a humane organisation and straight dealings) can as well be considered as a means, and in fact all the points are to some extent both aims and means, because they reinforce each other. And there will be members who are dissatisfied no matter how good the firm is, and the same may apply to clients, who may not appreciate quality at all. But on the whole, what I said is true. We should keep the six aims in A in view all the time, and concentrate on the means to bring them about.

But before I do this, I will try to explain why I am going on about aims, ideals and moral principles and all that, and don't get down to brass tacks. I do this simply because I think these aims are very important. I can't see the point in having such a large firm with offices all over the world unless there is something which binds us together. If we were just ordinary consulting engineers carrying on business just as business to make a comfortable living, I can't see why each office couldn't carry on, on its own. The idea of somebody in London 'owning' all these businesses and hiring people to bring in the dough doesn't seem very inspiring.

Unless we have a 'mission' – although I don't like the word – but something 'higher' to strive for – and I don't particularly like that expression either – but unless we feel that we have a special contribution to make which our very size and diversity and our whole outlook can help to achieve, I for one am not interested. I suppose that you feel the same, and therefore my words to you may seem superfluous; but it is not enough that you feel it, everybody in the firm should as far as possible be made to feel it, and to believe that we, the leaders of the firm, really believe in it and mean to work for it and not just use it as a flag to put out on Sundays. And they won't believe that unless we do.

On the other hand, who am I to tell you and the firm what you should think and feel in the future when I am gone – or before that, for that matter? It wouldn't be any good my trying to lay down the law, and I haven't the slightest inclination to do so. That is my difficulty. I dislike hard principles, ideologies and the like. They can do more harm than good, they can lead to wholesale murder, as we have seen. And yet we cannot live life entirely without principles. But they have in some way to be flexible, to be adaptable to changing circumstances. 'Thou shalt not lie', 'Thou shalt not kill', are all very well, generally, but do not apply if for instance you are tortured by fanatical Nazis or Communists to reveal the whereabouts of their innocent victims. Then it is your duty to mislead.

What these commandments should define is an attitude. To be truthful always, wherever it does no harm to other ideals more important in the context, to respect the sanctity of human life and not to destroy life wantonly. But where to draw the line in border cases depends on who you are, what life has taught you, how strong you are. Incidentally, they should not be taken as an encouragement to join the Catholic church!

I found also another tag: 'The way out is not the way round but the way through.' That's rather more uncompromising, more heroic. It springs from a different temperament. It's equally useful in the right place. But the man that bangs his head against a wall may learn a thing or two from the reed that bends in the wind.

The trouble with the last maxim is that it says something about the way, but not about the goal. The way must be adapted to the circumstances – the goal

In the following 13 points, which I must have jotted down some time ago – I found them in an old file – I am grappling with this question, perhaps not very successfully. I give them to you now:

Principles

- 1. Some people have moral principles
- 2. The essence of moral principles is that they should be 'lived'
- 3. But only saints and fanatics do follow moral principles always
- 4. Which is fortunate
- 5. Are then moral principles no good?
- 6. It appears we can't do without them
- 7. It also appears we can't live up to them
- 8. So what?
- 9. A practical solution is what I call the star system
- 10. The star or ideal indicates the course. Obstacles in the way are circumnavigated but one gets back on the course after the deviation
- 11. The system is adopted by the Catholic church. Sins can be forgiven if repented it doesn't affect the definition of good or evil
- 12. That this system can degenerate into permanent deviation is obvious
- 13. One needs a sense of proportion

is much more dependent on what sort of person you are. I admit that the last maxim also says a good deal about the man who propounds it, a man of courage, of action, perhaps not given too much to reflection, perhaps not a very wise man. The wise man will consider whether this way is possible, whether it leads to the desired result. Unless of course his goal is to go through, not to arrive anywhere, like the man in the sports car. But this only shows that it is the goal which is important, whatever it is.

The star system is an attempt to soften the rigidity of moral principles. But it doesn't really solve this dilemma. It is a little more flexible than moral precepts as to the way, but surely the 'stars' must be fixed – for if they can be changed ad lib the whole thing wobbles. And that in a way is what it does – I can't do anything about that. I should have loved to present you with a strictly logical build-up, deducing the aims for the firm from unassailable first principles. Or perhaps this is an exaggeration – for I know very well that this can't be done. All I can do is to try to make the members of the firm like the aims I have mentioned. I would like to persuade them that they are good and reasonable and not too impossible aims, possessing an inner cohesion, reinforcing each other by being not only aims but means to each other's fulfilment.

'Stars' like goodness, beauty, justice have been powerful forces in the history of mankind – but they so often are obscured by a mental fog — or perhaps I should say the opposite – they are created by a mental fog, and when the fog lifts, they are seen to have been illusions. They are man-made. I do not rate them less for that reason, but they are too remote, too indefinable, to be of much practical use as guidelines. They sustain or are born of the longings of mankind, and belong to the ideal world of Plato – which is fixed for ever. Rigid ideologies feed on them. Not so practical politics.

Our aims on the other hand are not nearly so remote. We will never succeed in fulfilling them in toto, but they can be fulfilled more or less, and the more the better. And they are not grasped arbitrarily out of the sky or wilfully imposed, they are natural and obvious and will, I am sure, be recognised as desirable by all of you: so much so, in fact, that the thing to be explained is not why they are desirable, but why I should waste any words on them.

I do, as I pointed out at the beginning of this argument, because our aims are the only thing which holds us together, and because it is not enough to approve them, we must work for them – and the leaders must be prepared to make sacrifices for them. Temporary diversions there must be, we have to make do with the second best if the best is not within reach, we have to accept expediencies and from a strict point of view all our activities can be considered as expediencies, for in theory they could all be better still – but the important thing is that we always get back on the course, that we never lose sight of the aims. Hence the name 'star system' derived from comparison with old fashioned navigation. But I propose to abandon this expression, partly because its meaning in the film industry may confuse, especially as it is very opposed to our point of view, which is in favour of teamwork rather than stardom: and also because it suggests star-gazing, which I find uncomfortably near the bone because I might with some justification be accused of it.

So I am afraid we have to fall back on 'philosophy'. Having dabbled in this subject in my youth I have been averse to seeing the term degraded by talk about the philosophy of pile-driving or hair-dressing, but it is of course useless to fight against the tide. The word has come to stay — and in 'the philosophy of the firm', it is not used quite so badly. So that's what I have been giving you a dose of.

I will now discuss what we have to do in order to live up to our philosophy. And I will do it under the four headings 10 to 13 in my list of aims and means:

- 10. Quality staff
- 11. Efficiency
- 12. Solvency
- 13. Unity and enthusiasm

But it will of course be necessary to mix them up to some extent.

Quality of staff

How do we ensure that our staff is of the right quality, or the best possible quality?

We all realise, of course, that this is a key question. The whole success of our venture depends on our staff. But what can we do about it? We have the staff we have – we must make do with them, of course (and I think we have a larger proportion of really good people than any other firm of our kind). And when we take on new people the choice is limited. Again we have to take the best we can get. We cannot pay them a much higher salary than our average scale, because that would upset our solvency and sink the boat. Naturally, our method of selection is important, and what we can do to educate our staff and give them opportunities to develop is important, but I can't go into details here. All I can say is that staff getting and staff 'treating' must not degenerate into a bureaucratic routine matter, but must be on a personal level. When we come across a really good man, grab him, even if we have no immediate use for him, and then see to it that he stays with us

The last is the really important point, which in the long run will be decisive. Why should a really good man, a man – or woman – who can get a job anywhere or who could possibly start out on his own, why should he or she choose to stay with us? If there is a convincing and positive answer to that, then we are on the right way.

Presumably a good man comes to us in the first instance because he likes the work we do and shares, or is converted to, our philosophy. If he doesn't, he is not much good to us anyhow. He is not mainly attracted by the salary we can offer – although that is of course an important point – but by the opportunity to do interesting and rewarding work, where he can use his creative ability, be fully extended, can grow and be given responsibility.

If he finds after a while that he is frustrated by red tape or by having someone breathing down his neck, someone

for whom he has scant respect, if he has little influence on decisions which affect his work and which he may not agree with, then he will pack up and go. And so he should. It is up to us, therefore, to create an organisation which will allow gifted individuals to unfold. This is not easy, because there appears to be a fundamental contradiction between organisation and freedom. Strongwilled individuals may not take easily to directions from above. But our work is teamwork and teamwork – except possibly in very small teams – needs to be organised, otherwise we have chaos. And the greater the unit, the more it needs to be organised. Most strong men, if they are also wise, will accept that. Somebody must have authority to take decisions, the responsibility of each member must be clearly defined, understood and accepted by all. The authority should also be spread downwards as far as possible, and the whole pattern should be flexible and open to revision.

We know all this, and we have such an organisation. We have both macro-, micro- and infra-structure. It has been developed, been improved, and it could undoubtedly be improved still further. We are of course trying to do that all the time. The organisation will naturally be related to some sort of hierarchy, which should as far as possible be based on function, and there must be some way of fixing remuneration, for to share the available profit equally between all from senior partner to office-boy would not be reasonable, nor would it work. And all this is very tricky, as you know, because, as soon as money and status come into the picture, greed and envy and intrigue are not far behind.

One difficulty is particularly knotty, the question of ownership, which is connected with 'partnership'. There is dissatisfaction amongst some of those who, in fact, carry out the functions of a partner – dealing with clients, taking decisions binding on the firm, etc. – because they cannot legally call themselves partners but are 'executive' partners or have some other title. I have discussed this problem in my paper 'Aims and Means'. If some viable way could be found to make 100 partners, I wouldn't mind, but I can't think of any.

In the Ove Arup Partnership we have all but eliminated ownership – the senior partners only act as owners during their tenure of office because someone has to, according to the laws of the country. And I wish that system could be extended to all our partnerships. It no doubt irks some people that the money invested in the firm may one day (with some contriving) fall into the turban of people who have done nothing to earn it – but what can we do? The money is needed for the stability of the firm, it makes it possible for us to earn our living and to work for a good cause, so why worry?

It may be possible to devise a different and better arrangement than the one we have now – more 'democratic', more fair. It may be possible to build in some defences against the leaders misbehaving and developing boss-complexes and pomposity, and forgetting that they are just as much servants in a good cause as everybody else – only more so. This is partly a legal question depending on the laws of the country, but I have neither the ability nor the time to deal with all that here.

What I want to stress is the obvious fact that no matter how wonderful an organisation we can devise, its success depends on the people working in it - and for it. And if all our members really and sincerely believed in the aims which I have enumerated, if they felt some enthusiasm for them, the battle would be nearly won. For they imply a humanitarian attitude, respect and consideration for persons, fair dealings, and the rest, which all tend to smooth human relationships.

Anyone having the same attitude who comes into an atmosphere like that, is at least more likely to feel at home in it. And if the right kind of people feel at home with us, they will bring in other people of their kind, and this again will attract a good type of client and this will make our work more interesting and rewarding and we will turn out better work, our reputation and influence will grow, and the enthusiasm of our members will grow - it is this enthusiasm which must start the process in the first place.

And they all lived happily ever after?

Yes, it sounds like a fairy tale, and perhaps it is. But there is something in it. It is a kind of vicious circle - except that it isn't vicious, but benevolent, a lucky circle. And I believe that we have made a beginning in getting onto this lucky circle. I believe that our fantastic growth has something to do with our philosophy. And I believe our philosophy is forward looking, that it is what is needed today, is in tune with the new spirit stirring in our time. But of course there are many other and dangerous spirits about and too much growth may awaken them. Too much growth may also mean too little fruit.

My advice would be:

'Stadig over de klipper',

or if you prefer:

'Take it easy!'

'More haste less speed!'

'Hâtez-vous lentement!'

'Eile mit weile!'

'Hastvaerk er lastvaerk!'

It's the fruit that matters. I have a lingering doubt about trying to gain a foothold in various exotic places. Might we not say instead: Thank God that we have not been invited to do a job in Timbuctoo – think of all the trouble we are avoiding. It's different with the work we do in Saudi Arabia, Tehran and Kuwait¹. There we are invited in at the top, working with good architects, doing exciting work. We are not hammering at the door from outside. But as a rule, grab and run jobs are not so useful for our purpose. I think the Overseas Department agrees with this in principle, if not in practice.

It's also different with civil engineering work, provided we have control – complete control – over the design and are not 'sharing' the job or having a quantity surveyor or 'agent', etc, imposed on it preventing us from doing the job our way. The general rule should be: if we can do a job we will be proud of afterwards, well and good – but we will do it our way. In the long run this attitude pays, as it has already done in the case of Arup Associates, and incidentally, the control of such jobs should be where our expertise resides.

To export Arup Associates' jobs is much more difficult, for whilst we may be able to build a bridge or radio tower in a foreign locality, good architecture presupposes a much more intimate knowledge of the country. Long distance architecture generally fails. But that does not mean that the ideal of 'Total Architecture' is irrelevant to our purely engineering partnerships or divisions. In fact they have been founded on the idea of integrating structure with architecture and construction and, in Scotland for instance, they are trying to give architects a service which will unite these domains².

Coming back to my main theme, I realise that when I have been talking about quality, about interesting and rewarding work, about 'Total Architecture', and attracting people of calibre, you may accuse me of leaving reality behind. "As you said yourself", you may say, "our work is teamwork. And most of this work is pretty dull. It is designing endless reinforced concrete floors, taking down tedious letters about the missing bolts, changing some details for the nth time, attending site meetings dealing with trivialities, taking messages, making tea – what is exciting about that? You are discriminating in favour of an elite, it's undemocratic. What about the people who have to do the dull work?"

¹ In 1970 Arup was carrying out a good deal of work in the Middle East

² In 1970 Arup's Scottish practice had just begun to offer multidisciplinary engineering services for buildings

Equality of opportunity

You have certainly a point there. Of course I am discriminating in favour of quality, and I would do anything to enable our bright people to use their talents. You cannot equate excellence with mediocrity, you cannot pretend they are the same. We would be sunk if we did that. We need to produce works of quality, and we need those who can produce them.

One perfect job is more important for the morale of the firm, for our reputation for producing enthusiasm, than 10 ordinary jobs, and enthusiasm is like the fire that keeps the steam-engine going. Likewise one outstanding man is worth 10 men who are only half good. This is a fact of life we cannot change. It is no good pretending that all are equal – they aren't. There should be equality before the law, and as far as possible equality of opportunity, of course. But the fact that you are good at something is something you should be grateful for, not something to be conceited about. It doesn't mean that you are better as a human being. And there are probably many other things you are hopeless at.

No man should be despised or feel ashamed because of the work he does, as long as he does it as well as he can. What we should aim at, naturally, is to put each man on to the work he can do. And, fortunately, there is nearly always something he can do well. We will have square pegs in round holes, we shall have frustrated people, unfortunately – those who are not frustrated one way or another are in the minority. But fortunately people vary, as jobs vary, and few would want to do the job another calls interesting if they are no good at it.

If we can reach a stage where each man or woman is respected for the job they do, and is doing his or her best because the atmosphere is right, because they are proud of what we are and do and share in the general enthusiasm, then we are home. And each job is important. Secretaries, for instance. They could have a tremendously civilising influence on our staff. They could teach them to write English, for instance, a most important and necessary job. But secretaries who can do that are of course at a premium. We must try to find them. It is even more important than that they are good-looking – and nobody could accuse me of being indifferent to that.

Our messengers and cleaners – how important it is that they are reliable and likeable, human, with a sense of humour. A cheerful remark can brighten the day. All our people are part of us, part of our 'image', create the atmosphere we live in.

But it doesn't alter the fact that the services of a messenger are less valuable to the firm than those of a gifted designer or an imaginative mechanical engineer, a fact that even the messenger will understand.

But there are of course people we cannot employ usefully. Masses of them, in fact. Those we should not take on, obviously, except on a strictly temporary basis. But sometimes they are found inside the firm. They may have been good once, but are on the way down. I am a case in point myself. But their loyal service, their place in the hierarchy, makes it difficult to de-grade them. To deal with them requires much tact, and is embarrassing. But they should not be allowed to pretend to do jobs they are no good at. They must not prevent the good ones from functioning. It's a problem all firms have, it's one of the cases where humanity and efficiency clash. To resolve it tactfully may be expensive, not to resolve it is fatal.

So far I haven't said much about solvency. Stuart Irons³ can tell you something about that. I compare it to stability in engineering structures – without it the whole thing collapses but if you have much more money than you need the usefulness of it declines until it becomes distracting and dangerous. That danger need not worry us for the time being. At the moment the need for solvency is restricting, and is the most frequent cause of having to compromise. That we may have to do – but let's not do it unnecessarily, and let's get back on course.

And Unity and Enthusiasm, the last item, is in a way what my talk has been about. It is a question of giving the firm an identity. What do we mean, when we speak about the firm, about 'we' or 'us'? Is it the whole collection of people in dozens of offices in different places? Are 'we' all of them or some of them, and which?

I think it is unavoidable that 'we' should mean different things in different contexts. Sometimes what is said is only relevant to the upper layers of management, sometimes it is meant to include everybody. What we must aim at is to make 'we' include as many as possible as often as possible. To increase the number of those who have a contribution to make, however small, who agree wholeheartedly with our aims and want to throw in their lot with us. We might think about them as members of our community, the others, who come and go, might be called staff. Of course there can never be any clear line of demarcation, it is not a question of signing a form or bestowing a title, it is a matter of how each feels and what we feel about them. For it is a two-way business.

But what binds our membership together must be loyalty to our aims. And only as long as the leaders of the firm are loyal to these can they expect and demand loyalty from the members. This speech is too long already, and I have not even touched on what you perhaps expected to be the main subject of my talk, the relationship between the Ove Arup Partnership and the Overseas Partnerships. But from the foregoing my point of view should be clear.

The fact that we have these outposts all over the world is of course an enormous source of strength to us and to you, it helps to establish our reputation and power for good, and opens up opportunities for all our members. This is however only because the leaders in these places are our own people, bound to us by common aims and friendships. But as the old leaders retire and growth takes place mainly locally, the ties that bind us together may weaken. We should prevent this by forging more ties, forming new friendships, and always being true to our principles. Improve communications – the universal injunction nowadays. Absence does not make the heart grow fonder, unfortunately. There will always be a need for a strong coordinating body – which is at the moment formed by the senior partners – which has the power to interfere if our principles are seriously betrayed. For should that happen, it would be better to cut off the offending limb, less the poison should spread.

Our name must not be allowed to cover practices which conflict with our philosophy. But at the moment there is no danger of that, and we can take comfort from what has been achieved. Perhaps that should have been the gist of my talk? But you are seeing it for yourself. I could also have dwelt on how far we have still to go; it would perhaps have accorded more with my star-gazing habits. But my time is up - my speech should have been condensed to one-third - but it is too late now. I hope at any rate that I haven't deserved the warning which the Duke of Albany addressed to Goneril in King Lear:

How far your eyes may pierce I cannot tell. Striving to better, oft we mar what's well.

Arup's core values maintain the vision established by Sir Ove Arup (1895-1988):

We will ensure that the Arup name is always associated with quality We will act honestly and fairly in dealings with our staff and others We will enhance prosperity for all Arup staff

Our priorities are:

Our clients and our industry Our creativity Our people Sustainable development

We shape a better world:
To enhance prosperity and the quality of life
To deliver real value
To have the freedom to be creative and to learn

